



An Unconditional Cash Transfer Program for Low-Income New Yorkers Affected by COVID-19

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Abstract Early in the pandemic, New York City's public hospital system partnered with multiple philanthropic foundations to offer an unconditional cash transfer program for low-income New Yorkers affected by COVID-19. The \$1000 cash transfers were designed to help people meet their most immediate health and social needs and were incorporated into healthcare delivery and contact tracing workflows as a response to the public health emergency. To better understand program recipients' experiences, researchers conducted 150 telephone surveys with randomly sampled cash transfer recipients and 20 in-depth qualitative interviews with purposefully sampled survey

participants. Survey participants were predominantly Latinx (87%) and women (65%). The most common reported uses of the \$1000 were food and rent. Most participants (79%) reported that without the \$1000 cash transfer they would have had difficulty paying for basic expenses or making ends meet, with specific positive effects reported related to food, housing, and ability to work. The majority of survey participants reported that receiving the cash assistance somewhat or greatly improved their physical health (83%) and mental health (89%). Qualitative interview results generally supported the survey findings.

Keywords COVID-19 · Social determinants of health · Public hospital systems · Housing insecurity · Food insecurity · Cash assistance · Cash transfer

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Introduction

Economic insecurity and its downstream sequela, such as housing and food insecurity, are well-known to negatively affect health. During the COVID-19 pandemic, various markers of economic insecurity—including eviction, household crowding, income, and inflexible in-person low-wage essential work—were associated with increased risk for COVID-19 infection, hospitalization, and death [1–3]. These disparities by economic status are related to and compounded by similar inequities observed for structurally marginalized racial and ethnic groups [4–6].

Simultaneously, the loss of jobs and income resulting from the pandemic contributed to worsened economic situations for millions of people. In New York City (NYC), which suffered from an early and particularly devastating initial COVID-19 wave, over half of Black and Latinx workers experienced job loss in the first months of the pandemic [7]. While federal programs including enhanced unemployment benefits softened the economic blow for some, many still had unmet financial needs, including hundreds of thousands of undocumented immigrants in NYC who were ineligible for federal relief. Responding to the crises of COVID-19 and economic hardship and recognizing gaps in the social safety net, NYC's public hospital system (NYC Health + Hospitals [H+H]) partnered with philanthropic foundations to rapidly develop and deploy a novel cash assistance program. This program provided unconditional cash transfers of \$1000 to New Yorkers with economic and pandemic-related needs identified through H+H healthcare sites and the Test & Trace Corps (T2), NYC's contact tracing program [8].

Studies of cash transfer programs, while heterogeneous in quality and findings, suggest that such interventions may have positive impacts on health [9–13]. Cash transfer programs have been implemented across the globe in response to the COVID-19 pandemic, with international studies finding effects on food security and access to healthcare [14–16]. In the USA, government and private philanthropy deployed various cash transfer programs during the pandemic, [17–19] but it is rarer for a health system to be explicitly involved in the design and implementation of such a program [20]. We add to the prior literature by presenting results from surveys and qualitative interviews conducted with recipients of the unconditional

cash transfer program offered through the public health system for low-income New Yorkers affected by COVID-19.

Study Data and Methods

Study Design

We conducted telephone surveys with randomly sampled cash transfer recipients and in-depth qualitative interviews with a subsample of survey participants. Researchers from an academic medical center who were not involved in administering the program conducted surveys, interviews, and analyses. The study was approved by the NYU School of Medicine Institutional Review Board.

Cash Transfer Program

From May 2020 to June 2021, a public–private partnership among H+H, philanthropic foundations, and a nonprofit organization provided one-time, unconditional transfers of \$1000 to approximately 5000 low-income New Yorkers diagnosed with or exposed to COVID-19 and experiencing financial hardship [8]. A nonprofit partner, NY Disaster Interfaith Services (NYDIS), was chosen to administer the program given their expertise and capacity to issue cash transfers. NYDIS offered several ways for eligible individuals to receive the cash transfers, including a mailed debit card, secure bank transfer, PayPal transfers, and ATM withdrawals; these options were selected to meet the needs of recipients with various levels of financial literacy and access to banking.

Social workers, community health workers, physicians, and nurses at H+H clinical care settings (outpatient and inpatient) referred patients to the program based on their COVID-19 diagnosis, health insurance (Medicaid, Emergency Medicaid, or uninsured) as a proxy for income, and patient self-report of financial hardship [8]. T2's Resource Navigators in community-based organizations referred COVID-19 cases and contacts in high need ZIP codes [21] who were low income, experienced a loss of income or increased expenses, and did not have access to paid leave for the full isolation and quarantine (I and Q) periods. Eligibility was determined by H+H and T2, and the eligibility criteria were designed to target

historically underserved populations impacted by COVID-19 while minimizing complexity and administrative burden.

Study Sample

Based on the pragmatic goals of the study, we determined a priori to conduct phone surveys with a random sample of 150 program recipients, 75 from each of the H+H and T2 referral sources.

Study staff contacted randomly sampled individuals from a list of all program recipients to screen them for study eligibility. Individuals were ineligible for the study if they did not speak English or Spanish or if they reported not having received a cash transfer. If the program recipient was under the age of 18, the study team spoke with a parent/guardian for study participation.

At the end of the telephone survey, research assistants (RAs) asked participants if they were interested in completing a future qualitative interview. We purposefully sampled participants for qualitative interviews to ensure diverse representation of gender, language, program referral source, and overall experiences with the program (e.g., positive, neutral, negative) based on survey responses.

Study Procedures

Telephone surveys were conducted October 2021–March 2022 by trained, bilingual (English/Spanish) RAs. RAs attempted to reach randomly sampled program recipients through telephone calls and text messages. RAs generally made 6–8 attempts to contact each individual at different times of day and days of the week before ending attempts.

For individuals reached by telephone, RAs explained the study, screened for eligibility, and obtained verbal informed consent. RAs read questions and answer choices aloud and entered responses using the REDCap web application [22]. Surveys took approximately 20 min to complete. Participants were mailed a \$40 prepaid debit/credit card (Greenphire ClinCard) for their participation. Before ending each call, RAs referred participants to the NYC assistance hotline number, 3-1-1, for help with any ongoing social needs.

One-on-one, semi-structured interviews were conducted with purposefully sampled survey

participants by a bilingual (English/Spanish) qualitative interviewer. Interviews were conducted and audio recorded using Webex (phone/audio only). Participants provided verbal informed consent. Interviews lasted approximately 45 min. Interviewees received \$40 paid via Greenphire ClinCard.

Measures: Survey Questionnaires

The telephone survey ([online supplement](#)) was developed collaboratively by the research team and program leaders from H+H and T2 based on the goals of the program and hypothesized effects, with questions focused on experience with and self-perceived impact of the cash transfer, as well as effects on feelings toward healthcare providers and the healthcare system (for H+H-referred recipients) and on experiences related to I and Q (for T2-referred recipients). Surveys were translated into Spanish by a professional translation company and checked by two native Spanish speakers for accuracy.

Measures: Qualitative Interviews

The qualitative interviewer used a semi-structured interview guide ([online supplement](#)) with domains including life experiences during the COVID-19 pandemic, experiences with the cash transfer program (e.g., ease of use), how the \$1000 was used, effects of the cash transfer (e.g., on social needs and health), and recommendations for future program design. The interview guide was translated into Spanish by a professional translation company and reviewed by two native Spanish speakers for accuracy.

Analysis

We conducted descriptive analyses of survey data using standard statistical procedures (e.g., frequencies and percentages). Data were imported from REDCap to SAS 9.4 for analysis. Given the overall goals of the evaluation, this study is descriptive, and we did not aim to test specific hypotheses. Results were examined for the H+H versus T2-referred program recipients and were similar; we present combined results.

A professional transcription company transcribed the qualitative interview recordings; RAs checked transcripts for accuracy. Immediately following each interview, the qualitative interviewer completed

an interview summary using a template capturing key domains of interest determined a priori by the research team and program partners. Another study team member (DF) independently conducted template summaries for two interviews, with similar results to those completed by the qualitative interviewer. DF abstracted findings from all template summaries to a matrix table to facilitate comparison across interviews. A third researcher (KMD) reviewed the matrix table. We chose these rapid turn-around qualitative analysis methods because they facilitate time-sensitive analyses while still being rigorous and replicable [23].

We compared the results of the quantitative and qualitative data to gain a fuller picture of the program [24]. We describe when the quantitative and qualitative results agree and any areas of divergence or additional information provided by qualitative interviews.

Results

Study Participant Characteristics

Two hundred twenty individuals were randomly sampled for telephone survey outreach from among 4847 cash transfer program recipients. RAs successfully reached 182 (83%) of the randomly sampled recipients by telephone. Of those reached, 14 (8%) declined eligibility screening, 13 (7%) were ineligible (7 did not speak English or Spanish, 5 reported not having received the cash transfer, 1 had died), 5 (3%) were eligible but declined participation, and 150 (82%) completed the survey (75 from each of the H+H and T2 referral sources).

Table 1 shows survey participant characteristics. Two-thirds were women (65%). Most identified as Latinx (87%) and completed the survey in Spanish (79%). Nearly one-third reported a grade school education or less. Approximately half lived with children. Participants had very high levels of difficulty with essential expenses, food security, and housing security. More participants categorized their overall health as fair or poor than good or very good/excellent. Table 1 also shows the proportion who reported receiving various other sources of assistance during the COVID-19 pandemic.

Of the 20 qualitative interviewees (10 from H+H and 10 from T2 referral sources), half were men, and

half were women. Fifteen interviews were conducted in Spanish.

Use of the Cash Transfer

Survey participants generally reported that it was very or somewhat easy to connect with the cash transfer program (76%) and that the instructions for receiving the \$1000 were very or somewhat clear (92%). These results were generally echoed in the qualitative interviews. Some interviewees described challenges in accessing the funds that were ultimately surmountable; generally, however, interviewees found the program relatively easy to use. A few interviewees who had been referred by H+H reported that they trusted the program because it had come from their health-care team. For example, one said, “Another reason I trusted it [the program] was because a doctor that we know was the one who was recommending us. A doctor that the whole family knows. This doctor has taken care of our whole family’s health, so I didn’t mistrust it because of that.” Regarding suggestions for the program in the future, some interviewees suggested the cash amount be based on household size.

Table 2 shows how survey participants reported using the \$1000 cash transfer. The most commonly reported uses were for food and rent. Other commonly reported uses were transportation costs, utility bills, phone and internet, clothing, health care costs, and costs related to children (e.g., diapers, school supplies). When asked which of the ways they spent the cash was most important to them, most participants responded food (40%) and rent (39%). Qualitative interview findings generally mirrored these survey results. For example, one interviewee noted that before receiving the cash transfer, “We were at the very last of our funds for food.” In addition to using the money for rent and food, some interviewees described using the money for overdue bills/debts including those related to utilities, groceries, and debts to friends or family. Interviewees reported spending the money over a period from 1 week to several months. One unexpected finding from the qualitative interviews was that two interviewees used the cash to kick-start small informal businesses, one selling desserts and the other sliced fruits. The interviewee who started the dessert business had been in the hospital for over 2 months, initially

Table 1 Telephone survey participant characteristics

	<i>n</i> (%)
	<i>n</i> = 150 ¹
Age, mean (range)	47 (20–77)
Ethnicity	
Hispanic or Latinx	131 (87)
Race	
Black or African American	27 (18)
White	15 (10)
American Indian or Alaska Native	2 (1)
Southeast Asian/Indian subcontinent	1 (1)
More than one race	5 (3)
Other ²	44 (29)
Refused	56 (37)
Gender	
Man	51 (34)
Woman	97 (65)
Other	1 (1)
Highest level of school completed	
Grade school or less (8th grade or less)	43 (29)
Some high school (9th–12th grades, but no diploma)	30 (20)
High school graduate or GED	48 (32)
Some college	18 (12)
College degree or more	6 (4)
Relationship status	
Single, never married	56 (37)
Dating or partnered, but not married	15 (10)
Married or civil union	47 (31)
Divorced, separated, or widowed	31 (21)
Living with children under age 18	81 (54)
Employment status	
Working full time	24 (16)
Working part time	53 (35)
Unemployed	39 (26)
Working at home (e.g., caregiving)	14 (9)
Retired or unable to work	19 (13)
Time when could not meet essential expenses, past 12 months	116 (77)
Time when could not pay the rent or mortgage, past 12 months	122 (81)
Current housing situation ³	
Have a steady place to live	79 (53)
Have a place to live today, but worried about losing it in the future	66 (44)
Do not have a steady place to live	5 (3)
Food insecurity, past 12 months ⁴	127 (85)
Uninsured	38 (25)
Health status	
Excellent	5 (3)
Very Good	10 (7)
Good	40 (27)
Fair	78 (52)

Table 1 (continued)

	<i>n</i> (%)
Poor	13 (9)
Do not know/not sure	4 (3)
Needed medical care that did not receive, past 12 months	18 (12)
Other assistance received during the pandemic (select all)	
COVID-19 free food delivery in NYC	85 (57)
Stimulus check	78 (52)
SNAP (food stamps) or WIC	67 (45)
Food bank	48 (32)
Unemployment benefits	45 (30)
COVID-19 free meal pick-up at schools in NYC	34 (23)
Rental assistance or NYC “One Shot Deal”	19 (13)
SSI or SSDI	19 (13)
Cash assistance from TANF or welfare	4 (3)
Other	10 (7)
None	17 (11)

¹One participant declined to answer questions on gender, relationship status, food insecurity, and employment. Five declined to answer the question on education level

²Separate questions were asked for ethnicity and race; a large number of participants answered “other” or “refused” for the question on race because they felt that none of the categories applied to them, aside from the ethnicity category of Latinx

³Housing status was measured using a CMS Accountable Health Communities screening question

⁴Food insecurity was measured by the Hunger Vital Signs 2-item screener

for COVID-19 and then because he was hit by a car. Explaining the impact of the cash transfer, he said, “I was very excited to get that money because when I left the hospital because of COVID, I had zero money. And I said, ‘I have to fight to pull through.’ And that was a huge relief for me to be able to start a business like that.”

Program Effects on Social Needs

Table 3 shows self-reported effects of the program on survey participants’ social needs. Most participants reported that the cash transfer greatly (28%) or somewhat (51%) improved their or their household’s financial stability. Participants most often strongly agreed (36%) or agreed (43%) with the statement that without the \$1000 they would have had trouble paying for basic expenses or making ends meet. Participants also reported positive effects related to food security, housing, and their ability to work. The majority of survey participants strongly agreed (52%) or agreed (35%) that

receiving the cash transfer continued to have a positive effect on their lives at the time of the survey.

Qualitative interviewees described the program as “a blessing” and “a relief,” recounting how it helped them address urgent needs for food and rent. For example, one interviewee noted that they had been “sacrificing” in rationing their food purchases to make ends meet, and so they used the entirety of the cash transfer for food. Similarly, one interviewee noted, “I bought the things I needed so I could feed my family.” Another interviewee stated, “It was a relief. At least I have something for to pay my rent.” Other interviewees highlighted the importance of the cash transfer for their children, such as one who explained, “We spent half of it to pay the rent and the other half, we paid for food and whatever the kids needed. ... as kids grow up, they need shoes and clothes because theirs do not fit anymore. ... we can’t deny a child that, so those were some of the needs that we covered with that resource. Putting

Table 2 Participants' use of the \$1000 cash transfer¹

	<i>n</i> (%)
	<i>n</i> = 150
Food	129 (86)
Rent	90 (60)
Overdue rent (back rent)	77 (51)
Rent due but not yet overdue (not back rent)	16 (11)
Transportation (car payments, gasoline, public transportation costs)	71 (47)
Utility bills	59 (39)
Phone or internet	47 (31)
Clothing	39 (26)
Medical or dental care costs (bills, medications, supplies)	36 (24)
School supplies	22 (15)
Diapers or other baby supplies	18 (12)
Paying off a debt (not rent)	18 (12)
Home goods (furniture, appliances, other supplies for the home)	13 (9)
Personal care (haircut, shave, manicure, etc.)	9 (6)
Saving for the future (e.g., put in a bank account)	7 (5)
Gave or lent money to a family member or a friend	6 (4)
Childcare or elder care	3 (2)
Entertainment (e.g., movies, cable, games)	3 (2)
Donations (e.g., to charity)	2 (1)
Travel (outside NYC)	1 (1)
Mental health care (therapy or other mental health care)	0 (0)
Cigarettes or alcohol	0 (0)
Other	10 (7)

¹Participants were asked about each of the listed categories separately and answered yes or no for each. Participants could report more than one use of the cash transfer. One participant declined to answer

the family first, putting the kids first. That's my concern."

Program Effects on Health

As shown in Table 4, most survey participants reported that receiving the cash transfer somewhat or greatly improved their physical and mental health (83% and 89%, respectively) and somewhat or greatly lowered their stress levels (87%). Fewer participants reported that receiving the cash had improved their ability to see a doctor or obtain medicine or medical supplies. Qualitative interviewees explained how the program reduced their stress and improved their mental wellbeing by enabling them to pay for essentials including food and rent. For example, one interviewee said, "Mentally, it took [off] a lot of pressure because when

you're sick and you ain't making no money, you home, you thinking about where I'm gonna get money to pay these bills. So, that makes it more that you get even more sick. So, I'm telling you, that was a blessing." A few interviewees noted other direct effects of the program on their physical health, including one who felt his blood sugar levels had improved due to having less stress, better food, and ability to pay copays for medication. A few other interviewees similarly mentioned positive effects from being able to buy healthy food, as well as using the cash to buy vitamins or necessary over-the-counter medications.

Survey participants referred to the program from H+H (*n* = 75) reported that receiving the cash assistance greatly (47%) or somewhat (35%) increased their trust in the healthcare system. Most reported that receiving the \$1000 made them feel

Table 3 Self-reported effects of the cash transfer on health-related social needs

	<i>n</i> (%)
	<i>n</i> = 150
Effect on own or household's financial stability	
Greatly improved	42 (28)
Somewhat improved	77 (51)
Neither improved nor worsened	26 (17)
Somewhat worsened or greatly worsened	1 (1)
Not applicable	4 (3)
Without cash would have had trouble meeting basic expenses	
Strongly agree	54 (36)
Agree	65 (43)
Neither agree nor disagree	19 (13)
Disagree or strongly disagree	3 (2)
Not applicable	9 (6)
Effect on own or household's ability to obtain enough food	
Greatly improved	72 (48)
Somewhat improved	49 (33)
Neither improved nor worsened	22 (15)
Somewhat worsened or greatly worsened	0 (0)
Not applicable	7 (5)
Cash prevented me from running out of or not having enough food	
Strongly agree	72 (48)
Agree	44 (29)
Neither agree nor disagree	18 (12)
Disagree or strongly disagree	5 (3)
Not applicable	11 (7)
Effect on own or household's ability to maintain stable housing	
Greatly improved	42 (28)
Somewhat improved	49 (33)
Neither improved nor worsened	39 (26)
Somewhat worsened or greatly worsened	0 (0)
Not applicable	20 (13)
Cash prevented me from losing my housing	
Strongly agree	28 (19)
Agree	43 (29)
Neither agree nor disagree	43 (29)
Disagree or strongly disagree	12 (8)
Not applicable	24 (16)
Effect on own or household's ability to keep or gain steady employment ¹	
Greatly improved	29 (19)
Somewhat improved	45 (30)
Neither improved nor worsened	32 (21)
Somewhat worsened or greatly worsened	2 (1)
Not applicable	40 (27)
Effect on own or household's ability to stay home from work	
Greatly improved	37 (25)
Somewhat improved	49 (33)
Neither improved nor worsened	32 (21)

Table 3 (continued)

	<i>n</i> (%)
Somewhat worsened or greatly worsened	1 (1)
Not applicable	31 (21)
Receiving cash assistance continues to have a positive effect on my life today	
Strongly agree	78 (52)
Agree	53 (35)
Neither agree nor disagree	11 (7)
Disagree	4 (3)
Strongly disagree	1 (1)
Not applicable	3 (2)

¹Two participants declined to answer the question about ability to keep or gain steady employment

much (44%) or somewhat (45%) more positively toward the clinic, hospital, or facility that referred them to the program. Participants also reported that receiving the \$1000 generally made them feel much (44%) or somewhat (43%) more positively about their physician and other members of their healthcare team. These findings were supported by qualitative interview results. For example, one interviewee shared, “I have always had a lot of respect and a lot of admiration toward [my healthcare team] because I do know that they are people who help people in need a lot. But this [cash assistance] helps us. It brings you closer to your medical team...because you feel their support and you feel their concern for you.”

Survey participants referred to the program from T2 ($n = 75$) reported that receiving the cash transfer made it a little (41%) or a lot (49%) easier for them to stay in I and Q for as long as it was recommended to them. Qualitative interviews revealed that individuals worried about the loss of income during the pandemic, including while trying to adhere to I and Q protocols. One interviewee shared, “I think it [the cash transfer] helped me a lot in this quarantine because, just think, if I hadn’t had that help, I wouldn’t have been able to pay my expenses.” On the other hand, a few interviewees revealed that they did not actually receive the cash transfer until after their I and Q period was over; thus, while the cash was useful to them in general, it may not have impacted their experience of I and Q specifically. A few noted helpfulness of other

T2 assistance including daily phone calls and T2’s I and Q food box program (Get Food).

Discussion

The COVID-19 pandemic sent economic shock waves across NYC, particularly affecting populations who were historically and systematically marginalized and at heightened risk for COVID-19 infection and death. Amidst this perfect storm, the city’s public hospital system (NYC Health+Hospitals) partnered with philanthropic foundations and a nonprofit organization to implement a novel unconditional cash transfer program for low-income New Yorkers affected by COVID-19. The infrastructure of the healthcare and public health systems was leveraged to identify individuals who were most at risk for poor health and social outcomes as a direct result of poverty, including those who were excluded from traditional government-run programs. In this study, we found that program recipients felt that the cash transfer was easy to use and significantly impacted their lives. The majority of participants reported that the program increased their ability to pay for essential items, reduced their stress, and contributed to improvements in their health.

The most commonly reported use of the \$1000 cash transfer was for food. A recent national survey found that 18.8% of US adults reported experiencing food insecurity during the pandemic, and that food insecurity was disproportionately experienced

Table 4 Self-reported effects of the cash transfer on health

	<i>n</i> (%)
	<i>n</i> = 150
Effects on physical health ¹	
Greatly improved my physical health	53 (35)
Somewhat improved my physical health	72 (48)
Neither improved or worsened my physical health	17 (11)
Somewhat worsened my physical health	2 (1)
Greatly worsened my physical health	0 (0)
Not applicable	5 (3)
Effects on mental health ¹	
Greatly improved my mental health	66 (44)
Somewhat improved my mental health	67 (45)
Neither improved or worsened my mental health	14 (9)
Somewhat worsened my mental health	2 (1)
Greatly worsened my mental health	0 (0)
Not applicable	0 (0)
Effects on stress level	
Greatly lowered my stress	60 (40)
Somewhat lowered my stress	70 (47)
Neither lowered nor increased my stress	17 (11)
Somewhat increased my stress	1 (1)
Greatly increased my stress	0 (0)
Not applicable	2 (1)
Effects on ability to see a doctor or obtain medicine/medical supplies	
Greatly improved	27 (18)
Somewhat improved	33 (22)
Neither improved nor worsened	43 (29)
Somewhat worsened	0 (0)
Greatly worsened	0 (0)
Not applicable	47 (31)

¹One participant declined to answer the questions about physical and mental health effects

by Black and Latinx populations and was significantly associated with foregoing medical care due to cost concerns [25]. In the current study, the large majority of cash transfer recipients reported that the program had improved their ability to obtain enough food for their household. Weaving together results from the qualitative interviews further underscored the importance of the cash transfer in allowing recipients—some of whom described significant food insecurity—to buy food.

The second most commonly reported use of the \$1000 cash transfer was for rent. Housing insecurity negatively affects health and contributes to

health disparities [26]. Though policies such as eviction moratoria and Emergency Rental Assistance forestalled risk for immediate housing loss for many people, at least temporarily, gaps remain and especially burden lower-income renters, who are disproportionately Black and Latinx [27]. Over 60% of participants in the current study reported that the cash transfer improved their ability to maintain stable housing, though without a comparison group, it is difficult to know whether recipients would have become literally homeless or entered other unstable housing situations (e.g., doubled up with friends or family) in the absence of the assistance. Even before the pandemic, NYC offered emergency cash assistance (“One Shot Deal”) in certain situations for some households at imminent risk of homelessness but with many more eligibility and documentation requirements than for the unconditional cash transfer program. Surveys and qualitative interviews conducted with cash transfer recipients revealed that they felt a great amount of stress related to paying their rent, suggesting that existing programs were insufficient. Direct cash transfer programs should be studied to better determine their role in housing security and homelessness prevention.

The cash transfer program served a very high-need population that, in some cases, was underserved by other assistance programs. Specifically, undocumented immigrants—who were excluded from federal pandemic aid such as unemployment insurance and stimulus checks, as well as from basic assistance programs such as the Supplemental Nutrition Assistance Program (SNAP)—were eligible for NYC’s cash transfer program. While we purposefully did not ask about immigration status in telephone surveys, several qualitative interviewees volunteered that they were undocumented and thus the cash transfer was particularly important for them. A program in Chelsea, Massachusetts that provided monthly \$200–400 cash transfers was similarly inclusive of undocumented immigrants; program recipients were 90% Latinx and reported very high levels of financial hardship [28]. Similar to the findings from our study, recipients used a majority of the cash for food [29]. One theme arising from qualitative interviews in our study was that some participants felt more trusting of the program because trusted healthcare teams referred them. This

observation may be informative for future program design, particularly given well-documented fears that may prevent some immigrants from accessing even those benefits for which they are eligible [30].

Decades of research have examined direct cash transfer programs, particularly in low-resource settings. While research has convincingly shown positive health impacts related to significant, recurring cash assistance, [10, 31] fewer rigorous studies have examined the impact of modest, one-time unconditional cash transfers in the USA [17–19]. Three large randomized trials examining one-time unconditional cash transfers (of \$500–\$2000) during the COVID-19 pandemic in the USA did not find significant effects on financial or psychological wellbeing, physical health, or other examined outcomes [17, 19]. Study authors presented several potential theories to explain these surprising findings, including that the baseline needs of the recipient population may modify the impact of modest cash transfers and that measurement over longer time periods (such as in our study) may make some potential effects more apparent. Additionally, survey questions may not be sensitive to all program impacts, some of which might be identified via qualitative interviews. Our study also adds to the past literature by examining a cash transfer program developed and offered by the health system as part of a public–private partnership. One other study, conducted in Ontario, Canada with 392 primary care clinic patients who reported difficulty making ends meet, found that patients randomized to receive a \$1000 cash transfer did not exhibit fewer COVID-19 symptoms (except in a subgroup analysis of recipients aged 50 and older) or infections or improvements in other outcomes as reported in 2-week follow-up surveys [20]. Program recipients in that study appeared somewhat “better off” at baseline than the recipients in our current study (nearly one-third reported annual incomes over \$30,000), which may blunt the observed impact of a modest cash transfer. Additionally, 2 weeks may not be a long enough follow-up period to observe program effects on health and material needs.

The public health emergency alleviated historical and partisan concerns about the moral hazards of unconditional cash transfers that have made it hard to build political buy-in and galvanize financial support. Cash transfer recipients in this study

reported no to minimal spending on items such as alcohol, cigarettes, and entertainment, adding to the evidence that unconditional cash transfers are used for essential goods and services. Furthermore, participants who had been connected to the program through their healthcare teams reported that receiving the cash increased their trust in the healthcare system and made them feel more positively about their healthcare teams and the referring clinic or hospital. In addition to self-reported positive effects on physical and mental health, these findings suggest that programs like the one described in this article warrant further attention and study. Such programs could be supported by healthcare leaders and policymakers and are aligned with the healthcare sector’s increasing awareness of the role of social determinants of health and the importance of addressing patients’ social needs.

Limitations

The primary study limitation is the lack of a comparison group. We did not consider a randomized trial at program onset given the immediacy of need. We could not identify a suitable comparison group retrospectively given data availability and because multiple unmeasured factors might have been associated with program receipt. However, we enhanced rigor by triangulating survey results with qualitative interviews. A second limitation is that survey participants may have differed from program recipients overall. We mitigated this concern by randomly sampling program recipients and taking steps to minimize the number of sampled recipients who were not reached or refused to participate, resulting in an overall participation rate of 68%. Based on available program information compiled by NYDIS, survey participants appeared roughly similar to program recipients in language (79% vs. 70% Spanish) and ethnicity (87% vs. 77% Latinx). Third, the study only included individuals who were comfortable speaking English or Spanish. However, the large majority of program recipients spoke either English or Spanish, and very few individuals were excluded from the study due to language. Last, social desirability bias may have influenced participants’ responses. We attempted to guard against this by having surveys and interviews conducted by study RAs unrelated to the

program. Participants were assured that their results were confidential and would not be connected with their identifying information or influence their receipt of future services.

Conclusion

A \$1000 unconditional cash transfer program operated during the COVID-19 pandemic in NYC was highly appreciated by recipients, who reported multiple positive effects on their health, social needs, and overall wellbeing. Our study adds to the prior research suggesting that people use cash transfers for essential needs, which may in turn improve their health and well-being. Offering this program through the city's public healthcare system was feasible and is a model that could be replicated by other health systems. We observed unique potential benefits related to program recipients' trust in the program and their health care teams that should be explored in future research.

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