Giving Cash to the Poor:
A Study of *Pantawid Pamilya* Cash Grants Generosity, Frequency, and Modality

Kris Ann M. Melad, Nina Victoria V. Araos, and Aniceto C. Orbeta Jr.

Giving Cash to the Poor: A Study of *Pantawid Pamilya*
Cash Grants Generosity, Frequency, and Modality

Kris Ann M. Melad
Nina Victoria V. Araos
Aniceto C. Orbeta Jr.

PHILIPPINE INSTITUTE FOR DEVELOPMENT STUDIES

December 2020

Abstract

This study assesses the payment system of the Pantawid Pamilyang Pilipino Program (4Ps or Pantawid Pamilya) in terms of the amount, frequency, and mode of payment delivery of the cash transfers. The study is an early attempt of the Institute to examine the Pantawid Pamilya implementation and recommend improvements in its payment system in light of the enactment of RA 11310 which institutionalized the program and identified PIDS to conduct regular assessments on the program's implementation and impact. The underlying framework for the study is based on the idea that the amount of cash grants and its delivery system should be able to encourage desired behaviors among beneficiaries and help achieve the program's target outcomes. The study answers the research objectives using a combination of qualitative and quantitative methods of analysis that include a review of the available literature on payment systems of international CCTs; re-assessment of the cash grant values in relation to original intended levels and devaluation due to inflation; assessment of the implementation of the payment system including challenges, facilitating factors, and alternative ideas; and an assessment of the impact of the design features of the payment system on select outcome variables. The study uses administrative data of the Department of Social Welfare and Development (DSWD), survey data from the program's 3rd impact evaluation, interviews of key program implementers in the payment system, focus group discussions with beneficiaries, and an online survey focused on the payment delivery aspect of the Social Amelioration Program (SAP) among Pantawid Pamilya beneficiaries. The results show that the program needs to be more responsive in adjusting the benefit level of the cash grants vis-à-vis inflation and threats to welfare of the beneficiaries. With regard to payment frequency, there is no strong demand by the beneficiaries for more frequent payouts. Changes in frequency of payment should also be carefully examined to know if benefits outweigh additional costs in the operations. Although the payment delivery system has improved through the years primarily due to the conversion of mode of payment to cash cards, some opportunities to improve the payment delivery of the program are still present. Finally, the experience with the SAP distribution demonstrated the ease and speed of distributing assistance in times of emergencies when recipients (e.g., 4Ps beneficiaries) are identified and a payment system in place.

Keywords: *Pantawid Pamilya,* Conditional Cash Transfer, cash grants, payment system

Table of Contents

List of Tables

List of Figures

Giving cash to the poor: A study of *Pantawid Pamilya* cash grants generosity, frequency, and modality

Kris Ann M. Melad, Nina Victoria V. Araos and Aniceto C. Orbeta Jr.[1]

1. Introduction

1.1. Background of the study

The Pantawid Pamilyang Pilipino Program (Pantawid Pamilya or 4Ps) is a human capital development program that aims to arrest the intergenerational transmission of poverty by providing cash grants to poor households, conditional to practice of certain desired behaviors. Specifically, the program provides cash grants based on the poor households' compliance with conditionalities on health, education, and family development. These conditions require that children attend school 85% of the time and eligible household members regularly avail appropriate basic health care services. In addition, parents in the household must attend monthly Family Development Sessions (FDS) or learning seminars.

In April 2019, Republic Act 11310 was enacted paving way to the institutionalization of Pantawid Pamilya. The Philippine Institute for Developments Studies (PIDS) has been tasked to conduct periodic assessments of the program in terms of its impact on the beneficiaries and status of program implementation. The Institute is also tasked to recommend adjustments in the amount of cash grants provided to the beneficiaries every six years. This research is an early effort of the Institute to assess the overall payment system of the program considering the tasks provided in the law. The study looks at three aspects of the payment system: (1) benefit level or the amount of cash grants received by beneficiaries; (2) frequency that the cash grants are received; and (3) modality or the channel through which the grants are received by the beneficiaries.

In terms of benefit level, prior to the passing of the law, compliant household beneficiaries receive Php500.00 per month for health grants. For education, each compliant child in preschool, kindergarten, and elementary (K-6) receives Ph300.00 per month while each compliant child in high school receives Php500.00 per month. The education grant can only be received by a maximum of three (3) children for 10 months each year for each household. Starting only in 2017, an amount of Php600.00 per month is given to the households as "rice subsidy" – an additional benefit supposedly aimed to improve food security among beneficiaries.

The amount of program grants generally remained at the same levels since its pilot implementation in 2008, apart from the addition of the rice subsidy and the differentiation of cash grants for high school students in 2014[2]. From the intended level of benefits in the program's first year of implementation, a cumulative reduction in the real value of cash grants by around 30% by 2016 is expected due to inflation. The provision of the rice subsidy in 2017 helped recover this loss in value of the cash grants, but this could also mean that no real increase in benefits was experienced by the beneficiaries for food security. The reduction in the real

---

[2] From 2008 to mid-2014, only children 0-14 were eligible beneficiaries of the program. Coverage has been expanded to include children 15 to 18 years old in 2014 and grants have increased to Php500 for children in high school

value of grants has been cited as one of the possible reasons for the lack of program impact on some outcomes including total per capita expenditure, and prevalence of working children based on the past impact evaluation studies of the program (DSWD, 2014; DSWD and World Bank, 2014). A study done by Albert (2015) on the extension of age coverage of the program also recommended increasing the amount of education grants for elementary students from Php300 to Php350, and for high school students from Php500 to Php600, to help improve completion and cohort survival rates among the beneficiary children.

With the passing of the law, the health grants increased from Php500 to Php750 and education grants for children in Senior high school (SHS) increased from Php500 to Php700[3]. Meanwhile, grants for children in elementary and junior high school remain at Php300 and Php500, respectively. These amounts are expected to be adjusted every six years based on recommendations of PIDS through the program National Advisory Council – its policy making body composed of DSWD and other agencies.

On frequency of receipt of benefits, the program beneficiaries currently receive cash grants every two months based on a cycle of compliance monitoring conducted by the program implementers. This is relatively faster than during the first three years of program implementation where payouts were conducted every quarter.

In terms of impact, evidence on other CCTs suggest that more frequent provisions of cash grants contribute to better consumption smoothing of beneficiaries while less frequent and lump-sum provision of grants result in higher investments and asset accumulation among households (Bastagli, et al., 2016). Given that the main objective of the program is to address gaps in the food consumption and education and health expenses of the household, these findings suggest that a more frequent payouts should be desired. However, it is apparent that increasing payment frequencies will incur additional operations cost for the program, and whether these additional costs will be cost-effective in terms of the marginal benefits is still unclear. For example, evidence from the systematic review done by Garcia and Saavedra (2012) point that monthly provision of cash grants is associated with smaller impact on educational impacts compared to the less frequent provisions.

The third aspect examined in this study is the payment modality or how beneficiaries receive their program benefits. Cash grants are delivered to the beneficiaries by the Land Bank of the Philippines (LBP) – an Authorized Government Depository Bank (AGDB). Based on the payroll advise generated by the DSWD, the LBP pays the cash grants to the beneficiaries through two modalities. The first modality is through the Cash Cards that can be used to withdraw the money from Automated Teller Machines (ATM), while the second modality involves subcontracting of payment conduits such as money exchange centers, cooperatives, and other firms to deliver the grants in cash to beneficiaries "Over the Counter" (OTC).

Timeliness and predictability of the payments are affected by the modality of cash grant payments. Beneficiaries with cash cards, on the average, receive their benefits earlier than those that receive their benefits through OTC transactions. While cash card holders have immediate access to their benefits once credited by LBP, OTC payouts require successful bidding of a payment conduit, and numerous logistic requirements like OTC venue, scheduling, security, and transportation of beneficiaries to and from the OTC venue, among others. Given this, the DSWD and LBP have been trying to increase the proportion of household beneficiaries with

---

[3] (RA 11310 : An Act Institutionalizing the Pantawid Pamilyang Pilipino Program)

2

cash cards. From the 44% of cash card holders in 2017, the DSWD reports that almost 75% of the beneficiaries are already cash card holders as of July 2019 (Pantawid Pamilya NPMO, July 12, 2019). However, this still means that until one year ago, one million out of the four million beneficiaries of the program were still vulnerable to delays and unpredictability of payments through OTC transactions. The study aims to provide additional information on this challenge of enrolling 100% of the beneficiaries to cash card accounts and the benefits that come with it.

In more recent events, the payment system of the program has been an essential tool in the delivery of the financial assistance for the Social Amelioration Program (SAP) to the Pantawid Pamilya beneficiaries as part of the government's mitigation and recovery plan during the COVID-19 pandemic. Using information on the experiences of the program beneficiaries in relation with the SAP, the study gains insights on the current capacity of the program payment system and briefly discusses its adaptability for other forms of social protection such as emergency cash assistance.

1.2. Objectives

The study aims to assess the payment system of the *Pantawid Pamilyang Pilipino Program* in terms its benefit level, frequency, and modality.

Specifically, the study aims to:
  i.   review international evidence on the level of benefits, frequency, and delivery mechanisms of CCTs in other countries;
  ii.   assess the implementation of the payment system and inputs of key actors and identify variations and challenges in implementation;
  iii. review the appropriateness of cash grant amounts based on of the objectives of the program, the intended value of benefits at program inception, the average expenses of poor households and students, and compare current levels with other successful CCTs;
  iv.   identify and study other options of payment delivery and solicit feedback on these options and alternative recommendations of program staff to improve the current payment delivery system; and
  v.   determine the impact of the program on for subgroups of beneficiaries by type of payment modality and frequency of payment.

1.3. Research questions

The research is a study of the overall payment system of the program covering portions of its results chain from outputs to outcomes. The following research questions are covered:

i.   What does the international evidence say about the level of benefits, frequency, and delivery mechanisms of CCTs?
ii.   How appropriate are the current benefit levels of the program in terms of the objectives of the program, its initial intended value, the average expenses of poor households and students, and in comparison, with other successful CCTs?
iii. How have policies, infrastructure, logistic, and technical inputs from the DSWD, LBP, and other actors changed and affected the payment delivery system of the program in the past years? What motivated the changes?
iv.   How is the payment system implemented? Are there any variations or unique challenges in the implementation?
v.   What do program staff recommend to improve the current payment delivery system?
vi.   What other options of payment delivery can the program explore to improve delivery of cash grants in terms of timeliness and reliability under different circumstances? How feasible are these options based on the perspective of the DSWD and other stakeholders?
vii. How does the level of benefits, frequency and modality of grant payments affect the following outcomes?
     (a) Expenditure and income
     (b) Labor outcomes
     (c) Health, education outcomes

In addition to the above, the study also gathers insights on the capacity of the program payment system using information on the experiences of the Pantawid Pamilya beneficiaries in receiving their financial assistance for the Social Amelioration Program (SAP) of the government in line with the COVID-19 mitigation plan.

In answering these research questions, the study is expected to generate recommendations and options that will help improve the payment system of the program. Aside from generating recommendations to enhance the payment system implementation, the research also delves into the operationalization of these policy recommendations and determines whether these proposed modifications are feasible based on the perspective of the program stakeholders. Ultimately, the goal of the research is to provide improvements in the program implementation – particularly on its payment system – to increase the chances of achieving its desired outcomes in human capital formation and household welfare.

2.   Review of Related Literature

2.1. Role of payment system in success of CCTs all over the world

Various studies and subsequent systematic reviews have shown that the design and implementation features of conditional cash transfers affect the uptake and outcomes of these programs on its beneficiaries (Bastagli, et al., 2016; Garcia & Saavedra, 2012; Davis, Handa, Arranz, Stampini, & Winters, 2002; Fiszbein & Schady, 2009; Baird, McIntosh, & Ozler, 2009).In terms of the benefit mechanism of cash transfers, majority looked at the variations in

impact in terms of the amount of the transfers, while several looked at the impact of variations in frequency of payment, timing, and predictability. This section presents a review of studies on this topic.

In terms of poverty reduction and household welfare, studies generally find that higher transfer levels result in bigger impacts on total household and food expenditure as well as poverty reduction. Davis, et.al. (2002) assessed the impact of the level of cash transfers by comparing the impact of two programs in Mexico that provide considerably different levels of benefits. The study reported positive impact of both programs on several indicators including household welfare and health and education outcomes of children. But, more importantly, it found that increases in the amount of grants have corresponding increases in the household expenditures of beneficiaries. The same is observed for other social protection programs that are unconditional in nature. In a two-year experiment of an unconditional cash transfer in Kenya, Haushofer, and Shapiro (2016) found relatively higher expenditures for non-durable items among households that received higher amount of transfers.

For child health outcomes, three studies of Mexico's Progresa program observed that higher transfer levels are associated with improvements in nutrition outcomes of children. Manley et. al (2015) found statistically significant improvement in the height-for-age Z scores (HAZ) to be associated with higher transfer levels. Esteva (2012) also observed higher HAZ and weigh-for-age Z scores (WAZ) for beneficiaries of Progresa that received higher transfer levels, but these were both not significant. Meanwhile, Fernald et. al. (2009) found that larger cumulative transfers are associated with better child development in both physical and cognitive domains.

The results for education outcomes are more mixed. Manley et. al (2015) found a significant positive relationship between the size of transfers in Progresa and improvements in the cognitive and verbal development indices of children. The study also observed stronger effects on cognitive development due to transfer levels compared with longer duration of exposure. Baird et. al. (2009) found that higher transfers in a Malawi program are associated with improved attendance and progression in school levels among schoolgirls, but this result is only applicable when conditions are enforced with regard to the school attendance of the children. However, other education outcomes examined in the study, including dropout rates, are not responsive to increases in transfer levels. Filmer and Schady (2011) also found small and often insignificant effects on education outcomes of higher transfer levels of the CSSP in Cambodia. A meta-analysis done by Garcia and Saavedra (2012) found that transfer amounts are not statistically correlated to effect sizes of program impacts on education outcomes.

For employment, although the effects of CCTs on employment and work-seeking behavior have been widely studied, there are limited research that specifically looked into the relationship between employment and the level of transfers. One of these few studies is done by Dabalen et. al (2008) where the authors observed reduction in working hours due to increase in transfer levels in a program in Albania. The authors explain that this result could have been exacerbated by other environment conditions such as poor job generation, among others, but they also mention that underreporting of employment is possible as it is part of the eligibility criteria for the program. On the other hand, a re-analysis of six CCT programs in developing countries reveal that there is no systematic evidence that the programs have discourage work among beneficiaries (Banerjee, Hanna, Kreindler, & Olken, 2017)

Relative to studies on transfer levels, studies on the effect of the frequency, timing and predictability of cash transfers are scarcer. In terms of household welfare, Haushofer, and

Shapiro (2016) experiment of a Kenyan cash transfer program showed that monthly provision of cash transfers compared to lump-sum receipt is associated with reduction in expenditures of non-durable items. In addition, lump-sum receipt of benefits was found to be associated with higher savings and investment in beneficiary households. Bazzi et. al. (2012) also observed that predictability and the corresponding timely delivery of benefits are associated with higher increases household expenditure in Indonesia.

For education, the results of the meta-analysis done by Garcia and Saavedra (2012) indicate that more frequent provisions of cash transfers, i.e., monthly versus less frequent, is associated with negative impacts on effect sizes of program impact on education outcomes of children. The authors explained that less frequent payments (i.e., less frequent than monthly) are able to relax the saving constraints of beneficiaries due to partial delay or lumping of payments.

Regarding employment, Bazzi et. al. (2012) found reduction in the working hours of adult members associated with the delay in the receipt of transfers. As mentioned earlier, the program eligibility criteria may have influenced this observation as households anticipate receiving transfers under low employment conditions. However, is also important to highlight the reanalysis done in Banerjee et al (2017) that show there is no significant effect on work incentives.

Banerjee et al. (2017) showed a graph (Figure 1) on the negative relationship between the generosity of the cash transfer programs and the view of people on why the poor are poor. Countries that tend to believe that the poor are lazy tend to provide less generous cash grants than countries that tend to believe that poverty is because their society is unfair.

2.2. Local assessments of the 4Ps Payment system

Studies by CGAP (2013) and Catubig et. al. (2015) both assessed the payment system of Pantawid Pamilya, although the latter had a limited scope and focused only the experience of Davao Region. Both studies noted improvements in the payment system of the program since its pilot implementation, especially after the entry of additional payment conduits that manage the delivery of cash grants to beneficiaries. However, both studies also identified gaps in the payment system.

The CGAP report mentioned as challenges the underdevelopment of the financial infrastructures and the difficulty of catching up with the demand due to rapid increase in number of beneficiaries through the years. This issue is further exacerbated by the limitation of other conduits in developing solutions and innovations as the monopoly of the implementation lies with the Land Bank of the Philippines. Another key issue pointed out by the report is the "missed opportunity" for the LBP and the other payment conduits as they fail to fully appreciate and maximize the potential of beneficiaries to be formal bank clients.

Meanwhile, Catubig et. al. noted that trade-offs exist for all types of payment delivery modes in terms of opportunity costs for the beneficiaries, transaction costs for the government, predictability, and security. This observation highlights the need to study all possible payment delivery options in order to weigh trade-offs and arrive at the most cost-efficient mode. The study also noted facilitating factors such as use of established financial infrastructures already present in the areas (e.g. LBP, Rural Banks, Philpost, etc.), and competition between payment service providers that encourage innovations. Lastly, the study highlighted that the efficiency of the program payment system relies heavily on the commitment of these providers to fulfill their obligations in the payment delivery.

3. Research Design and Methodology

This section presents the research design for the study. The study used a mix of qualitative and quantitative methods of analysis using data from both primary and secondary sources. The analysis is anchored on the conceptual framework presented in Section 3.1 which shows the pathways through which the design features of the payment system of the program affect the program's theory of change, and the achievement of the desired outcomes among beneficiaries. Section 3.2 presents the research design and data collection and analysis components that were used, while Section 3.3 briefly describes the data sources in terms of respondent profiles.

3.1. Conceptual Framework

One of the key assumptions in the program theory of *Pantawid Pamilya* is that the cash grants incentivize beneficiaries to perform their co-responsibilities meant to facilitate human capital accumulation of children in the household (DSWD, 2014). Under such assumptions, the amount of grants and the frequency and manner by which the grants reach the beneficiaries are crucial. As presented in Section 2, evidence on other CCTs demonstrate that these design features of the payment system have an influence on the achievement of desired outcomes of the program.

Figure 1 shows a simplified illustration of the program logic. Poor households receive the package of interventions which include cash grants, the imposition of program conditions, and learning sessions through the FDS. With these program inputs, beneficiaries of the program are expected to have increased income and higher productivity of children in the future. Beneficiaries receive cash grants in exchange for their compliance with program conditions on the education and health of children, and family development, which in turn result in higher investments in the human capital of children. The grants are expected to increase the resources of the household beneficiaries and allow them to afford their needs and smoothen their overall consumption. The additional income is also expected to improve chances of households to cope or withstand economic shocks. All these intermediate outcomes contribute to the overall goal of the program to increase the productivity of children beneficiaries as adults and improve the overall welfare of their households.

For these pathways and outcomes to be realized, it is assumed that resources for the program are adequate and delivered on time and the enforcement of conditionalities and other support interventions including the FDS are implemented effectively. Likewise, it is also important that supply of quality educational and health services is available and accessible to the beneficiaries. The final assumption key to the realization of the final program goal is that merit-based employment and entrepreneurial opportunities are available to the beneficiaries. This allows that the investments on the human capital of the children beneficiaries translate to higher productivity in gainful employments and entrepreneurial activities.

From the figure, the three features of the benefit payment are expected to have influence the realization of changes for the beneficiaries. Evidence from the literature (Section 3) generally suggest that higher transfer levels result in higher impacts on the household expenditure and other measures of immediate income effect of the grants. Likewise, higher transfer levels are also expected to influence compliance behavior of beneficiaries, therefore increasing the

likelihood of achieving outcomes related to the human capital investment in children. The frequency of the grants provision relates more to the availability of the grants to support the ongoing consumption of the beneficiaries, while the modality of grant provision influences access of the beneficiaries to the grants including the costs they incur.

It is important that the program can balance the effectiveness and cost-efficiency of the benefit scheme. The grants should be large enough that the program is able to encourage desired behaviors from the beneficiaries and effect improvements in their consumption, but at the same time, it should also be not too large to foster dependency among beneficiaries. Likewise, the grants should be provided in a timely manner such that they are available to the beneficiaries in times of need, but not at the expense of cost efficiency (i.e. operational costs vis-à-vis marginal benefit). Lastly, it is important that the grants are delivered at minimum costs for the program implementers and the beneficiaries.

Figure 1. Conceptual Framework

- Low productivity
- Low / unstable income
- Vulnerability to shocks

POOR HHs

Low investment in human capital
- Low schooling
- Ill health
- High malnutrition

Enforcement of compliance monitoring, FDS, other support interventions

Beneficiaries comply with conditions in education, health and family development

Increased investment in children's education and health

Better child health and nutrition outcomes

Better child education outcomes

Higher productivity; Higher income of children in the future

Cash Grants

Appropriate grant amount

Benefit levels are high enough to encourage compliance to conditions, and augment income of the household beneficiaries

Appropriate frequency of payment

Grants are provided at appropriate frequencies such as they are available to the beneficiaries when needed, and saving constraints are relaxed

Delivered timely and easily accessible to beneficiaries

Grants are delivered to the beneficiaries with minimum costs to the beneficiaries

Household financial resource increases; income augmented

Households are able to smoothen consumption and are better able to cope with shocks

Improved ability to provide for other household needs and ability to deal with shocks

Assumptions:
Resources are adequate and delivered on time
Enforcement of conditionalities are effective
FDS and support interventions are effective
Beneficiaries convert grant into investments in human capital

Supply of educational and health services are adequate, of high quality, and available and accessible to beneficiaries
Employment and entrepreneurial opportunities are available and merit-based

3.2. Research Design

The study used a mix of quantitative and qualitative data and analysis to answer the research questions specified in Section. For simplicity, these components are grouped into four clusters of analysis below.

3.2.1. Desk review of literature and administrative data

Desk review of available literature and evidence related to the payment policies of international CCT programs was conducted to answer the first and second research questions posted in the study. Literature on the design and assessment of successful international CCTs were used to develop insights on potential improvements in the 4Ps payment system.

The study also reviewed program administrative data and reports related to the payment system and program operations. These include data and reports on the cash grant disbursement, payment delivery modes, compliance monitoring, and budget of the program.

3.2.2. Key Informant Interviews and Focus Group Discussions

The second group of analyses include qualitative research methods through focus group discussions (FGD) with program beneficiaries and key informant interviews (KII) with

program implementers. These were conducted to gain insights from the experiences of the stakeholders with regard to the payment system of the program.

The key informant interviews of stakeholders of the program were aimed to gain an understanding of the following aspects of the payment system:
  i.   Payment policies (i.e., on benefit levels, frequency, and modality) and rationale
  ii. General processes and implementation
  iii. Variations in the implementation across the years and areas
  iv. Challenges, and facilitating factors
  v.   Plans and policy directions (e.g. modernization)
  vi. Suggestions/recommendation for improvement

The target respondents were key persons from the program management responsible for program policies, operations, and monitoring, as well as key officials of the Land Bank of the Philippines (LBP) as the primary AGDB.

On the other hand, the focus group discussions with beneficiaries were aimed to understand issues that they are facing in accessing and using cash transfers. The key topics in the FGD include:
  i.   Assessment of the appropriateness of benefit levels relative to their household expenditures
  ii. Experience in compliance monitoring and correctness of cash grant amounts
  iii. Knowledge and experience on filing payment-related grievances
  iv. Experience in payout procedure such as receipt of information on payment schedules, challenges in accessing grants, support services related to the program payouts, etc.
  v.   Expenditure of grants and tracking of expenses
  vi. Suggestions for improvement of program implementation

Data collection was conducted in National Capital Region (NCR) and the three island clusters of Luzon, Visayas, and Mindanao. The study areas were selected from the 3rd wave impact evaluation sites and consisted of 16 barangays from 8 municipalities[4]. One FGD per barangay was conducted totaling to 16 FGDs in all. For the areas outside NCR, one city and one municipality is chosen for each region, while one rural and one urban (or *"Poblacion"*) barangay were chosen for each city or municipality. The distribution of study sites per island cluster is shown in Table 1.

---

[4] The areas and base sample frame for this study are the same with separate research entitled "Qualitative Follow-up Study to the 3rd Wave Impact Evaluation". The data collection for the two studies were simultaneously conducted but the FGD participants were different.

Table 1. Distribution of study sites by island cluster

Island Group/ Cluster	Number of Cities/ Municipalities	Number of barangays
NCR	2 cities	4
Luzon	1 city, 1 municipality	4
Visayas	1 city, 1 municipality	4
Mindanao	1 city, 1 municipality	4

For each of the 16 barangays, the data collection included a focus group discussion with beneficiaries of the program, and interviews with the Pantawid Pamilya City/Municipal Link (C/ML) and Municipal Roving Bookkeeper (MRB) assigned in the areas whenever possible. The C/ML is the frontline staff of the program who oversees that the operations at the beneficiary level and serves as the primary linkage of the program with the beneficiaries and other local stakeholders. The MRB on the other hand is the staff primarily involved in the payment operations at the city or municipal level. The MRB serves as the primary link between the C/ML, the LBP or payment conduits, and higher level staff involved in the payment operations. The number of C/MLs and MRBs assigned in the area usually depend on the number of Pantawid Pamilya beneficiaries.

Data collection was conducted for majority of the Luzon areas (including NCR) from November to December 2019 while data collection in Visayas and Mindanao areas were conducted from January to March 2020.

Aside from the MRBs and C/MLs, other stakeholders interviewed are key officials involved in the policy and design of the payment system. These interviews were scheduled after all of the FGDs in order to validate and probe issues that were identified by the beneficiaries as well as the frontline workers of the program. The complete list of target respondents for the FGD and KIIs are presented in Table 2 below. The roles and number of target respondents are also shown. All of the FGDs and most of the KIIs were conducted in person while KIIs with two MRBs, the LBP, and the DSWD-FMS were conducted via phone and online video conference due to COVID-19 travel restrictions. Due to scheduling difficulties, the interview with Pantawid National Program Management office was conducted via email where the office provided responses to guide questions.

Table 2. Target respondents for FGDs and KIIs

Respondent	Number of respondents	Method	Role in the program
Beneficiaries	10/ barangay	FGD	▪ Program beneficiary
City/Municipal Link	1/city or municipality	KII	▪ Compliance monitoring ▪ Linkage with local actors ▪ Information channel to beneficiaries ▪ Facilitation of updates and grievances
Municipal Roving Bookkeeper	1/city or municipality	KII	▪ DSWD staff assisting conduits for payouts in OTC areas
Pantawid Pamilya National Program Management Office (NPMO)	1-4*	KII	▪ Program M&E, and key policies ▪ Grievance redress ▪ Beneficiary updating, NPMO level ▪ Compliance verification, NPMO level

Respondent	Number of respondents	Method	Role in the program
DSWD Finance Director for 4Ps	1	KII	▪ In charge of payroll generation and liquidation at the national level
Landbank Program PMO	1	KII	▪ Authorized government depository bank ▪ Overall in-charge of payment of grants

Thematic analysis was used to analyze the qualitative data collected by the study team. This was facilitated by the use of computer-assisted qualitative data analysis software (CAQDAS), specifically NVivo. Transcripts of the interviews were systematically coded following themes based on pre-identified areas of discussion during the questionnaire development. Sub-categories were then generated based on the initial themes in order to further analyze the range of insights provided by respondents.

Given validity and reliability issues inherent in qualitative analysis (Nowell et al. 2017), the study team employed various methods in order to validate the study results. Namely, these are triangulation, thorough documentation of interview proceedings and the analytical process, and use of rich and thick description in the analysis text.

Triangulation is conducted by comparing responses of program beneficiaries and program implementers, namely DSWD and Landbank staff. Cross verification is also done by comparing qualitative analysis results with results of other methods employed by the study. Interviews were documented with audio recordings, as well as notes taken during the interview. Documentation of the analytical process was also practiced by the writing of notes or "memos" using features provided by the CAQDAS utilized by the study team. Thick description is provided in the analysis in order to provide a thorough context for interview responses.

Although measures are taken to support the validity and reliability, particularly the qualitative component of the study, it must be noted that qualitative analysis on its own cannot be used to generalize over a large population. The main purpose of the analysis in this case is to facilitate triangulation by cross verification with the results of the other methods of analysis employed by the study. This also supplements and provides depth the analysis by capturing insights not covered by other methods.

3.2.3. Analysis of IE3 survey data

The study also included an analysis of the survey data collected for the 3rd impact evaluation of the program to assess if target outcomes are affected by features of the payment system, specifically the mode of delivery of receipt of cash grants.

The survey data was collected from November to February 2017 covering 6,775 households that are beneficiaries and non-beneficiaries of the program and includes information on the manner through which beneficiaries of the program receive their cash grants. Moreover, the data includes information on the characteristics of the households and their individual members, and indicators of desired program outcomes such health care utilization and education of children, income and expenditure, receipt of social and government program benefits, labor participation, anthropometric data, among others.

Consistent with the design of the 3rd impact evaluation of the program, the study applied an RDD identification strategy was used to analyze the survey data. In RDD, poor and eligible households – the beneficiaries – are compared with households that are just below the eligibility cut-off for the program (i.e., poverty threshold). RDD is extensively discussed in the works of Imbens and Lemiuex (2008), Cattaneo, Idrobo and Titiunik (2018a) and Cattaneo, Idrobo and Titiunik (2018b).

Figure 2.Regression Discontinuity Design
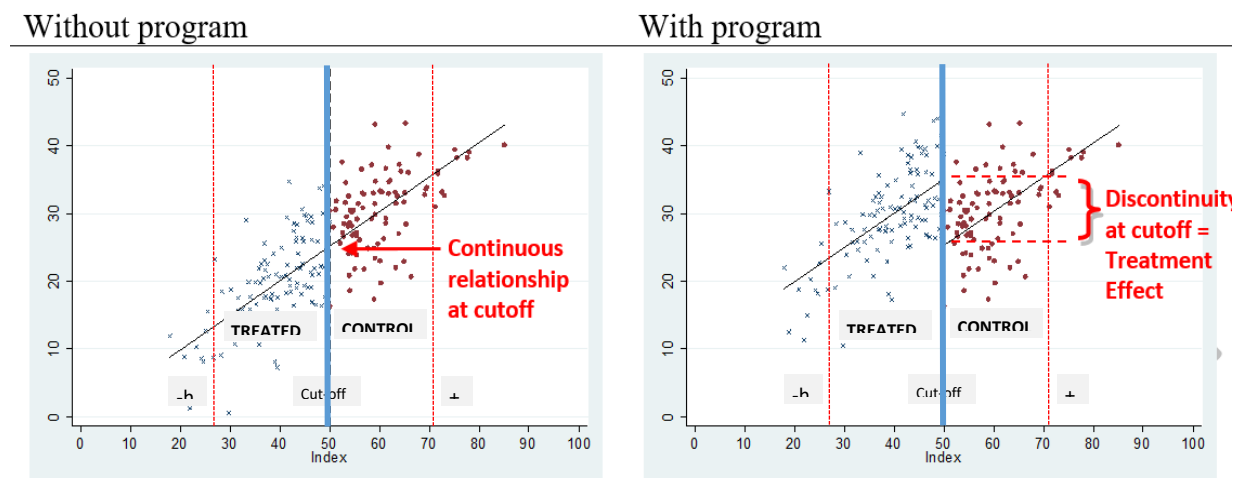
Source: Impact evaluation concept note, World Bank (2010)

The estimation is constructed on the base equation

$$y^- - y^+ = \lim_{x \uparrow \bar{x}} E[Y_i | X_i = x] - \lim_{x \downarrow \bar{x}} E[Y_i | X_i = x]$$

where Y is outcome of interest, X is the Proxy Means Test (PMT) score of the households based on Listahanan targeting of the program, x is the eligibility cut-off or poverty threshold, and T is the treatment assignment variable.

The study estimated the impact of the program on subsets of beneficiaries grouped by cash grant modality (OTC versus cash card). This was done by estimating the impact of the program separately on subsets of the sample based on the features of the payment system being

examined. Differences between impact estimates for the subgroups were tested using z-test of equality of coefficients:

$$Z = \frac{\tau_1 - \tau_2}{\sqrt{(se_1)^2} + \sqrt{(se_2)^2}}$$

where: τ_1 = coefficient (program impact) on the first subgroup
τ_2 = coefficient (program impact) on the second subgroup
se_1 = standard error of the impact estimate on the first subgroup
se_2 = standard error of the impact estimate on the second subgroup

To improve precision of estimates, relevant covariates such as urban/rural classification of areas, barangay characteristics, supply conditions, etc. were included in the estimation models.

The analysis of the IE3 data for this study is limited by two main issues: (1) the original sampling of was not designed to measure the impact of such features of the payment system; and (2) the RD methodology can only generate impact estimates among household beneficiaries near the poverty thresholds and not of the poorer segments of the beneficiary population. Ideally, a controlled experiment as in an RCT should be done to accurately measure the impact of these payment system components; however, the results of the study should be able to provide a reliable picture of the impacts of this distinction in the payment modality.

3.2.4. Online survey on SAP implementation

In line with the government's social protection plan to alleviate loss of income and other shocks due to the COVID 19 pandemic, financial assistance is given to Pantawid Pamilya beneficiaries through the Social Amelioration Program (SAP). An online survey was launched to collect information on the experiences of the program beneficiaries in receiving their financial assistance. The information from the online survey was used to gain additional insight on the current capacity of the program payment system, challenges, and its ability to adapt to wider coverage of beneficiaries and available technologies in payment delivery.

The questions included in the survey are those that pertain to their experiences in accessing or withdrawing their regular cash grants in Pantawid Pamilya and the SAP financial assistance. Respondents were also asked regarding the platforms they used in accessing their benefits (e.g., ATMs, digital banking, etc.), as well as effects of the current pandemic on their sources of income, expenses, and access to health services.

3.3. Profile of Respondents by Source

This section presents the profile of respondents in the data collection activities mentioned in the preceding text. These include the description of participants in the FGDs and KIIs, as well as respondents in the 3rd impact evaluation survey and the online survey on SAP experience.

3.3.1. FGD Respondents

A total of 156 individuals participated in the 16 FGDs that were conducted. Although the research team targeted ten participants for each FGD, the number of participants varied across sites with number of participants ranging from 5 to 18 due to availability of participants. Among the island clusters, Mindanao FGDs had more participants than the average (Table 3).

Table 3. Distribution of FGD participants by island cluster

Island Cluster	Freq.	Percent
LUZON	36	23.08
MINDANAO	46	29.49
NCR	38	24.36
VISAYAS	36	23.08
Total	156	100

The base sample for the FGDs were taken from the sample of Pantawid Pamilya beneficiaries in the IE3 survey[5]. In cases where the number of potential participants for the FGDs is lower than 10, the city/municipal link were asked to invite other active beneficiaries of the program in the barangay.

Table 4 shows the profile of the FGD participants. Majority of the respondents (83%) were female, and most are the designated grantee of the household. The grantee, usually the primary caretaker of the children, is the authorized representative to receive the cash grants and attend the FDS. The rest of the participants were mostly the spouse of the grantee. Among the participants, almost 20% were Parent Leaders (PL). A parent leader is a Pantawid Pamilya beneficiary chosen as a leader or representative of a group of beneficiaries of around 25 to 40 members usually residing within the same barangay. The PLs are usually more well-versed with the program operation details compared to other members of their parent group because the C/MLs are usually relay information to the other beneficiaries through them. The average age of participants is 47.

---

[5] This excludes beneficiaries who were invited in FGDs for the research "Qualitative Follow-up Study to the 3rd Wave Impact Evaluation". The areas and base sample for these studies are the same but participants for the FGDs were different to avoid respondent fatigue.

Table 4. Profile of FGD participants

Characteristic	Freq. (n=151*)	Percent
Female	125	82.78
Parent leader	29	19.21
Grantee	122	80.79
Age group		
20-29	5	3.31
30-39	35	23.18
40-49	51	33.77
50-59	38	25.17
60 and older	22	14.57

Note: Five participants do not have profile information

Table 5 shows the average household composition of the FGD participants. From the table, not all of the households have children 5 years old and below and pregnant women. Meanwhile, on the average, there are two children age 3 to 18 years old in the households. These children are within the age group eligible for the education monitoring of the program. However, the average number of monitored children for education is lower which means not all of those within the eligible age group are monitored for school attendance. For context, the program has a limit of three children per household

Table 5. Household composition of FGD participants

Household member	Average number in the household (n=151)	Min.	Max.
Pregnant woman	0.05	0	1
Children 0 to 5 years old	0.46	0	3
Children 3 to 18 years old	2.21	0	10
Monitored children (for education condition)	1.49	0	3

In terms of mode of payment of cash grants, almost all of the respondents reported claiming their cash grants through cash cards (96%) while only 5 participants reported receiving through over the counter transactions in Land Bank branches. This is consistent with the KII responses and recent program reports that indicate that most of the areas nationwide, except for areas in Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) are predominantly receiving grants through cash cards. Among the participants, 145 were able to provide the amount of the last grant they received. The average amount is PHP 3.400 pesos for two months of compliance monitoring, while reported amounts range from PHP 1500 to PHP5200. Most of the participants received their last cash grant one or two months prior to the interview but five of the participants reported receiving their last grants in 2009 up to 2018. These participants were later found to be inactive beneficiaries who have exited from the program due to aging out of eligible children or other reasons for ineligibility.

3.3.2. KII respondents

As discussed earlier, City or Municipal Links (C/ML) are the program frontline staff who serve as the direct link of the program to the Pantawid Pamilya beneficiaries. The C/MLs ensure that systems and program operations are running smoothly at ground level and concerns of beneficiaries regarding the program are addressed or referred to the proper stakeholders. Their role include ensuring that information on the beneficiaries are up to date, compliance data are being collected (with the help of health facilities, schools, and another program staff called Social Welfare Assistant), grievances of beneficiaries are collected and properly endorsed to appropriate channels, and FDS are being conducted and attended regularly. They are also expected to be "case managers" of the beneficiaries and ensure that that other issues and needs of the family are being addressed through linkages with local stakeholders including the Local Government Units. Given the crucial role of the C/MLs in program implementation, they were included as key informants in the study.

In total, there were 18 C/MLs that were interviewed. There were 5 each from NCR and Visayas, and 4 each from Mindanao and Luzon. Table 6 shows the profile of the respondents in terms of their experience as C/MLs and current caseload. The average years of experience as C/ML is 6 years with the shortest at 1 year and longest at 9 years. In terms of experience as C/ML in the study area, the average and range is lower since some of the C/MLs interviewed have been previously assigned to a different area. The average number of barangays covered by one C/ML is around 6, while number of beneficiaries on the average are around 780 and values range from 678 to 980.

The Municipal Roving bookkeeper (MRB) is the staff in charge with the ensuring payment operations in the program are running smoothly at the ground level. Their primary role is to coordinate with the Land Bank of the Philippines and other payment conduits to ensure that beneficiaries are able to receive their cash grants whether through cash cards or over the counter. They also work with the C/MLs in helping beneficiaries enroll to a cash card account and troubleshoot concerns regarding receipt of grants such as loss or damage of cash cards, card capture, among others.

In total, there were nine MRBs assigned in the study areas that were interviewed. On the average, the MRBs have had 5 years of experience as MRBs (Table 6). An MRB is usually assigned to one or more municipality but in some areas, particularly in populated cities like in NCR, more than one MRB can be assigned.

Table 6. Experience and caseload profile of C/ML and MRB respondents in KIIs

Respondent characteristics	Mean	Obs.	Std. Dev.	Min.	Max.
CITY/ MUNICIPAL LINKS					
Total years as C/ML	6.4	16	2.4	1	9
Total years as C/ML assigned in the study area	3.9	16	2.0	0.7	7
Caseload or number of Pantawid Pamilya beneficiaries managed	780.8	16	84.0	678	980
MUNICIPAL ROVING BOOKKEEPER					
Total years as MRB	5.1	9	2.4	2	10
Number of MRBs assigned in the same city or municipality	1.3	9	0.7	1	3

In addition to the local KIIs with the C/MLs and MRBs assigned in the study sites, interviews were conducted with officers of the Landbank of the Philippines' Conditional Cash Transfer Program Management Department (CCT-PMD), the DSWD Financial Management Service for Special Programs (FMS-SP), and the National Program Management Office (NPMO) of the program. These interviews were done to collect information on the payment process, including rationale for past policy decisions, current, and future directions, from the perspective of the national-level program implementers There were two KII respondents for the interview with CCT-PMD and also two respondents for the interview with DSWD FMS-SP which was done via video conferencing. The data collection for the NPMO was conducted through email questionnaire through its Planning and Monitoring Evaluation Division.

1.1.1. IE3 data

As discussed in the previous section, the main sample of the 3rd wave impact evaluation survey was based on a RDD evaluation design. The sample consisted of poor households eligible to be enrolled in the program, and non-poor or non-eligible households. The total sample covered in the survey were 6,775, coming from 180 barangays nationwide. The survey data was collected from November 2017 to February 2018 through face-to-face interviews.

Of the total sample, 3,450 households formed part of the treatment group while 3,325 households were included in the comparison group. Table 7 shows the characteristics of the treatment and comparison group at baseline and their estimated PMT scores at the time of targeting. Based on the table, the households in the treatment and comparison groups, on the average, are generally similar in terms of household composition and income. This supports the validity of comparing the two groups to measure the impact of the program.

Table 7. Household composition and estimated income of households at baseline, by treatment assignment

	Treatment	Comparison	All
Total number of households	3,450	3,325	6,775
Average number of household members	5.17	5.10	5.13
Average number of HH members by age group:			
0 to 5 years old	0.6	0.59	0.6
6 to 14 years old	1.28	1.21	1.25
15 to 18 years old	0.5	0.47	0.48
19 to 60 years old	2.48	2.49	2.48
Total no. of WRA (aged 15-49 years)	2,646	2,494	5,140
Ave. estimated income based on PMT	PHP 14,466	PHP 15,596	PHP 15,017

The focus of this study component is the differential impact of the two modes of cash grant payment on the key target outcomes of the program. Of the treatment households, data on the mode of payment is only available to 3,011 Pantawid Pamilya beneficiaries. The distribution of the households by mode of payment is shown in Table 8. Treatment households that did not have information on the mode of payment were excluded in the analysis. In total, the analytical sample for the treatment group is composed 1,315 household that receive grants through OTC mode and 1,298 households that receive grants through cash card mode of payment.

Table 8. Distribution of IE3 treatment households by mode of payment

Mode of Payment	Frequency	Percentage
Over-the-Counter (OTC)	1,315	38.1
Cash card	1,298	37.6
No data	837	24.3
Total	3,450	

Table 9 presents some information on the payment history of the 4Ps households in the analytical sample. Based on the respondents reported frequency of payouts in the past 12 months, cash card payouts were more frequent compared to OTC payouts. This could be expected because OTC payouts require more logistical preparations and schedules are dependent on a number of factors that do not affect cash-card based delivery of grants. In terms of the total amount of grants over the same period of 12 months, the difference between the two mode of payments was not statistically significant although that of the cash-card group was slightly higher possibly due to the slightly higher frequency of payouts.

Table 9. Frequency of payout and amount of grants received by IE3 treatment households included in the analysis (n=2,613)

	All	By Mode of Payment		
		OTC	Cash Card	Difference
Frequency of cash grant payouts in the past 12 months	5.3	5.1	5.5	-0.40**
Total amount of grants received in the past 12 months (in PHP)	15,357	15,060	15,658	-597.37

1.1.2. Online SAP survey

The online survey was launched starting April 2020 using the online platform Survey Monkey. The data used in the analysis is as of December 2020, but majority of the responses included in the analysis were those received towards the end of April 2020 until the first week of May 2020 as shown in Figure 3. During this period, the first tranche of cash grants was still currently being distributed to its intended beneficiaries including 4Ps households.

Figure 3. Frequency distribution of online survey respondents by date of response
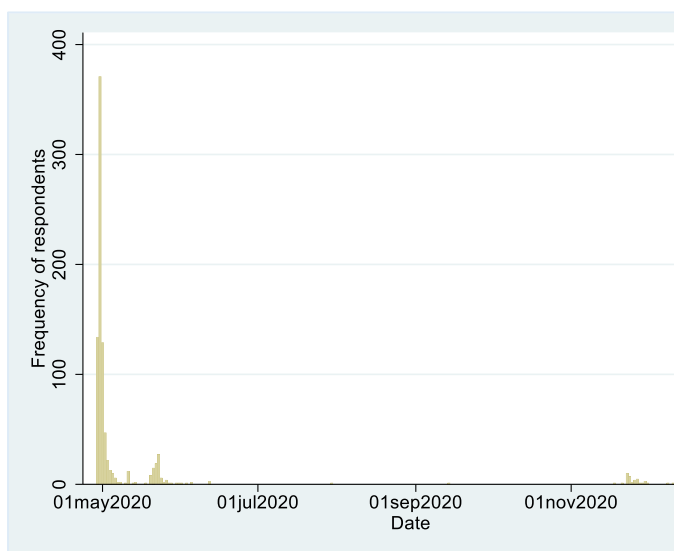
The main challenge in the data collection is the recruitment of respondents and completion of the survey. Being an online survey, the response and completion rates depend on the access of beneficiaries to internet-connected gadgets and requires a certain level of internet-literacy to navigate through the survey. This was especially difficult because the target respondents – the 4Ps beneficiaries – are from low income households, and we expect that access to stable internet connection and internet-capable devices is limited. Another issue observed in the data is the imbalance in distribution of respondents in favor of urban areas where connectivity is more available.

In total, there were 1,483 attempts to answer the survey and 1,325 of which (95.8%) were eligible to answer the interview as they were current 4Ps beneficiaries at the time of data collection. However, the number of responses dwindled as the questionnaire progressed due to

the respondents dropping out in the middle of the interview. Possible reasons could be unstable internet connection, loss of interest, respondent fatigue, or errors in navigating through the questionnaire. Of the 1,325 original respondents, only 488 beneficiaries reached the last section of the questionnaire, equivalent to only 36% completion rate (Figure 4). Average completion time for the whole questionnaire is 20 minutes.

Figure 4. Completion rate by question item in online survey
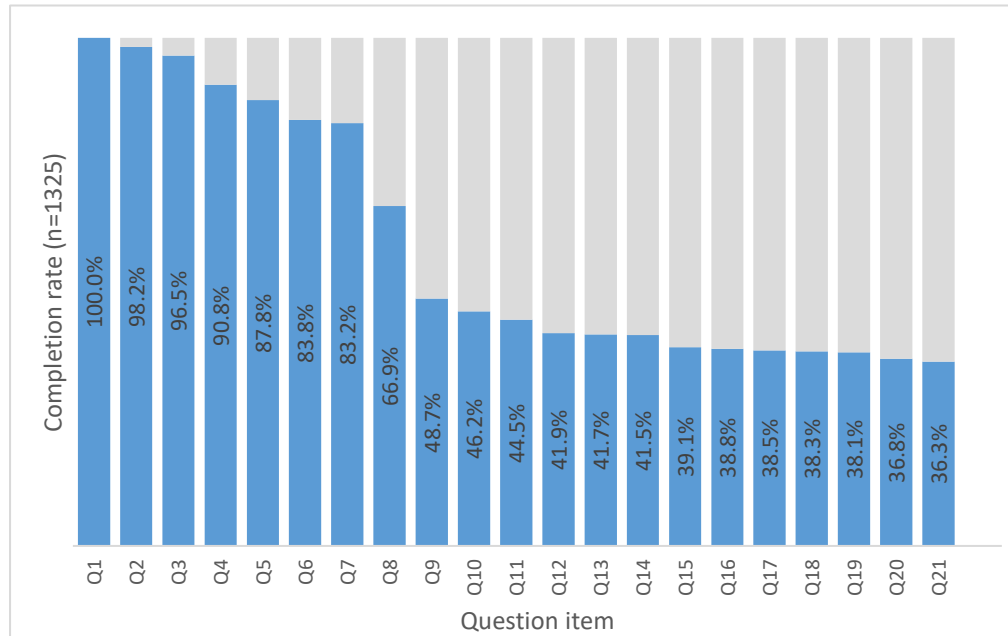
To maximize the data collected, the responses of a total of 886 respondents were included in the analysis. The data includes those of the respondents that were able to answer the questions regarding their usual experience in receiving the 4Ps cash grants as well as the question asking whether they have received their SAP grants. These are indicated by the completion rates for Question 7 and 8 (Q7, Q8) in Figure 4. However, since the completion rate for the succeeding questions decreases, these respondents have incomplete data for the latter sections which include follow-up questions on the SAP and their profile characteristics. Because of this, profile information are incomplete for some respondents.

Table 10 shows basic descriptive statistics on the respondents included in the analysis. The number of observations with data on these characteristics are also presented for reference. Most respondents are the assigned 4Ps "grantee" for their household. The grantee is the authorized representative of the household to receive cash grant payments and is also the member required to attend the Family Development Sessions. Almost all of the respondents are females which is expected since most of 4Ps grantees are also the mothers of the children beneficiaries. Most of the respondents reported that their spouse is the primary income earner or "breadwinner" of the household. The top occupations reported were construction and factory work and driving public utility transportation. The average age of respondents is 42 while the average household size is 7. The average number of children 3 to 18 years old in the household is 3 and most, but not all, of these children were enrolled in school before the quarantine.

Table 10. Descriptive statistics of respondents included in the analysis

Characteristic	Percentage of respondents*	Number of observations with data
Percentage of respondents who is the current grantee of the household	98.0%	886
Percentage of respondents who is a 4Ps parent Leader	28.0%	612
Percentage of female	96.0%	552
Breadwinner of the household is the respondent's spouse	60.2%	505
	Mean*	
Age	41.63	555
Household size	6.75	510
Number of children 3 to 18 years old	2.99	510
Number of children 3 to 18 years old currently attending school	2.72	507

Note: The percentage and mean values were computed among observations with data

More than half of the respondents are from the National Capital R. This is followed by Region IV-A and Region III. The table below shows the distribution of the respondents in NCR. Most of the NCR respondents are residents of Marikina City (66.0%) followed by Makati City (16.7%).

Figure 5. Distribution of online survey respondents by region
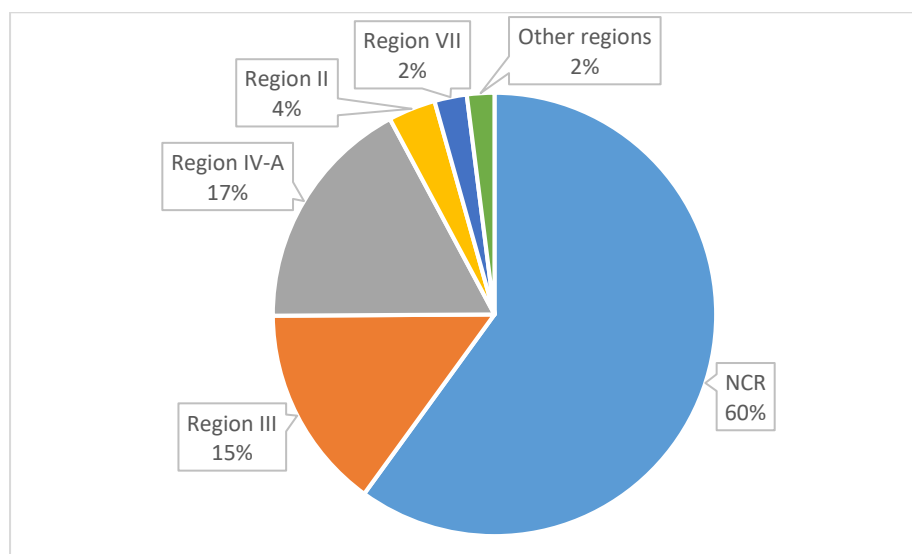
Note: Other regions include Region I (4 respondents), Region V (3), Region VI (1), Region VIII (1), Region XII (1), and BARMM (1); N = 550 respondents

When respondents were asked if a type of quarantine is being imposed in their area of residence, majority responded that an Enhanced Community Quarantine (ECQ). This is expected since most of the respondents are from NCR and other nearby regions and most of the responses were collected in April and May 2020.

4. Results

This section presents the results of the study. The first subsection provides a detailed description of the implementation of the payment system of the program as well as challenges in the implementation that were collected from the FGDs with beneficiaries and KII with implementers. The succeeding subsections focus on the three focus areas of the study, namely assessment of the benefit level, the frequency of payment, and the modality of payment delivery. The final sub-section discusses the analysis of the online survey on the SAP implementation focusing on the experience of the beneficiaries in accessing their grants and the role of the program's payment system in its delivery.

4.1. The 4Ps Program Payment System

According to the key informants from the national program management, the payment system of the program plays an especially important role in the success of the program as it ensures the correct payment to the beneficiaries and timely release of grants which are expected to encourage desired behaviors from the beneficiaries.

The payment system forms a key component of the program cycle starting from the first release of unconditional grants to newly registered households and the succeeding release of grants that are based on the compliance of beneficiaries (Figure 6).

Figure 6. Role of payment system in Pantawid Pamilya Program Cycle
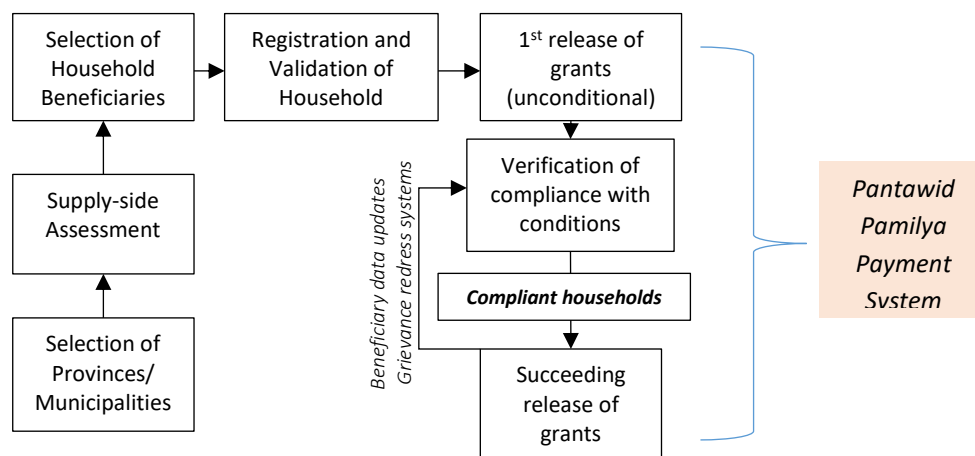
Source: Adapted from Figure 1 of Pantawid Pamilya Operations Manual (DSWD, 2015)

4.1.1. Current design of the payment system

Figure 7 shows the fund flow of the program payment system from the government allocation in the General Appropriations Act (GAA) up to the payout to beneficiaries. The fund begins with the approval of the GAA which provides authorization for the program to incur fund obligations, followed by the release of Notices of Cash Allocation (NCAs) by the DBM to DSWD for the payment of the expenses of the program. The cash grants are deposited by the DSWD in the Land Bank of the Philippines as the program's primary authorized government depository bank (AGDB). The LBP then maintains the funds in takes care of the transfer of the

funds to its conduits that will pay the cash grants to the beneficiaries or directly to the accounts of the beneficiaries with cash cards.

Figure 7. Fund flow of the Pantawid Pamilya Payment System
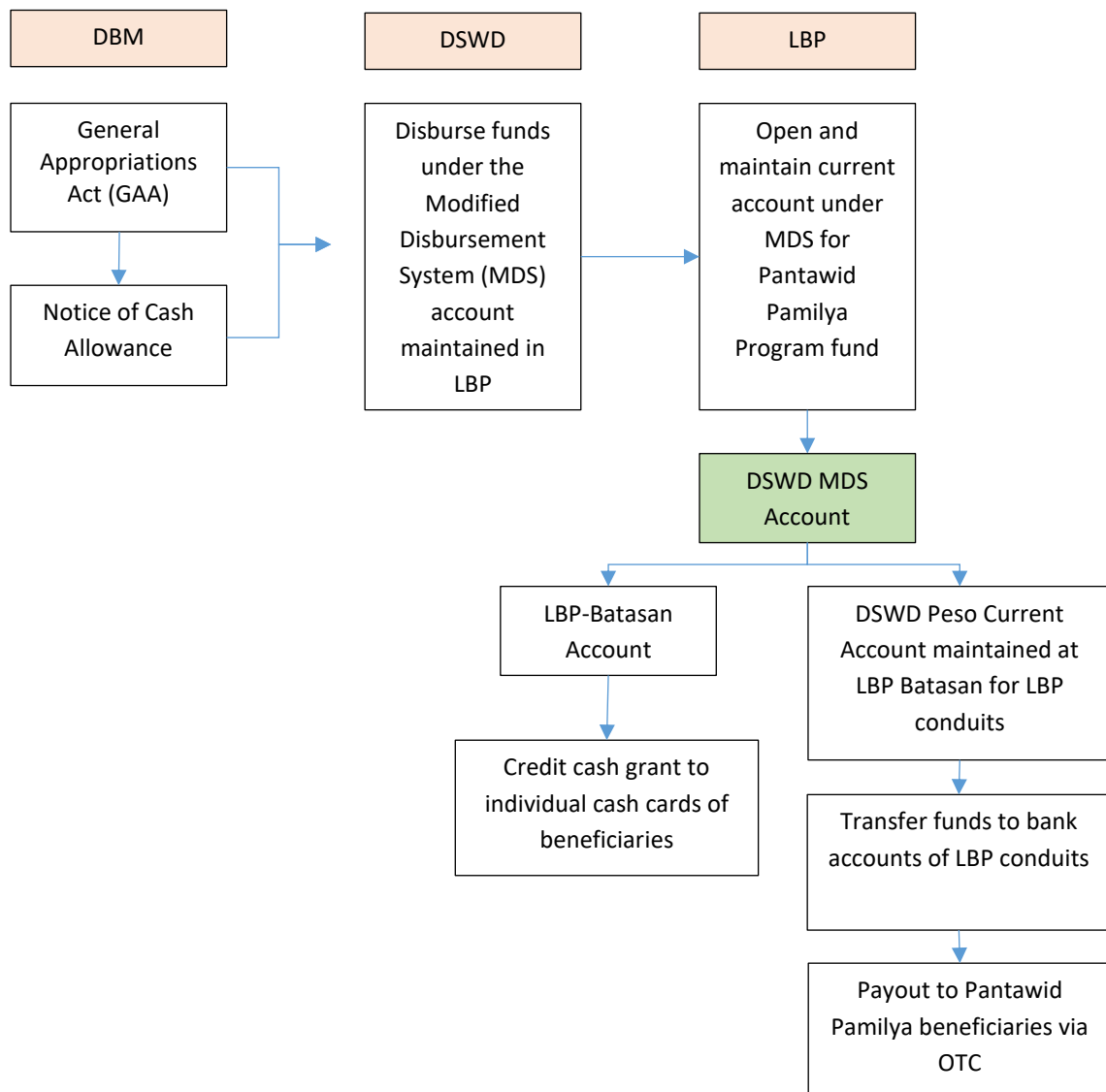
Source: Adapted from Pantawid Pamilya Operations Manual – FMS Sub-manual (DSWD, 2015)

Cash grants are delivered to beneficiaries through two modes of payment: Bank cash cards where the grants are withdrawn via ATM; and Over-the-counter (OTC) transactions where the grants are provided directly to beneficiaries and in the form of cash via payment conduits.

Payment conduits are hired by the Landbank to deliver the cash grants when there is no available ATM or Point-of-Sale merchants in the area. The LBP procures the services of these payment conduits following the existing government procurement law and selection is generally done through competitive bidding of firms. Payment conduits include rural banks, money remittance centers, cooperatives, money couriers, and postal services. The following are the procedures highlighted in the program operations manual on the selection of conduits that are eligible to provide their services in the payment delivery.

Figure 8. Selection process of payment conduits

```
┌─────────────────────────────────────────────────────────────────┐
│        Public or private conduit submits proposal to LBP         │
└─────────────────────────────────────────────────────────────────┘
                              ▼
┌─────────────────────────────────────────────────────────────────┐
│  LBP invites potential conduits to present its plans and          │
│  strategies in distribution and liquidation of cash grants        │
└─────────────────────────────────────────────────────────────────┘
                              ▼
┌─────────────────────────────────────────────────────────────────┐
│  DSWD shall ensure that the Information Systems of the potential   │
│  conduits can readily communicate with the information systems     │
│  of the Pantawid Pamilya                                          │
└─────────────────────────────────────────────────────────────────┘
                              ▼
┌─────────────────────────────────────────────────────────────────┐
│  LBP/AGDB shall negotiate for a reasonable fee to the potential    │
│  conduits in consideration of its services                         │
└─────────────────────────────────────────────────────────────────┘
                              ▼
┌─────────────────────────────────────────────────────────────────┐
│  DSWD issues a clearance that the potential conduit may now join   │
│  the bidding process undertaken by LBP                             │
└─────────────────────────────────────────────────────────────────┘
```

Source: Pantawid Pamilya Operations Manual – FMS Sub-manual (DSWD, 2015)

Payment conduits that have been involved in the delivery of cash grants include the PhilPost, Globe GCASH Remit (merchant-based), Smart-NATCCO, MASSPEC, First Consolidated Bank, Rural Bank of Gattaran, Philippine Veterans Bank, M Lhuillier, LBC, among others.

After the selection of the payment conduits, the payment system starts with the generation of the Notice of Payroll Action (NAPA) based on the compliance data of beneficiaries. The NAPA is prepared by the Compliance Verification Division program's national program management office and serves as the basis for the list of beneficiaries entitled for the cash grants in a specific pay period. Using the NAPA and the report of the DSWD regional offices on the specific mode of payment for the areas (in coordination with the LBP), the cash grants are computed. The DSWD FMS facilitates the funding process for the payment of the cash grants through the Landbank. The Landbank then facilitates the disbursement of the cash grants to the beneficiaries – either through direct crediting to the cash cards of beneficiaries or the transfer of funds to payment conduits. The conduits and LBP is likewise expected to facilitate the liquidation of funds and submission of reports to DSWD.

To ensure quality assurance, the program management established some safeguards to ensure correctness of the amount of grants and the intended beneficiaries. The following are the measures mentioned by the DSWD key informants:

- The Pantawid Pamilya Information System (PPIS) which is maintained by the Planning Monitoring and Evaluation Division (PMED) supports the core processes of the program which are registration, updating, compliance verification, payment, and grievance. It weeds out the need for manual processes which lead to human-errors.
- The program also conducts regular technical assistance and spot check activities (pre-COVID).
- The Compliance Verification Division NPMO level conducts random checks per household in all regions before and after NAPA generation.
- The Risk Management and Quality Assurance Division (RMQAD) of the NPMO helps ensure that cash grants are released to correct households and in correct amounts and

checks the payroll of beneficiaries in each pay period to check for any duplicates and inconsistencies.

- At the regional and provincial level, the Compliance Verification Officers conducts checking of the collected compliance forms from the facilities.

According to the NPMO, monitoring of the performance of the LBP as its ADGB is continuously done. They mentioned having regular dialogues with LBP and other banking units to address payment related issues and revisiting of the existing Memorandum of Agreement with the LBP to respond to the encountered problems in the implementation.

4.1.2. Changes in the payment system

According to DSWD key informants, a combination of over-the-counter (Manual) and cash card modes of payment were adopted during the early years of the program implementation. The payment delivery was initially solely done by the Landbank of the Philippines. However, during the early years of the program, due to the rapid expansion of the program, the LBP had difficulty in catering to the program coverage. This prompted DSWD to request LBP to contract out payment conduits that can do the payment delivery in their behalf especially in areas where access to ATMs or banks are difficult.

According to the DSWD key informants, although the payment system had weaknesses in the earlier years such as delays in payouts, it has improved through the years, especially starting 2017 when the DSWD management put pressure and attention to improving the payment system. This is also supported by the feedback of beneficiaries during the FGDs. They mentioned that delays in the payout were more frequent during the earlier years of the program and they almost never experience significant delays in the payout of cash grants in the recent years.

Shift towards full Cash Card mode of payment was also introduced in 2019 to facilitate faster release of cash grants and ease beneficiaries' access to it. The national program management also mentioned that the program targets conversion of cash card account into transactional accounts which allow savings and other banking transactions for beneficiaries.

According to the national program management respondents, the payment system also has improved its accuracy due to various quality assurance procedures and safeguards that were put in place. The full shift to EMV cash cards introduced faster obligation and crediting of cash grants to the beneficiaries. However, the need for more infrastructure for access and wider functionality of the accounts are lagging behind.

4.2. Assessing the Benefit Level

4.2.1. Changes in benefit level through the years

Since its implementation in 2008, the amount of grants amount of grants remained at same levels until recently. Figure 9 below shows the timeline of the changes in the value of cash grants from 2008 to 2020. From the figure we can observe that the cash grants remained the same for most of the years since its implementation except for the increase in the high school

grants in 2014, the addition of the rice subsidy in 2017, and the very recent increase in grants mandated by the institutionalization of the program through RA 11031.

Figure 9. Timeline of changes in value of cash grants
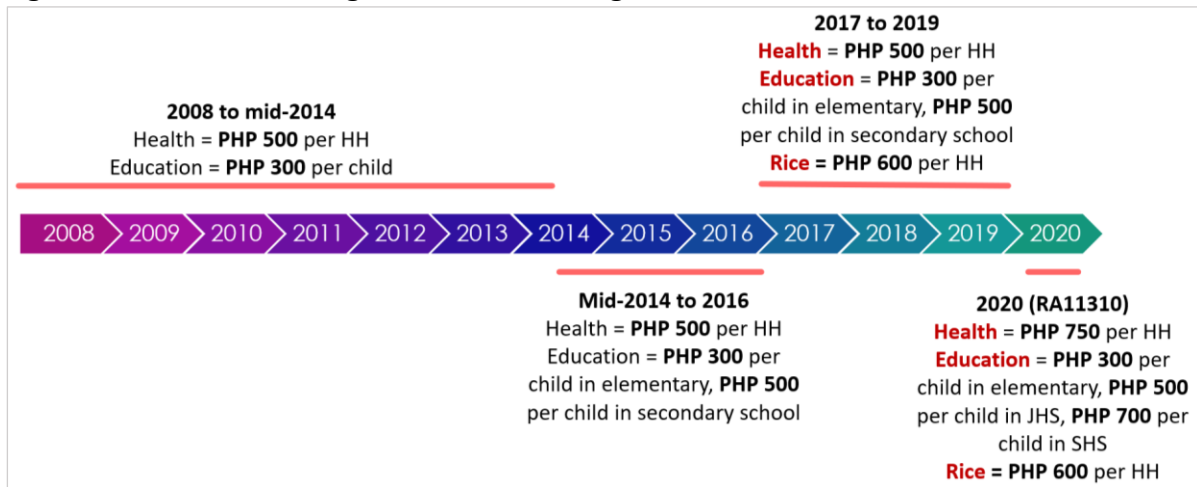
Source: DSWD, various years

Figure 10 shows the reduction in the real value of the cash grants from its original share of the poverty threshold in the start of implementation in 2008 until 2017, excluding the addition of the rice subsidy. From covering 20% of the poverty threshold during targeting, the real value has been reduced by 5-percentage points after ten years of implementation. Note that this simulation assumes a maximum cash grant amount for a household with three children in elementary school who are all are fully compliant with conditionalities. Based on the program administrative reports, beneficiaries are not always able to maximize the three-children limit in the number of beneficiaries and compliance is not always perfect, so the shares may be even lower in reality.

Figure 10. Share of the real value of grants over 2006 poverty threshold, by year
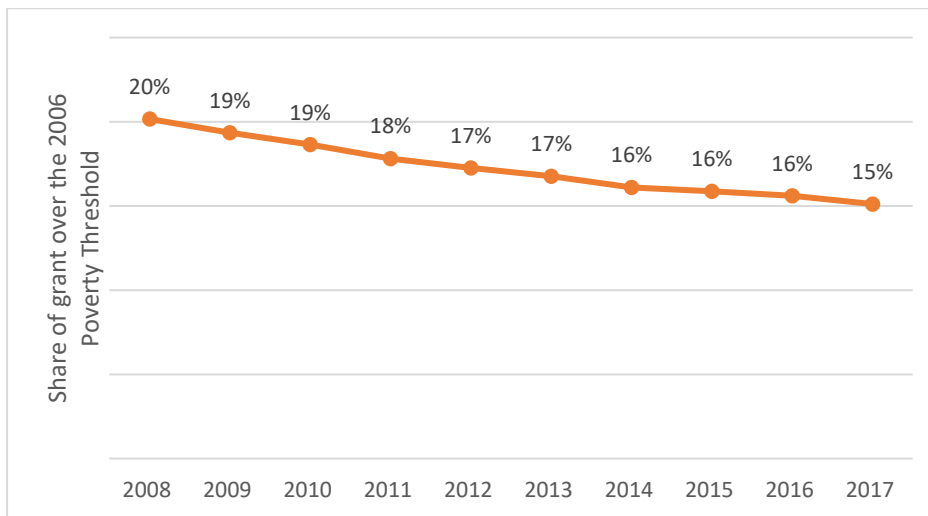
Source of basic data: DSWD, PSA

In a comparison made by Acosta &Velarde (2019) on the generosity (defined as of international CCTs in bottom 20% or poorest households, the Pantawid Pamilya lags behind other countries. Due to reduction in real value of the grants, the generosity of the program for the bottom 20% has decreased from 11% in 2013 to only 9% in 2015. The slight rise in the generosity observed in 2017 was explained by the authors as due to the addition of the rice subsidy.

Figure 11. Comparison of 4Ps and international CCTs in terms of generosity in bottom 20%
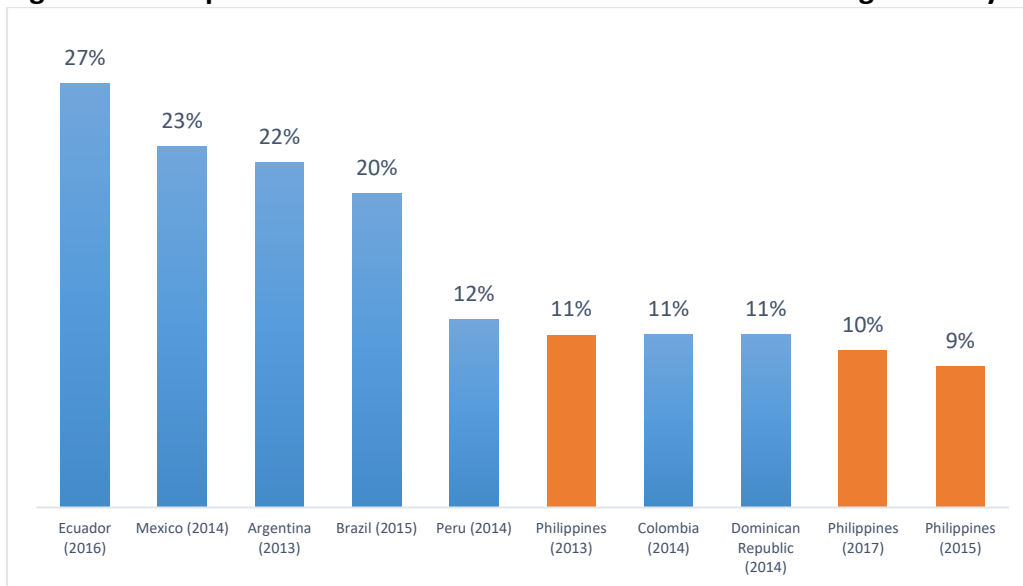
Source: Acosta &Velarde (2019)

4.2.2. Adequacy of grant amounts

Beneficiaries and program implementers were asked to provide their assessment on the benefit level or grant amounts paid by the program. Note that during the data collection, the beneficiaries have yet to receive the increased rates for the cash grants under Republic Act 11310. The first payout with the new grant amounts started only in March 2020 after the conduct of field activities.

4.2.2.1. Assessment of beneficiaries

Even though the respondents reported that their household budget is not enough to cover their expenses, most are reluctant to speak out on the optimal cash grant amount that should be provided to them. They noted that an increase in the cash grant amount would be able to help them cover cost of rising prices. They were not able to suggest a specific amount for the increase in grants, but they mentioned that the grant for education and rice could be increased – usually the grant for rice or education. Other beneficiaries also said that there is no need to increase the grant amount but suggested that the program cover up to college.

Some beneficiaries also said that they are already satisfied with current grant amount. Although they acknowledged that the grant is not enough to cover their expenses, the amount that they receive is already able to contribute to their household expenses. Most beneficiaries said that they are satisfied with whatever amount the government chooses to give them, also noting that the funding should go to programs for others who are also in need. Many also mentioned that beneficiaries also need to work to earn income and should not rely solely on the grant for their needs. A few of the beneficiaries, especially parent leaders, cited that the increase of benefits under RA 11310 had already been discussed with them and they are already satisfied with the amounts under the law. Besides request for increase, grantees also suggest provision of other programs, particularly livelihood programs, to support their income.

When asked how they spend the cash grants, beneficiaries report spend the cash grants mostly for education of children, food for the household, clothing, and health expenses including vitamins for children and check-ups (Figure 12). Some beneficiaries also mentioned spending the grants for other household needs such as utilities and household improvement and durables (e.g., tiles, kitchenware).

Grantees often report that they are not able to set aside a portion of the grant money, and this is often spent by the time of the next payout. Although only a small number are able to save, a few respondents shared that they use part of the grant as capital for their businesses or long-term investments.

Figure 12. How beneficiaries spend their 4Ps cash grants

Source: FGDs with beneficiaries

Unanticipated school expenses are often the reason cited why the cash grant is not enough. Although 4Ps students are enrolled in government schools with no tuition fee, parents cite miscellaneous fees such as PTA fees, and contributions for the improvement of school facilities (i.e. electric fan, TV). Parents also cite costs of projects and workbooks or learning modules. One parent shared that as 4Ps beneficiaries, they are expected by the school administration/faculty to support their children's participation in voluntary activities such as field trips.

In cases where beneficiaries have insufficient funds for household expenses, their coping mechanisms include scrimping on household expenses, adjusting consumption by reducing food consumption or purchasing cheaper alternative foods (e.g. instant noodles, vegetables), prioritizing of school expenses, borrowing money or food items from small stores in the community, as well as working additional jobs such as doing laundry, selling food/snacks, assisting in manual labor in farms.

4.2.2.2. Assessment of program implementers

The C/MLs and MRBs interviewed are generally satisfied with the grant amounts as they can see improvements in wellbeing of the beneficiaries. However, they also acknowledged that an increase in amount would help beneficiaries because of increase in prices of food and other commodities. They noted that any increase in the amount of the grants will help the beneficiaries. They also mentioned that the grants have already been increased in the law.

For the national program management, the increase in the cash grant amounts in the law can help address the did address the inflation rates given the end of the implementation of the unconditional cash transfer program which was originally meant to cushion poor households due to the inflation

Prior the enactment of RA 11310, the grant's purpose is to be an immediate aid for children stay in school and get regular health check-ups, have their growth monitored, and receive vaccines. The World Bank used the term cushioned in explaining the relief/aid done by the grants from the program. It cushioned the poor from the adverse impacts of various shocks experienced by the country for the past six years through this grant. Now, with the increased benefit, the program was able to address the varying inflation rates from different regions. UCT did address the inflation rates but the increased benefit was very appropriate in expanding the objectives and targets because of shortened length of stay of the beneficiaries in the program. The program increased the grants a little from the inception of the program

4.3. Payment Frequency

4.3.1. Current payment frequency

The cash grants of the program are currently being paid to beneficiaries on a bimonthly basis following the schedule presented below. Each cycle begins with the compliance of beneficiaries during the monitoring period of two months, followed by the collection of compliance data and payroll preparation on the third month, and the payout on the fourth month (Table 11). Based on this cycle, a compliant beneficiary is expected to receive cash grants every two months.

The frequency of payment has already been revised from its previous quarterly cycle from 2008 to 2010 in order to provide the cash grants more frequently to the beneficiaries and promote consumption smoothing through the grants.

Table 11. Illustration of the bimonthly payment cycle of Pantawid Pamilya

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
FEBRUARY	Compliance monitoring					
MARCH						
APRIL	Payroll preparation	Compliance monitoring				
MAY	PAYOUT					
JUNE		Payroll preparation	Compliance monitoring			
JULY		PAYOUT				
AUGUST			Payroll preparation	Compliance monitoring		
SEPTEMBER			PAYOUT			
OCTOBER				Payroll preparation	Compliance monitoring	
NOVEMBER				PAYOUT		
DECEMBER					Payroll preparation	Compliance monitoring
JANUARY					PAYOUT	
FEBRUARY						Payroll preparation
MARCH						PAYOUT

4.3.2. Feedback and opinion on payment frequency

4.3.2.1. Opinion of beneficiaries

Based on the FGD with the beneficiaries, nine of the 16 barangays that responded stated that they preferred the current bimonthly schedule of provision of grants to be retained. Six of the 16 barangays leaned towards more frequent provision of grants, citing that they preferred that grants be provided monthly. One barangay had 50-50 opinion on the matter.

Figure 13. Beneficiaries' preferred payment frequency based on the FGDs
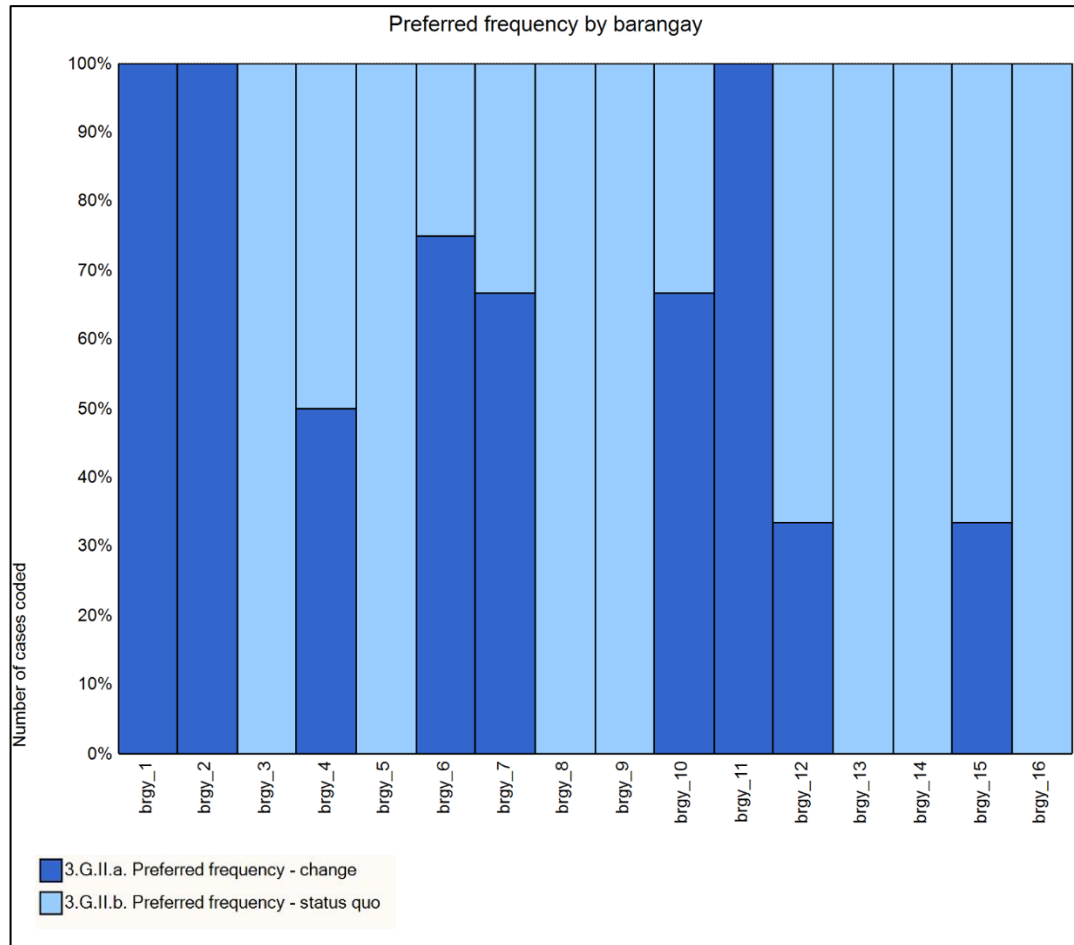
According to members who preferred to retain the current bimonthly schedule of payouts, the timing will allow beneficiaries to receive a larger amount compared to more frequent payouts. They also mentioned that increasing the payout frequencies will incur additional transportation costs for beneficiaries that do not have ATMs in their area or residence. They also said that provision of the grant every two months is acceptable since the purpose of 4Ps is to supplement the schooling needs of children and beneficiaries do not rely on the program entirely for their financial needs.

Meanwhile, respondents that were in favor of monthly payouts, argue that more frequent provisions of grants will allow them to cover emergency or sudden and urgent expenses (i.e. school projects). They also said that this will allow them to avoid needing to take out loans to tide over the household while waiting for the next provision of the grant. Several also mentioned that it will be easier for them to include the grants in the household budgeting since the timing coincides with their monthly budget preparation.

None of the respondents preferred a frequency of three months or more citing that this interval would be too long and would cause them to incur debts.

4.3.2.2. Opinion of program implementers

According to the program implementers interviewed, increasing the payment frequency is more possible for areas that are already using cash cards as mode of payment and will

be more challenging for areas such as BARMM that are still under OTC mode of payment.

Another major consideration that they mentioned is that increasing the payment frequency means added cost for the program operations and bank service fees. Following the increase in payment frequency is the increase in the frequency by which the compliance verification (CV) process is done. This increase in the CV processing eeds commensurate increase in operations budget and staff. As shown in Figure 10, the compliance verification process and payroll preparation is largely manual – i.e., forms are printed and filled-out during compliance data collection. Meanwhile, bank service fees are charged by the LBP to DSWD/NG for withdrawal transactions of beneficiaries to non-LBP ATMs. In 2020, the bank service fees budget amounted to PHP 509 million.

Figure 14. Compliance Verification Cycle
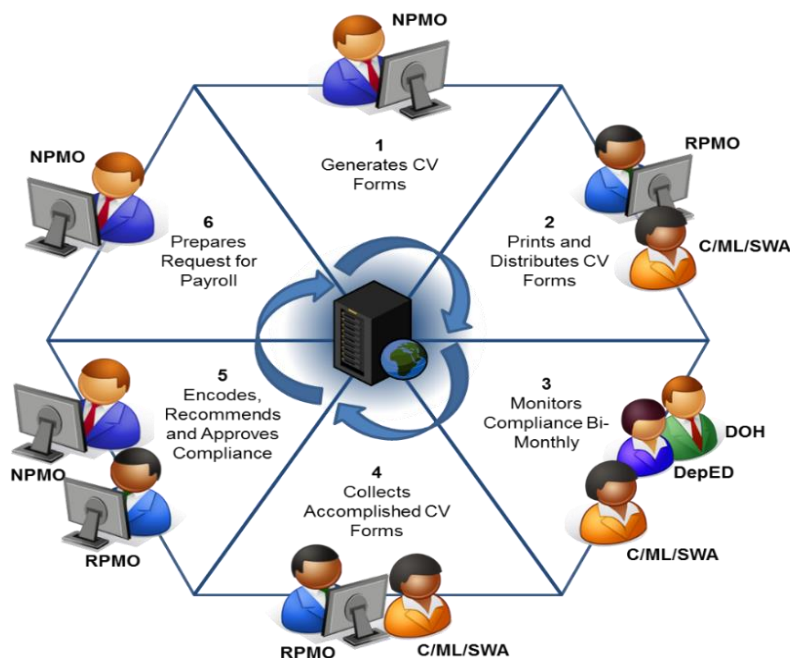
Source: Pantawid Pamilya Operations Manual – FMS Sub-manual (DSWD, 2015)

Efforts to streamline the process are currently being explored by the program management such as linking the DepEd BEIS and the program monitoring system. The NPMO also explored means to reduce the duration of the distribution and collection of compliance verification forms to improve the timeline of the payment cycle. The Compliance Verification Division initiated decentralization of processes to reduce the timeline. It also developed an offline version of encoding of compliance data. The NPMO also mentioned that these improvements were supposed to be launched this year but because of the pandemic the program postponed the use of this system/module.

4.4. Payment Modality

4.4.1. Current modes of payment

The share of cash card payment mode has continued to increase from less than half in 2016 to almost 90% as of June 2020. The biggest increase was observed in 2019 when the DSWD has started to pursue full conversion of the mode of payment to EMV-enabled cash cards.

Table 12. Share of Cash Card and OTC payment modes among 4Ps households, 2016-2020

YEAR	Cash Card	OTC
2016	45.0%	55.0%
2017	44.3%	55.8%
2018	56.1%	43.9%
2019	86.0%	14.0%
2020 (Q2)	87.8%	12.2%

Source: DSWD (Pantawid Pamilya Quarterly reports, 2016-2020)

Among the Regions, only BARMM is predominantly still under OTC mode of payment (93.1%). According to the DSWD, the remaining areas under OTC in other regions are mostly GIDA areas. There are also few beneficiaries who are currently under OTC but are only waiting for completion of account enrollment process. However, there are further delays being experienced due to the COVID-19 pandemic.

Table 13. Share of Cash Card and OTC payment modes among 4Ps households, by region, 2020

Region	Cash Card	OTC	Total	% Cash Card	% OTC
NCR	213,140	7,443	220,583	96.60%	3.40%
CAR	59,431	680	60,111	98.90%	1.10%
I	204,683	932	205,615	99.50%	0.50%
II	103,198	2,042	105,240	98.10%	1.90%
III	287,135	6,561	293,696	97.80%	2.20%
IV-A CALABARZON	311,758	5,598	317,356	98.20%	1.80%
MIMAROPA	173,228	20,896	194,124	89.20%	10.80%
V	348,760	19,417	368,177	94.70%	5.30%
VI	312,573	8,775	321,348	97.30%	2.70%
VII	279,410	5,217	284,627	98.20%	1.80%
VIII	248,426	31,446	279,872	88.80%	11.20%
IX	291,860	6,837	298,697	97.70%	2.30%
X	245,809	19,908	265,717	92.50%	7.50%
XI	247,013	9,727	256,740	96.20%	3.80%
XII	238,144	9,040	247,184	96.30%	3.70%
CARAGA	178,723	9,808	188,531	94.80%	5.20%
BARMM	26,758	361,362	388,120	6.90%	93.10%

Source: DSWD (Pantawid Pamilya Quarterly reports, 2020-Q2)

According to DSWD, the direction of the program is towards implementing a 100% Cash Card (EMV Cards) mode of payment, and eventually, conversion to transaction account where beneficiaries shall be issued with an account in the form of deposit account or electronic

money/ wallet, which can be used to store money, send payments, and receive deposits. These features are currently not available with the

The NPMO also mentioned that the program plans to engage all possible Point of Sale in these areas to address the limitation of ATM supply in some areas. An example the respondents cited is engaging sari-sari store which has digital money account to distribute cash grants.

4.4.2. Feedback and opinion on payment modalities

Generally, the beneficiaries and key informants preferred cash card mode of payment over OTC due to the convenience and reliability it provides, but their experience is usually affected by the availability of ATMs or local banks in the area and the costs that the beneficiaries need to incur. The respondents noted challenges and gaps that need to be addressed to improve the payment delivery. These are discussed in the succeeding subsections.

4.4.2.1. Experience and opinion of beneficiaries

Most respondents stated that they prefer receiving the grants through their cash cards. Respondents mentioned it was more convenient since they can choose when to withdraw the cash grant, unlike OTC where they must follow the schedule of the payout to receive the grants in person. Most respondents also mentioned that they have experienced more frequent delays in payouts when they were still under OTC mode of payment. They also mentioned that waiting time is longer compared to withdrawal via ATM.

Only respondents from one site preferred to receive the grant through OTC, citing that it was faster when payouts were conducted at their barangay gym and they did not have to transfer from one place to another to withdraw the grant. In this area, there was no available ATM and beneficiaries need to travel to the town center to withdraw from money exchange centers through POS machines and a rural bank which provides over the counter withdrawal of their grants. They also noted that OTC mode of payment do not incur fees on withdrawal (e.g., POS service fees) that reduce the amount of grants that they receive. These group of beneficiaries also reported that the queue in withdrawing through their cash cards take longer than OTC payouts due to their limited options for merchants and banks in their area. One respondent also mentioned that chairs are provided during OTC venues, so the queuing is less tiring. However, the beneficiaries also acknowledged that the cash cards could be a convenient mode of payment once the lack of ATMs and alternative means of withdrawal in the area is addressed.

Despite general preference for cash card mode of payment, the beneficiaries noted some challenges they experience in this mode of payment. One major challenge was the duration of the process of card replacement. This was not a big problem for some beneficiaries, since in some municipalities, grantees were able to get their grant OTC while card was in process, but some were not able to receive their grant from 6 months up to more than a year. Most of the respondents also mentioned that they have to wait in line at the ATM for more than an hour when the grants are released due to the volume of beneficiaries that flock the ATMs for withdrawal. In areas without ATM or LBP branches, beneficiaries either go to nearby town to withdraw their cash grants and incur transportation costs or go to private establishments that allow withdrawal through Point-of-Sale (POS) transactions/ withdrawal services. In one of the study areas, there was no standardization of fees collected by private establishments that offer encashment using

POS machines. In the interview with the LBP key informants, they mentioned that an accreditation process is currently being done to formally engage these establishments. However, it is not certain whether the POS merchants accessed by the beneficiaries in the FGDs are included in the accredited merchants of the LBP.

To address the challenges mentioned by beneficiaries, they suggested improving their access to ATMs or withdrawal options. Some suggested that grants should be released in the barangay so that beneficiaries do not have to spend money on transportation. Some also suggested to have a fixed day (or week) of the month for release of the grant (e.g. every first week of the month) for the payouts to be more predictable.

4.4.2.2. Experience and opinion of local 4Ps staff

Most of the C/MLs and MRBs believe that the cash card payment is better as it is more convenient for beneficiaries. However, there were also a few that wanted to return to the OTC payment of specific challenges in cash card-based payments. These respondents noted that there are still issues that they need to resolve even with cash cards (e.g., lost cards, wrong pin entry, etc.) while they can immediately address queries on-site during OTC payouts. They also mentioned that OTC payments minimize risk of pawning of cash cards.

The C/MLs and MRBs also noted challenges that they experience in both modes of payment. They mentioned that OTCs are more logistically challenging to conduct since it requires coordination with local government units for set-up of venue and scheduling. There were also more documentation and reportorial requirements such as physical acknowledgement receipts compared with electronic bank records in cash card mode of payment. Payout schedules are also more susceptible to delays due to issues in procurement of conduits, weather disturbances, security threats, among others.

For cash card-based payments, the C/MLs and MRBs mentioned that their main challenge is the need to frequently troubleshoot concerns of the beneficiaries with their cash cards such as cases of "forced pin", loss and damage of cards, card capture, and disputes in the amount of grants received. They also mentioned that not all areas have ATMs or banks which affects the access of beneficiaries to their cash grants. Similar to what was mentioned by beneficiaries, the C/MLs and MRBs also mentioned that duration of the processing of card replacement takes long and feedback loop on status has gaps. In particular, some of the respondents lamented that they have difficulty providing feedback to beneficiaries on the status of processes that are submitted to higher level of program management (i.e., regional, and national level) as they do not have immediate access to the status of these requests. A few also mentioned the risk of cash card pawning as a challenge in using cash card mode of payment.

The respondents suggested the provision of satellite ATMs for areas with no LBP branches the access of beneficiaries and improve the payment delivery system. With regard to the administrative processes, the respondents recommended streamlining and expediting of processing of card replacement and change grantee updates. They suggested that the processing of card replacement should be done at the regional/local level instead of at the central office of DSWD and Landbank. To improve feedback loops to the beneficiaries, the respondents suggested that they should be provided access to real-time status of update processing and grievance resolution that they facilitated. They

also recommended the use of an online system or dashboard for the status of approval of updates to avoid conflicting information that will be provided to beneficiaries.

4.4.2.3. Opinion of national program staff

DSWD-FMS key informants believe that the conversion to cash cards for most of the beneficiaries greatly improved the performance of the payment system. Regarding other e-payment facilities (e.g., GCASH, PAYMAYA), respondents mentioned that there might not be added value to this since LBP is already working to provide the same features to beneficiaries once their cards are converted to fully transactional accounts as promised by LBP. The conversion of confirmed by the interviews with LBP staff and the National Program Management office. The key informants also noted that switching to other modes of grants payment might pose difficulties because beneficiaries would have a new system to learn and get comfortable with. They also added that many features of these digital banking technologies are already offered in the LBP mobile and the beneficiaries just need to be trained and taught how to access these features

In the response sent by the National Program Management Office, the program is also currently exploring financial technology solutions in line with a general effort to shift to digital delivery of social protection programs. They also noted that this has already been communicated with LBP.

The NPMO also noted that there is a need to map out the areas and categorize each of them according to readiness in implementing cash card mode of payment. Those which are ready, shifted to full cash card release of grants while those areas that are not ready can be classified as transition the areas that should adopt year-on-year plan to shift to cash card.

They also noted the need to update the information systems of the program and upgrade and IT equipment of the local staff so the data feedback can be more fluid. They also mentioned the need strengthen the information systems of the program to self-check for data errors. To streamline processes in the payment system, particularly card replacement and enrollment of cash card accounts, the NPMO recommends that the LBP should decentralize its processes and allow branches to open and manage the accounts of beneficiaries in their areas.

4.4.3. Differential impact of program by payment modality

This section presents the results of the analysis of IE3 data that looked into the difference in impact of the program on subgroups of beneficiaries with different modes of receiving their cash grants namely through over-the-counter means and through cash card. The difference in the impact of program on these subgroups could show advantages of pursuing specific design features of the payment system. The results are presented for four groups of outcomes: (1) children's health; (2) education; (3) income and expenditure of the household; and (4) labor outcomes. The full statistical tables of the results are shown in the appendix and only the summary of results will be presented in the succeeding discussion.

In summary, the results show that the difference in program impact on health and education outcomes for the two subgroups of beneficiaries do not significantly matter. The mixed results in education suggest that both groups are favorably impacted by the program regardless of the mode of payment. In terms of total expenditure and income, the results suggest that the

subgroup of beneficiaries with cash cards are more positively impacted by the program. Although further study is needed to explain the results, a possible explanation could be the more timely and predictable provision of grants through the cash cards relative to OTC means. The results also indicate shifts in differences in expenditure patters where cash card beneficiaries spend more on non-food expenditures, particularly health and education, while OTC beneficiaries prefer food and clothing expenditures. Results on employment show increased duration of work for cash card beneficiaries which could possibly explain the observed positive impact on income excluding the grants.

4.4.3.1. *Differential impact on child health*

In summary, the results of the subgroup analysis on the program impact on child health show that for most of the outcomes examined, there is no significant difference in the program impact among beneficiaries that receive their cash grants through OTC means or through cash card. Of the outcomes, only the health visits of children and deworming of children under six years old have shown significant difference in impact between the two subgroups. These results, however, could be seen as conflicting in terms of the health seeking behavior being illustrated by the beneficiaries. In the health visits outcome, a negative impact was observed for the OTC group while an increase in deworming rate of children was also observed. These results could be clarified by further investigating other factors that could cause such discrepancy in addition to the possible effect of the mode of payment.

Table 14. Summary of results on subgroup analysis of 4Ps impact on child health by mode of cash grant payment

Outcome group and indicator	Highlight of results
Growth monitoring	
Regular weight monitoring for children 0 to <2 years old	No significant impact observed for both Cash Card and OTC subgroups
Frequency of weight monitoring for children 0 to 2 years old in the past six months	No significant impact observed for both Cash Card and OTC subgroups
Child health services and practices	
Vitamin A supplementation (6 months to 6 years old)	Positive program impact observed within sampling bandwidth only for both subgroups.
Full immunization at age 1	No significant impact observed for both Cash Card and OTC subgroups
Visited a health facility or health professional in the past 8 weeks	Negative impact observed on OTC group, no significant impact on cash card group. Difference between OTC and Cash card group is significant.
Deworming	
Deworming (under 6 years old)	Positive impact on OTC group, no significant impact on cash card group. Difference between OTC and Cash card group is significant
Deworming at least once (6 to 14 years old)	Positive impact observed in OTC group but not significantly different with Cash card group

Outcome group and indicator	Highlight of results
Deworming at least twice (6 to 14 years old)	Positive program impact observed for both subgroups.
Child nutrition outcomes	
Underweight	No significant impact observed for both Cash Card and OTC subgroups
Severe underweight	No significant impact observed for both Cash Card and OTC subgroups
Stunting	Increase in prevalence observed in OTC group within sampling bandwidth only, but estimate is not significantly different with Cash Card group
Severe stunting	Increase in prevalence observed in OTC group within sampling bandwidth only, but estimate is not significantly different with Cash Card group
Wasting	No significant impact observed for both Cash Card and OTC subgroups
Severe wasting	No significant impact observed for both Cash Card and OTC subgroups

1.1.2.1. *Differential impact on education*

Results of the subgroup analysis on the impact of education is mixed. For enrollment, significant positive impact is more frequently observed for the subgroup that receives their cash grants through cash card mode of payment, while no significant impact was observed in most enrollment outcomes of the OTC subgroup, although, the differences in estimates between the OTC and Cash card group are not significantly different based on the estimated z statistics. On the other hand, for attendance rates, positive impact is more commonly observed in OTC subgroup of beneficiaries while no impact is observed for the cash card group. For dropout rates, impact is more evident in the cash card subgroup while for child labor, the program impact is more observed in OTC subgroup of beneficiaries. In terms of education expenditure, impact on total education expenditure is observed in cash card subgroup while the impact on the OTC subgroup is positive for clothing/uniform and school supplies or project materials, and negative for school fees. With these results, it is not clear whether there is a significant advantage of a mode of payment over the other in terms of education outcomes. Certain aspects of the mode of payment, such as predictability and timeline of payouts vis-à-vis payment collection schedules of schools may explain these results but need to be investigated using more detailed information.

Table 15. Summary of results on subgroup analysis of 4Ps impact on education by mode of cash grant payment

Outcome group and indicator	Highlight of results
Enrollment	
Enrollment of children 3 to 5 years old	No significant impact for both subgroups
Enrollment of children 6 to 11 years old	Positive program impact observed for both subgroups.
Enrollment of children 12 to 15 years old	Positive impact observed in Cash Card group, but difference with OTC group is not significantly different

Outcome group and indicator	Highlight of results
Enrollment of children 16 to 17 years old	Positive impact observed in Cash Card group, but difference with OTC group is not significantly different
Enrollment of children 12 to 17 years old	Positive impact observed in Cash Card group, but difference with OTC group is not significantly different
Enrollment of children 6 to 14 years old	Positive impact observed in Cash Card group, but difference with OTC group is not significantly different
Enrollment of children 15 to 20 years old	Positive impact observed in Cash Card group within sampling bandwidth only, but difference with OTC group is not significantly different
Attendance rates (in %)	
Attendance rate of children 3 to 5 years old	No significant impact for both subgroups
Attendance rate of children 6 to 11 years old	Positive impact on OTC group, no significant impact on cash card group. Difference between OTC and Cash card group is not significant
Attendance rate of children 12 to 15 years old	No significant impact for both subgroups
Attendance rate of children 16 to 17 years old	Positive impact on OTC group, no impact on cash card group. Difference between OTC and Cash card group is significant
Attendance rate of children 12 to 17 years old	No significant impact for both subgroups
Attendance rate of children 6 to 14 years old	Positive impact observed in OTC group within sampling bandwidth only Difference between OTC and Cash card group not significant
Attendance rate of children 15 to 20 years old	No significant impact for both subgroups
Attendance of at least 85%	
Attendance of at least 85% among children 3 to 5 years old	No significant impact for both subgroups
Attendance of at least 85% among children 6 to 11 years old	Positive impact on Cash Card group, no significant impact on OTC group within MSE bandwidth. Difference between OTC and Cash card group not significant
Attendance of at least 85% among children 12 to 15 years old	No significant impact for both subgroups
Attendance of at least 85% among children 16 to 17 years old	Positive impact on OTC group, negative impact on cash card group. Difference between OTC and Cash card group is also significant
Attendance of at least 85% among children 12 to 17 years old	No significant impact for both subgroups
Attendance of at least 85% among children 6 to 14 years old	No significant impact for both subgroups

Outcome group and indicator	Highlight of results
Attendance of at least 85% among children 15 to 20 years old	No significant impact for both subgroups
School level enrollment	
Enrollment in daycare, nursery, preschool/kindergarten of children 3 to 5 years old	No significant impact for both subgroups
Enrollment in preschool or kindergarten children 5 years old	No significant impact for both subgroups
Enrollment in elementary of children 6 to 11 years old	No significant impact for both subgroups
Enrollment in junior high school of children 12 to 15 years old	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group not significant
Enrollment in senior high school of children 16 to 17 years old	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group not significant
Dropout rate	
Dropout rate among children 6 to 11 years old	Significant reduction in drop-out rate observed in Cash Card group within sampling bandwidth only but not significantly different with OTC group
Dropout rate among children 12 to 15 years old	Significant reduction in drop-out rate observed in Cash Card group within sampling bandwidth only but not significantly different with OTC group
Dropout rate among children 16 to 17 years old	No significant impact for both subgroups
Dropout rate among children 12 to 17 years old	Significant reduction in drop-out rate observed in Cash Card group within sampling bandwidth only but not significantly different with OTC group
Dropout rate among children 6 to 14 years old	Significant reduction in drop-out rate observed in both subgroups
Dropout rate among children 15 to 20 years old	No significant impact for both subgroups
Child labor	
At least 1 hour of work (with or without pay) last month, 10-14 years old	Significant reduction in child labor incidence observed in OTC group, but not significantly different with Cash Card group
At least 1 hour of paid work last month, 10-14 years old	Significant reduction in child labor incidence observed in OTC group within MSE bandwidth, but not significantly different with Cash Card group
Number of days worked (with or without pay) last month, 10-14 years old	Significant reduction in drop-out rate observed in Cash Card group within sampling bandwidth only but not significantly different with OTC group
Education expenditures	
Expenditures on tuition and other fees (per month) in the last school year	Negative impact on OTC group, no significant impact on Cash card group. Difference between OTC and Cash card group is not significant

Outcome group and indicator	Highlight of results
Expenditures on school materials and supplies (per month) in the last school year	Positive impact on OTC group, no significant impact on Cash card group. Difference between OTC and Cash card group is not significant
Expenditures on school uniform (per month) in the last school year	Positive impact on OTC group, no significant impact on Cash card group. Difference between OTC and Cash card group is not significant
Expenditures on school allowance (per month) last school year	Positive impact on Cash Card group within sampling bandwidth only, no significant impact on Cash card group. Difference between OTC and Cash card group is not significant
Total school expenditures (per month) last school year	Positive impact on Cash Card group within sampling bandwidth only, no significant impact on Cash card group. Difference between OTC and Cash card group is not significant

1.1.2.1. *Differential impact on household expenditures and income*

Results of the subgroup analysis on household income and expenditure some evidence on differential impact of the two modes of payment. Results show positive impact on the share of food and clothing expenditures of the beneficiaries in the OTC subgroup. The shift in share of expenditures of beneficiaries under the OTC subgroup towards food and clothing could be related to the emergence of flea markets in OTC payout venues as noted by Adriano (2016) and other anecdotal evidence. Meanwhile, positive impact on non-food expenditures is observed for beneficiaries in the cash card subgroup. Looking further into the results, this increase in non-food expenditures could be due to the positive impact on medical and education expenses. The increase in total expenditures for education is also consistent with the results of the previous subsection.

The results also show that positive impact on total average per capita expenditure is only observed for the cash card group of beneficiaries. This could be due to the relatively faster delivery of grants through the cash card which increases the relative frequency of payouts through this means compared to OTC payouts. As presented in Section 3, the beneficiaries under cash card mode of payment were able to have payouts slightly more frequently than the beneficiaries under OTC mode.

In terms of total per capita household income, positive impact is observed on both subgroups of beneficiaries suggesting that the receipt of grants is able to augment the household income regardless of the mode of delivery. But this positive impact is retained only for the cash card group when the grants are excluded or when it is limited to income from salaries and wages. Further study is needed to examine this result to see whether aspects of the mode of payment lead to this result or some related intermediate outcomes.

With regard to self-rated poverty, an interesting result is the positive impact on self-rating of cash card beneficiaries and negative impact on self-rating of OTC beneficiaries. This could be studied further to understand the psychology of the beneficiaries related to the mode of payment.

Table 16. Summary of results on subgroup analysis of 4Ps impact on household expenditure and income by mode of cash grant payment

Outcome group and indicator	Highlight of results
Household expenditures: Share to total expenditures	
Share of food to total expenditures	Positive impact on OTC group, no significant impact on Cash card group. Difference between OTC and Cash card group is significant
Share of non-food to total expenditures	Negative impact on OTC group, no significant impact on Cash card group. Difference between OTC and Cash card group is significant
Share of education to total expenditures	No significant impact for both subgroups
Share of clothing and footwear to total expenditures	Positive impact on OTC group, no significant impact on Cash card group. Difference between OTC and Cash card group is significant within sampling bandwidth
Share of health to total expenditures	No significant impact for both subgroups
Share of alcohol and tobacco to total expenditures	No significant impact for both subgroups
Household expenditures	
Average total per capita expenditure	Positive impact on Cash-card subgroup but difference is not significant with OTC group
Average total per capita food expenditure	No significant impact for both subgroups
Average total per capita non-food expenditure	Positive impact on Cash-card subgroup and slight negative impact on OTC group. Difference is significant
Average per capita non-food expenditure (including other disbursements)	Positive impact on Cash-card subgroup and slight negative impact on OTC group. Difference is significant
Average per capita expenditure on vice goods (e.g., alcohol, tobacco)	No significant impact for both subgroups
Average per capita expenditure on inpatient care	No significant impact for both subgroups
Average per capita expenditure on outpatient care	No significant impact for both subgroups
Average per capita expenditure on medical services and commodities	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group not significant
Average per capita expenditure on education per school age child	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group not significant
Average per capita expenditure on clothing and footwear	Positive impact on OTC group, no significant impact on Cash Card group. Difference between OTC and Cash card group is significant
Income	
Per capita income including grants	Positive program impact observed for both subgroups.

Outcome group and indicator	Highlight of results
Per capita income without grants	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group is significant
Per capita income from salaries and wages	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group is significant
Per capita income from entrepreneurial activities	No significant impact for both subgroups
Per capita income from other receipts (excluding grants)	No significant impact for both subgroups
Hunger and self-rated poverty	
Incidence of hunger	No significant impact for both subgroups
Number of days experienced hunger in the past 3 months	Significant reduction in duration of hunger observed in OTC group, but not significantly different with Cash Card group
Self-rated poverty status (Poor)	No significant impact for both subgroups
Self-rated poverty status (Not-Poor)	Positive impact on Cash Card group, negative impact on OTC group. Difference between OTC and Cash card group is significant

1.1.2.1. *Differential impact on household expenditures and income*

In terms of labor outcomes, the difference in impact between the two groups is observed on the duration of working hours and looking for additional jobs. Positive impact on total work hours is observed for beneficiaries in the cash card group while negative impact is observed for OTC beneficiaries. While this result warrants further study to explain the discrepancy, the increase in working hours for cash card beneficiaries could be a possible explanation to the observed positive impact on salaries and wages of this subgroup of beneficiaries which was discussed above. With regard to the negative impact on job-seeking behavior, negative impact is observed for the subgroup of beneficiaries that receive their grants through cash cards. However, the previous result on the longer duration of working hours for this subgroup of beneficiaries justify this.

Table 17. Summary of results on subgroup analysis of 4Ps impact on labor outcomes by mode of cash grant payment

Outcome group and indicator	Highlight of results
Labor force participation	No significant impact for both subgroups
Employment	Negative impact observed in Cash Card group within MSE bandwidth, but not significantly different with OTC group
Usual work hours per week in primary occupation	Positive program impact observed for both subgroups.
Other job or business besides primary occupation	No significant impact for both subgroups
Usual work hours per week in other jobs	Negative impact observed in OTC group , no significant impact on Cash card group. Difference between OTC and Cash card group is significant

Total usual work hours per week	Positive impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group is significant
Looking for additional work if employed	Negative impact on Cash Card group, no significant impact on OTC group. Difference between OTC and Cash card group is significant
Unemployed and looking for work	No significant impact for both subgroups

4.5. 4Ps Payments System and SAP Implementation

This section presents the findings of the study related to the implementation of the Social Amelioration Program and the role of the Pantawid Pamilya payment system in the disbursement of the SAP grants. The study took advantage of implementation on SAP to learn on the performance of the 4Ps payment system in times of emergencies. The results are mainly from the online survey on the SAP among 4Ps beneficiaries but insights from the interviews of the DSWD respondents are also included to provide more information from the implementors perspective. The online survey run from April to December 2020.

In summary, the feedback of beneficiaries and key informants on the SAP implementation suggest that the experience of 4Ps beneficiaries on the distribution of the SAP is instructive in terms of ease and speed of reaching targeted beneficiaries. The beneficiaries did not report significant challenges in withdrawing their grants which they were able to receive through their cash cards. The Key informants cite that ease of the SAP distribution to 4Ps was due to the existing registry of beneficiaries and established system of payment of grants to the households.

4.5.1. Online SAP Survey

4.5.1.1. 4Ps Payment System
Almost all of the beneficiaries in the online survey data (96.8%) are currently enrolled in an LBP cash card account as part of the Pantawid Pamilya payment system. Majority of them also reported that their cash cards are currently in their possession. Two beneficiaries reported that they have already been enrolled in a cash card account but have not yet claimed or received their cash cards while three beneficiaries lost or damaged their cards and are still waiting for these to be replaced. Six beneficiaries reported other reasons why their cash cards are not in their possession including pending applications for change of their household grantee and locked cash card due to incorrect pin entry. Meanwhile, 31 respondents (3.5%) said that they are still not enrolled in an LBP cash card account and 40 (4.5%) are unaware or uncertain of the status of their LBP cash card enrollment.

Table 18. Status of enrollment and possession of LBP cash card among 4Ps online survey respondents

Status of enrollment in LBP Cash card account	Frequency	Percentage
Enrolled	**858**	**96.8%**
Cash card in possession	847	
Cash card not claimed	2	

Cash card lost or damaged	3	
Cash card not in possession due to other reasons	6	
Not enrolled	**16**	**1.8%**
Do not know/ Uncertain of status	**12**	**1.4%**

Almost all of the beneficiaries reported that they usually claim their cash grants by withdrawing from ATMs of LBP or other banks. Seventeen respondents reported receiving their grants through OTC means including five respondents who also claimed they have been enrolled in an LBP cash card account. OTC means mentioned by the respondents include withdrawing through LBP branch over the counter and encashment of cheques through other banks. Eighteen respondents reported that they are currently not receiving benefits from the program due to pending change grantee application, or they are a newly registered beneficiary that have yet to receive grants.

Table 19. How respondents usually receive their 4Ps cash grants

Usual manner of receiving 4Ps cash grants	Number of beneficiaries by LBP enrollment status			Total
	Enrolled	Not enrolled	Unknown status	
ATM (LBP or other banks)	850	-	-	850
Point-of-Sale (POS) machine	1	-	-	1
Over-the-counter (OTC)	5	10	2	17
Currently not receiving	2	6	10	18
TOTAL	858	16	12	886

4.5.1.2. Receipt of SAP cash grant

At the time of answering the survey, around 85% of the respondents already received at least one payment of the SAP financial assistance. Of those who already received their SAP grants, 48 (6% of 759) of the beneficiaries reported receiving two payments of the SAP subsidy, while the majority reported receiving only once. Note that at the time when most of the responses were collected, the government has nearly completed disbursing the first tranche of payment of SAP grants to 4Ps beneficiaries. Those responses claiming two payments of SAP grants have already been provided to them were mostly received during the latter period of data collection where the SAP distribution is on the 2nd tranche of grants.

Table 20. Status of enrollment and possession of LBP cash card among 4Ps online survey respondents

Receipt of SAP cash grants	Frequency	Percentage
Received	**759**	**85.7%**
Once (first tranche)	704	
Twice (first and second tranche)	48	
No response	7	
Not yet received	**127**	**14.3%**

Of those who received their SAP subsidy once, the average amount they received is PHP 6,322. Of those who received their SAP subsidy twice, the average amount for the first receipt is PHP 6,359 and PHP 807 on the second receipt. The low amounts of the second

receipt claimed by the respondents may be an indication that this is not a part of the SAP, but of their regular cash grants from the 4Ps. The values reported for this item range from 400 and PHP 6,700. For reference, the correct values of SAP subsidy that should be received by 4Ps beneficiaries is reflected in Table 22. According to the guidelines in the SAP provision, the beneficiaries are entitled to PHP 5000 to PHP8000 SAP subsidy depending on the region of residence. However, PHP1350 of the said amount will be covered by the cash grants that they were supposed to receive during the period.

Table 21. Average amount of SAP grant received by frequency of receipt

Frequency of receipt of SAP cash grants	Average (PHP)	Number of observations
Once (first tranche)	5,963	579
Twice (first and second tranche)		
1st *tranche*	6,358	36
2nd *tranche*	807	36

Table 22. Correct SAP subsidy per region

Region	Total amount of SAP (in PHP)	Total amount of SAP excluding the cash grants (PHP)
NCR	8,000	6,650.00
III, IV-A	6,500	5,150.00
VI, VII, X, XI	6,000	4,650.00
CAR, I, II	5,500	4,150.00
IV-B, V, VIII, IX, XII, CARAGA, BARMM	5,000	3,650.00

Source: DSWD Memorandum Circular No, 14 s. 2020

4.5.1.3. Mode of payment

Majority of the respondents were able to withdraw their SAP financial assistance through Landbank and non-Landbank ATMs. Only around 3% of the respondents were able to receive their financial assistance through other modes such as POS machines, assemblies called by the DSWD or LGU, and house to house visits.

Table 23. How respondents received their SAP cash grants

Manner of receiving SAP cash grants	Frequency	Percentage
ATM	592	97.2%
POS	4	0.7%
OTC in bank branch	1	0.2%
Assembly called by LGU, DSWD or LBP	10	1.6%
House to house by DSWD	2	0.3%
Total	609	

Most of the beneficiaries reported walking to the ATM, bank, or OTC venue where they withdrew their SAP cash assistance. Of those who had to ride in their own vehicle or public transportation, the median expense incurred is PHP 128, while highest value of expense was reported at PHP2500. In terms of duration of travel, the median reported by those that travelled through their own vehicle, public transportation, or LGU service vehicle was 30 minutes. The longest travel time however is 300 minutes or equivalent to 5 hours. In terms of duration of queueing in ATMs, banks, or other payout venues for SAP, the median time reported by the respondents is 60 minutes. The longest duration id queueing however is 300 minutes or equivalent to 6 hours.

Table 24. Average and median transportation cost and time spent during receipt of SAP grants

	Number of observations	Average	Median	Min	Max
Transportation expense (in PHP)	87	128.5	100	10	2500
Travel time (in minutes)	124	57.1	30	2	300
Queue time (in minutes)	505	73.9	60	1	600

Almost all of the respondents (97%) who received their SAP in venues outside their homes reported that social distancing was followed all the time while they were claiming their SAP financial assistance. Several reported that social distancing was followed only partially.

4.5.1.4. Correctness of Amount of Financial Assistance

Around two-thirds (66%) of the respondents think that the amount they received for SAP is sufficient to cover their needs during the quarantine. The rest of the respondents think otherwise.

Respondents were also asked whether they think the amount they received is correct based on their knowledge of the SAP guidelines that they are supposed to receive. Majority (81%) thinks that the amount they received is consistent with the guidelines that they know. Of those who think the amount they received is incorrect according to guidelines, their expected amounts range from PHP1,500 to PHP 50,000. The median value they expect is PHP 8,000.

4.5.1.5. Use of SAP Financial Assistance

The table below shows the expenditure items where the respondents spent their SAP financial assistance. From the proportions, almost all of the respondents spent their financial assistance on food for the household. More than half also spent the money on medicine and other health-related expenditures. Around 12% of the beneficiaries also reported using their SAP financial assistance to extend aid to other families. These other families could be their relatives or neighbors in the community, as well as through other humanitarian or relief operation modes.

Table 25. Top expenditure items where beneficiaries used their SAP grant (n=759)

Expenditure item	Percentage
Food	71.0%
Health and Medicine	38.0%
Aid for others	12.0%
Non-food household expenses	6.0%
Savings	5.0%
Investment in business	3.0%

4.5.1.6. Experience in SAP

In terms of their overall experience in the SAP implementation, 26% of the respondents reported having no issues or challenges experienced in the implementation of the SAP. Around 24% have reported that there were households they feel should not be given financial assistance, while 19% think that there are those who should receive financial assistance but were not given. Another common experience reported by the respondents is receiving negative comments from neighbors and other people on their being SAP beneficiaries. This was reported by 17% of the respondents. None reported experiencing

difficulty in withdrawing their SAP grants although this was included in the pre-coded responses available in the questionnaire.

Table 26. Problems experienced in SAP implementation (n=759)

Problems experienced in SAP implementation	Percentage
No problems experienced	26.0%
Some who are deserving did not receive SAP	24.0%
Some who are not deserving were able to receive SAP	19.0%
Disbursement of grants took a long time	17.0%
Insufficient SAC forms	12.0%
Lack of transportation to banks, ATM, or assembly venue	12.0%
The grants were shared by more than one family	6.0%
Confusing or frequently changing guidelines in implementation	6.0%
Barangay officials did not know what they should do	4.0%
The amount of grant is insufficient	3.0%
The amount of grant received is incorrect	3.0%
Negative comments directed (to respondents) by neighbors and other people	2.0%

4.5.1.7. Source of information of those who have not received SAP

Among those who have not received their SAP financial assistance at the time of the interview, majority (98 out of 125 respondents) still have not received any advice on the schedule of their SAP assistance. Among those who have already received information (27 respondents), their most common sources are the DSWD staff, LGU officials, community associations (e.g., Home-owners' Association), and/or neighbors.

Table 27. Sources of information on SAP payout schedule for those who have not received SAP (n=27)

Source of information	Percentage
DSWD Staff	44.0%
LGU Staff	30.0%
Home-owners' Association or similar organizations	22.0%
Neighbors or relatives	15.0%
Social media (Facebook, Twitter, Instagram)	11.0%
TV or radio	4.0%

4.5.1.8. 5. Non-4Ps Experience

Majority of the respondents (62%) claimed that they know of a non-4ps beneficiary who received the SAP financial assistance.

Beneficiaries were also asked what they observed, know, or perceived as the experience of non-4Ps recipients of the SAP financial assistance. The same patterns in responses are observed to when they were asked to report on their own experiences. Around 22% of the respondents reported that they think there were no issues or challenges experienced in the implementation of the SAP among the non-4ps. Around 28% have reported that there were households they feel should not be given financial assistance, while 20% think that there are those who should receive financial assistance but were not given. The

percentage of respondents that reported the issue on negative comments from neighbors and other people is around 20% of the respondents.

Table 28. Problems experienced by non-4Ps in SAP implementation (n=886)

Problems experienced in SAP implementation	Percentage
No problems experienced	22.0%
Some who are deserving did not receive SAP	28.0%
Some who are not deserving were able to receive SAP	20.0%
Disbursement of grants took a long time	20.0%
Insufficient SAC forms	17.0%
Lack of transportation to banks, ATM, or assembly venue	9.0%
The grants were shared by more than one family	8.0%
Barangay officials did not know what they should do	3.0%
Confusing or frequently changing guidelines in implementation	3.0%
The amount of grant is insufficient	2.0%
The amount of grant received is incorrect	1.0%
Negative comments directed to us by neighbors	1.0%

4.5.1.9. Role of Parent Leaders
More than one-fourth of the respondents (173 of 612) are 4Ps Parent leaders. Based on the responses, more than 80% of these parent leaders reported that almost all or all of their 4Ps members have already received their financial assistance at least once. Among those that reported at least half of their members not yet receiving SAP, the reasons they reported include lack of cash cards for other members and failure to contact or communicate with some members.

Table 29. Proportion of 4Ps beneficiaries in the parent group that received SAP according to Parent Leaders (n=612)

Proportion of members in parent groups that received SAP	Percentage of responses (by parent leaders)
All members	41.5%
Almost all	39.6%
More than 50%	7.9%
Half or 50%	4.9%
Less than 50%	0.6%
Almost none/ few of the members	1.8%
None of the members	3.7%

Most of the parent leaders play a role in the implementation of SAP among 4Ps members. Their primary role is in information dissemination to their member beneficiaries; this is done by almost all of the parent leaders who participated in the survey. Several of them have also reported being involved in actual implementation including distribution of the SAP financial assistance and identifying potential beneficiaries.

4.5.2. Opinion of DSWD Key Informants on role of 4Ps Payment System in SAP implementation

DSWD key informants noted that it was relatively easy for them to distribute the SAP benefits to Pantawid Pamilya beneficiaries compared to non-beneficiaries of the program since this only required them to provide the list of beneficiaries to the Landbank and request them to transfer the funds of SAP to the accounts of the 4Ps beneficiaries. They acknowledged that this ease was due to the existing database of beneficiaries and the wide coverage of the beneficiaries in the cash card payment system.

When asked whether the current payment system appropriate or sufficient to handle a program as large as the Social Amelioration Program, the national program management noted that the current payment system, as it is, is only intended for Pantawid Pamilya beneficiaries and may not be able to cater to other programs such as the SAP which has different coverage targets. However, they also noted that the program's payment system should be improved to readily adapt and efficiently deliver benefits in times of emergency situations.

5. Summary and Recommendations

The study presents an assessment of the payment system of the Pantawid Pamilyang Pilipino Program using a combination of qualitative and quantitative methodologies. Data sources include program administrative reports, Focus Group Discussions with program beneficiaries, interviews with program implementers, survey data of the 3rd impact evaluation of the program, and an online survey that aims to collect information on the experiences of beneficiaries in receiving their grants and the implementation of the Social Amelioration Program.

In terms of the benefit level, the results show that the amount of cash grants have remained at their nominal levels starting 2008 up to 2016 even though the real value has already decreased due to inflation. The amount of grants have only recently increased due to the Rice subsidy and RA 11301 which started implementation in 2017 and 2020, respectively. In those years where the grants have remained stagnant, the reduction in real value of the grants also reduced its ability to augment the income of the beneficiaries and aid human capital investment of children. Compared with other countries, the 4Ps grants are lagging in terms of its generosity.

When asked to give an assessment of the benefit level of the program, beneficiaries are hesitant to demand increase in grant amounts but admit that their budget is barely enough to cover needs. Most of the grants are spent on education expenses of children and food for the family. Program implementers also acknowledged that an increase in the cash grants will be helpful to cushion the increase in prices and possible economic shocks to the households.

Evidence on the perceived optimal frequency of payment of benefits are mixed. While more frequent payments result in consumption smoothing, less frequent payments also resulted in positive impact on savings and asset accumulation. Results from the FGDs with beneficiaries also show that there is no strong demand for more frequent payments among the beneficiaries and most prefer the current bimonthly payment of grants due to additional transportation costs to be incurred and smaller amount of grants to be received every payout. As regards the feasibility of increasing the payment frequency, program implementers noted that there are cost considerations for the program. These include costs for operations in the compliance monitoring, and cost for bank service fees.

In general, the program payment system have improved through the years despite gaps in the initial years of its implementation. The conversion of the mode of delivery has been mentioned by program implementors as the key improvement in the payment delivery. This is also confirmed by accounts of beneficiaries saying that there are less delays in the payout of grants in the recent years and noted that convenience offered by cash cards. However, the experience of beneficiaries are largely dependent on the availability of ATMs or POS merchants in their community or nearby areas. In addition, both beneficiaries and program implementers also noted some issues that still need to be addressed even in the cash card mode of payment. This includes difficulty in accessing ATMs and/or banks in some of the areas, and delays in the approval of cash-card related processes such as replacement of cards in case of change of grantee, and broken feedback loop on the status of some processes.

IE3 evidence suggest mode of payment do not create significant heterogeneity in impact of the program for education and health outcomes. However, results for household income and expenditure indicate more pronounced positive impact of the program for cash card holders. While this needs further study to ascertain pathways for such discrepancy in impact, it is possible that the predictability and reliability of payouts in cash cards relative to OTC means have contributed to the positive effect of the program.

Results of the quick assessment of the Social Amelioration Program point to the ease of providing emergency cash assistance to the Pantawid Pamilya beneficiaries due to its existing registry of beneficiaries and established cash card system for most of the beneficiaries.

Based on the results of the study, the following recommendation are put forward:

- DSWD and PIDS should study the need to establish a principle for adjusting the grant amount provided by the program ahead of the six-year schedule of reviewing the benefit level stipulated in the 4Ps Act/RA11031. This is also important given that the country will enter the recovery phase post-COVID. An an ex-ante analysis should precede the increase in amount of grants.

- In addition to automatic adjustment of the amount grants, the program may consider differentiating the amount of the assistance for specific target beneficiaries (e.g., by gender, location) such as the recommendation of Reyes and Tabuga (2013), David, Albert and Vizmanos (2018), and Paqueo and Orbeta (2019).

- If grant amounts cannot be adjusted proactively, supplementary interventions (other programs or other cash assistance) should be pursued.

- More than increasing the frequency of payouts, reliability and predictability of payment schedules appear to be more important. This can be done by ensuring payouts are conducted according to an explicit declared schedule and beneficiaries have reduced barriers to access the grants. To achieve this, improvements should be made in the in processes and IT infrastructures of DSWD and LBP.

- Changes in frequency of payment should be carefully examined to know if benefits outweigh additional costs. This can be piloted in a small area before full implementation.

- LBP (or the relevant AGDB) should expand network of ATMs and local bank branches in the country to reach all areas. LBP should also find alternative points of cash withdrawal such as POS to cover areas without ATMs. POS establishments should be monitored, and transaction fees should not be shouldered by beneficiaries (at least for 1st withdrawal) regardless of where the transaction is done.

- Processes of resolving payment and cash card related grievances (e.g., decentralized process) should be streamlined and frontline staff should have access to real-time status.

6. Bibliography

Acosta, P., Avalos, J., & Velarde, R. (2019, September). Pantawid Pamilya 2017 Assessment:An Update of the Philippine Conditional Cash Transfer's Implementation Performance. *WORLD BANK SOCIAL PROTECTION POLICY NOTE*.

Adriano, L. (2016). *Pantawid Pamilyang Pilipino Program: Stimulus to Local Economic Growth.* DSWD.

Albert, J. (2015, January). *Pantawid Extension to High School: Pathway for Accelerating Improvements in Human Capital Among the Poor.* Mandaluyong City: Asian Development Bank.

Baird, S., McIntosh, C., & Ozler, B. (2009). *Designing Cost-Effective Cash Transfer Programs to Boost Schooling among Young Women in Sub-Saharan Africa.* The World Bank.

Banerjee, A., Hanna, R., Kreindler, G., & Olken, B. (2017). Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs. *The World Bank Research Observer*, 155-184.

Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). *Cash Transfers: What Does the Evidence Say? A Rigorous Review of Programme Impact and of the Role of Design and Implementation Features.* London: Overseas Development Institute.

Bazzi, S., Sumarto, S., & Suryahadi, A. (2012). *Evaluating Indonesia's unconditional cash transfer programme, 2005–2006.* 3ie.

Catubig, M., Villano, R., & Dollery, B. (2015). Payment Schemes in Conditional Cash Transfer Programs: The Case of 4Ps in the Davao Region, Philippines. *Administrative Sciences*, 240–259.

CGAP. (2013). *Striving for E-payments at Scale: The Evolution of the Pantawid Pamilyang Pilipino Program in the Philippines.* CGAP/World Bank.

Dabalen, A., Kilic, T., & Wane, W. (2008). *Social transfers, labour supply and poverty reduction: the case of Albania.* The World Bank.

Davis, B., Handa, S., Arranz, M. R., Stampini, M., & Winters, P. (2002). Conditionality and the impact of program design on household welfare: Comparing two diverse cash transfer programs in rural Mexico. *Working Paper*. Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations (FAO - ESA).

DSWD. (2014). *Keeping Children Healthy and in School: Evaluating the Pantawid Pamilya Using Regression Discontinuity Design.*

DSWD and World Bank. (2014). *Philippines conditional cash transfer program impact evaluation 2012.* Washington DC: DSWD and World Bank.

Esteva, A. A. (2012, April). *aguilaresteva.com.* Retrieved from AA Esteva:
http://www.aguilaresteva.com/cash-and-conditionalities-effects-on-early-childhood-
medium-term-effects-on-physical-and-cognitive-development-updated-april-2012/

Fernald, L., Gertler, P., & Neufeld, L. (2009). 10-year effect of Oportunidades, Mexico's conditional
cash transfer programme, on child growth, cognition, language, and behaviour: a
longitudinal follow-up study. *The Lancet*, 1997-2005.

Filmer, D., & Schady, N. (2011). Does more cash in conditional cash transfer programs always lead to
larger impacts on school attendance? *Journal of Development Economics*, 150–157.

Fiszbein, A., & Schady, N. (2009). *Conditional Cash Transfers: Reducing Present and Future Poverty.*
Washington DC: IBRD and WB.

Garcia, S., & Saavedra, J. (2012, February). Educational Impacts and Cost-Effectiveness of Conditional
Cash Transfer Programs in Developing Countries: A Meta-Analysis. *RAND Working Paper
Series*.

Gertler, P. (2004). Do Conditional Cash Transfers Improve Child Health? A Randomized Experiment.
The American Economic Review, 336-341. Retrieved October 6, 2014, from
http://www.jstor.org/stable/3592906

Haushofer, J., & Shapiro, J. (2016). The Short-term Impact of Unconditional Cash Transfer to the
Poor: Experimental Evidence from Kenya. *The Quarterly Journal of Economics*, 1973–2042.

Manley, J., Fernald, L., & Gertler, P. (2015). Wealthy, healthy and wise: does money compensate for
being born into difficult conditions? *Apllied Economics Letters*, 121-126.

Pantawid Pamilya NPMO. (July 12, 2019). Overview of the Pantawid Pamilyang Pilipino Program.
Orientation to 4Ps NAC Members and Partners. Quezon City.

7. Appendix: Differential impact of Pantawid Pamilya by mode of payment

Table 30. Growth monitoring

Outcomes			**Sharp RD Estimates**		
			CER Optimal	MSE Optimal	Sample
Regular weight monitoring for children 0 to <2 years old		z-value	0.559	0.419	-0.372
		difference (impact)	8.580	8.579	-4.250
	Cash card	impact	14.900	7.630	-7.130
		se	10.370	9.150	4.930
		robust p-value	0.117	0.257	0.163
		conventional p-value	0.151	0.404	0.148
		number of obs.	348	425	734
		Pantawid	27.865	7.628	-7.130
		non-Pantawid	12.965	24.632	19.467
		bandwidth	356	470	3,008
	OTC	impact	6.320	11.230	-9.880
		se	11.300	10.580	4.860
		robust p-value	0.468	0.195	0.365
		conventional p-value	0.576	0.288	0.042
		number of obs.	263	315	748
		Pantawid	22.178	25.801	26.613
		non-Pantawid	15.856	14.573	16.733
		bandwidth	256	338	3,008
Frequency of weight monitoring for children 0 to 2 years old in the past six months		z-value	-0.024	-0.005	-0.216
		difference (impact)	-0.021	-0.021	-0.256
	Cash card	impact	0.292	0.113	-0.274
		se	0.608	0.543	0.290
		robust p-value	0.564	0.669	0.275
		conventional p-value	0.632	0.835	0.344
		number of obs.	344	423	734
		Pantawid	3.212	0.113	-0.274
		non-Pantawid	2.920	3.125	2.991
		bandwidth	350	461	3,008
	OTC	impact	0.313	0.354	-0.511
		se	0.619	0.558	0.285
		robust p-value	0.525	0.384	0.341
		conventional p-value	0.614	0.525	0.073
		number of obs.	291	366	748
		Pantawid	3.256	3.275	3.278
		non-Pantawid	2.944	2.921	2.767
		bandwidth	303	400	3,008

*** p<0.01, ** p<0.05, * p<0.10
Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 31. Child health services and practices

Outcomes			Bandwidth			
			CER Optimal		MSE Optimal	Sample
Vitamin A supplementation (6 months to 6 years old)		z-value	-0.270		-0.015	-0.787
		difference (impact)	-1.640		-1.640	-3.650
	Cash card	impact	4.870		5.770	5.600 *
		se	3.940		3.550	2.310
		robust p-value	0.257		0.158	0.093
		conventional p-value	0.217		0.104	0.015
		number of obs.	1,172		1,423	2,460
		Pantawid	84.446		84.742	5.611
		non-Pantawid	79.579		78.972	84.086
		bandwidth	361		479	3,008
	OTC	impact	6.510		5.890	9.600 **
		se	4.610		4.170	2.430
		robust p-value	0.217		0.263	0.012
		conventional p-value	0.158		0.158	0.000
		number of obs.	1,188		1,449	2,465
		Pantawid	85.942		85.562	9.604
		non-Pantawid	79.435		79.670	87.832
		bandwidth	398		530	3,008
Full immunization at age 1		z-value	-0.288		-0.062	-0.384
		difference (impact)	-2.240		-2.236	-5.440
	Cash card	impact	-0.840		-1.690	0.370
		se	4.720		4.210	3.110
		robust p-value	0.944		0.844	0.339
		conventional p-value	0.859		0.688	0.905
		number of obs.	1,144		1,347	2,062
		Pantawid	24.840		24.631	0.368
		non-Pantawid	25.676		26.320	27.253
		bandwidth	432		573	3,008
	OTC	impact	1.400		2.320	-0.610
		se	6.190		5.610	3.500
		robust p-value	0.786		0.636	0.750
		conventional p-value	0.821		0.679	0.862
		number of obs.	861		1,076	2,037
		Pantawid	26.313		26.884	-0.603
		non-Pantawid	24.912		24.561	25.434
		bandwidth	332		441	3,008
Visited a health facility or health professional in the past 8 weeks		z-value	2.286 **		0.316	0.165
		difference (impact)	18.740		18.738	4.570
	Cash card	impact	2.090		0.440	4.610
		se	4.750		4.360	2.790
		robust p-value	0.765		0.940	0.221
		conventional p-value	0.660		0.920	0.098
		number of obs.	1,242		1,523	2,684
		Pantawid	40.863		39.405	4.630
		non-Pantawid	38.771		38.966	40.362
		bandwidth	348		461	3,008
	OTC	impact	-16.650 **		-10.520 *	7.630
		se	6.680		5.990	3.230
		robust p-value	0.012		0.061	0.201
		conventional p-value	0.013		0.079	0.018
		number of obs.	787		987	2,721
		Pantawid	28.123		32.182	7.623
		non-Pantawid	44.768		42.705	42.941
		bandwidth	211		281	3,008

*** p<0.01, ** p<0.05, * p<0.10
Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 32. Deworming

Outcomes		Bandwidth			
		CER Optimal		MSE Optimal	Sample
	z-value	-2.901 ***		-0.359	-1.424

Outcomes			CER Optimal		MSE Optimal		Sample	
Deworming (under 6 years old)	Cash card	difference (impact)	-22.590		-22.598		-20.230	
		impact	-3.790		-2.950		-1.080	
		se	4.840		4.410		3.280	
		robust p-value	0.441		0.503		0.443	
		conventional p-value	0.433		0.504		0.741	
		number of obs.	1,379		1,655		2,662	
		Pantawid	42.126		42.907		-1.084	
		non-Pantawid	45.919		45.856		45.692	
		bandwidth	407		540		3,008	
	OTC	impact	18.800	***	15.670	***	9.380	**
		se	6.100		5.370		3.220	
		robust p-value	0.002		0.004		0.019	
		conventional p-value	0.002		0.004		0.004	
		number of obs.	1,023		1,282		2,701	
		Pantawid	61.877		59.071		9.381	
		non-Pantawid	43.072		43.400		55.938	
		bandwidth	296		394		3,008	
Deworming at least once (6 to 14 years old)		z-value	-2.090	**	-0.058		-1.202	
	Cash card	difference (impact)	-7.240		-7.239		-9.900	
		impact	-3.390		-2.770		0.790	
		se	2.590		2.310		1.350	
		robust p-value	0.223		0.280		0.292	
		conventional p-value	0.191		0.230		0.555	
		number of obs.	2,859		3,499		5,830	
		Pantawid	84.828		85.417		0.812	
		non-Pantawid	88.217		88.192		87.589	
		bandwidth	375		498		3,008	
	OTC	impact	3.850		3.680	*	3.930	*
		se	2.300		2.000		1.260	
		robust p-value	0.112		0.092		0.075	
		conventional p-value	0.094		0.066		0.002	
		number of obs.	2,868		3,539		5,801	
		Pantawid	90.892		90.825		3.928	
		non-Pantawid	87.043		87.145		91.028	
		bandwidth	426		569		3,008	
Deworming at least twice (6 to 14 years old)		z-value	-0.185		-0.034		-0.642	
	Cash card	difference (impact)	-1.140		-1.140		-2.560	
		impact	8.810	**	9.000	**	7.460	**
		se	3.810		3.460		2.320	
		robust p-value	0.024		0.013		0.019	
		conventional p-value	0.021		0.009		0.001	
		number of obs.	3,233		3,846		5,807	
		Pantawid	32.740		33.045		7.477	
		non-Pantawid	23.927		24.042		32.653	
		bandwidth	441		586		3,008	
	OTC	impact	9.950	**	11.040	***	3.290	
		se	4.850		4.300		2.550	
		robust p-value	0.033		0.008		0.108	
		conventional p-value	0.040		0.010		0.197	
		number of obs.	2,510		3,096		5,777	
		Pantawid	33.240		33.820		3.288	
		non-Pantawid	23.287		22.780		30.163	
		bandwidth	355		474		3,008	

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 33. Child nutrition outcomes

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
Underweight		z-value	0.224	0.056	0.048
	Cash card	difference (impact)	1.680	1.674	0.570
		impact	3.510	3.330	0.860
		se	4.570	4.190	2.660
		robust p-value	0.435	0.413	0.457

Outcomes			Bandwidth			
			CER Optimal	MSE Optimal	Sample	
		conventional p-value	0.442	0.427	0.748	
		number of obs.	1,453	1,728	2,519	
		Pantawid	24.398	24.136	0.859	
		non-Pantawid	20.890	20.802	21.767	
		bandwidth	481	638	3,008	
	OTC	impact	1.830	2.330	3.170	
		se	5.940	5.160	2.790	
		robust p-value	0.857	0.838	0.415	
		conventional p-value	0.758	0.652	0.255	
		number of obs.	1,077	1,342	2,539	
		Pantawid	23.453	24.137	3.170	
		non-Pantawid	21.618	21.809	24.128	
		bandwidth	332	443	3,008	
Severe underweight		z-value	-0.059	-0.033	0.013	
		difference (impact)	-0.250	-0.256	0.080	
	Cash card	impact	1.870	1.810	0.500	
		se	2.270	2.040	1.260	
		robust p-value	0.453	0.433	0.530	
		conventional p-value	0.411	0.373	0.693	
		number of obs.	1,197	1,446	2,519	
		Pantawid	7.229	6.992	0.500	
		non-Pantawid	5.362	5.177	5.380	
		bandwidth	359	476	3,008	
	OTC	impact	2.120	2.230	2.490	
		se	3.540	3.000	1.650	
		robust p-value	0.643	0.636	0.151	
		conventional p-value	0.549	0.457	0.132	
		number of obs.	1,375	1,657	2,539	
		Pantawid	7.848	7.777	2.487	
		non-Pantawid	5.724	5.545	7.124	
		bandwidth	464	618	3,008	
Stunting		z-value	1.192	0.210	0.054	
		difference (impact)	9.540	9.546	0.790	
	Cash card	impact	5.590	4.510	1.550	
		se	4.510	4.140	2.810	
		robust p-value	0.225	0.279	0.311	
		conventional p-value	0.215	0.277	0.581	
		number of obs.	1,217	1,464	2,454	
		Pantawid	35.714	34.795	1.568	
		non-Pantawid	30.121	30.289	32.025	
		bandwidth	381	505	3,008	
	OTC	impact	-3.950	0.960	6.620	**
		se	6.610	5.840	3.180	
		robust p-value	0.458	0.858	0.043	
		conventional p-value	0.550	0.869	0.037	
		number of obs.	854	1,079	2,506	
		Pantawid	30.092	33.856	6.617	
		non-Pantawid	34.045	32.893	37.308	
		bandwidth	256	341	3,008	
Severe stunting		z-value	0.232	0.096	0.043	
		difference (impact)	1.190	1.184	0.300	
	Cash card	impact	3.540	2.690	0.640	
		se	2.970	2.770	1.740	
		robust p-value	0.247	0.345	0.512	
		conventional p-value	0.234	0.331	0.714	
		number of obs.	1,347	1,588	2,454	
		Pantawid	11.565	11.068	0.642	
		non-Pantawid	8.028	8.381	10.377	
		bandwidth	432	573	3,008	
	OTC	impact	2.350	3.240	4.110	**
		se	4.180	3.730	2.000	

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		robust p-value	0.688	0.580	0.029
		conventional p-value	0.573	0.384	0.040
		number of obs.	1,045	1,303	2,506
		Pantawid	11.790	12.764	4.097
		non-Pantawid	9.437	9.520	14.052
		bandwidth	329	438	3,008
Wasting		z-value	-0.416	-0.126	-0.055
		difference (impact)	-2.290	-2.294	-0.700
	Cash card	impact	-2.510	-1.040	0.920
		se	3.860	3.540	2.030
		robust p-value	0.464	0.646	0.613
		conventional p-value	0.515	0.770	0.650
		number of obs.	1,074	1,302	2,207
		Pantawid	10.835	11.359	0.928
		non-Pantawid	13.348	12.397	11.217
		bandwidth	370	491	3,008
	OTC	impact	-0.220	0.040	1.370
		se	3.930	3.500	2.040
		robust p-value	0.912	0.910	0.957
		conventional p-value	0.956	0.990	0.502
		number of obs.	949	1,180	2,209
		Pantawid	12.211	12.006	1.367
		non-Pantawid	12.430	11.961	11.667
		bandwidth	332	442	3,008
Severe wasting		z-value	-0.205	-0.088	0.075
		difference (impact)	-0.630	-0.635	0.760
	Cash card	impact	-2.910	-2.440	-1.210
		se	1.960	1.800	1.060
		robust p-value	0.126	0.147	0.354
		conventional p-value	0.138	0.174	0.257
		number of obs.	1,115	1,331	2,207
		Pantawid	2.240	2.310	-1.209
		non-Pantawid	5.154	4.755	2.514
		bandwidth	391	518	3,008
	OTC	impact	-2.280	-2.100	-0.800
		se	2.370	2.160	1.130
		robust p-value	0.332	0.319	0.277
		conventional p-value	0.336	0.331	0.480
		number of obs.	1,038	1,268	2,209
		Pantawid	2.782	2.591	-0.800
		non-Pantawid	5.061	4.689	2.796
		bandwidth	372	496	3,008

*** p<0.01, ** p<0.05, * p<0.10
Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 34. Enrollment

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
Enrollment of children 3 to 5 years old		z-value	0.060	0.008	-0.082
		difference (impact)	0.640	0.638	-1.910
	Cash card	impact	-2.210	-0.110	1.480
		se	7.160	6.720	4.290
		robust p-value	0.780	0.991	0.875
		conventional p-value	0.757	0.987	0.730
		number of obs.	746	885	1,441
		Pantawid	55.142	55.344	1.458
		non-Pantawid	57.356	55.453	54.605
		bandwidth	406	539	3,008
	OTC	impact	-2.850	-0.650	3.260

Outcomes			**Bandwidth**					
			CER Optimal		MSE Optimal		Sample	
		se	7.880		7.210		4.130	
		robust p-value	0.699		0.867		0.509	
		conventional p-value	0.717		0.928		0.430	
		number of obs.	738		889		1,475	
		Pantawid	55.209		55.775		3.257	
		non-Pantawid	58.060		56.426		57.220	
		bandwidth	419		557		3,008	
Enrollment of children 6 to 11 years old		z-value	0.532		0.004		1.309	
		difference (impact)	0.550		0.555		0.650	
	Cash card	impact	1.800	**	1.870	**	0.510	**
		se	0.780		0.750		0.580	
		robust p-value	0.020		0.011		0.018	
		conventional p-value	0.021		0.012		0.374	
		number of obs.	2,312		2,733		3,959	
		Pantawid	99.422		99.376		0.517	
		non-Pantawid	97.620		97.505		98.502	
		bandwidth	474		629		3,008	
	OTC	impact	1.250	*	1.380	*	0.590	**
		se	0.680		0.700		0.530	
		robust p-value	0.076		0.062		0.030	
		conventional p-value	0.068		0.050		0.269	
		number of obs.	1,702		2,095		3,938	
		Pantawid	99.181		99.196		0.594	
		non-Pantawid	97.935		97.815		98.692	
		bandwidth	358		478		3,008	
Enrollment of children 12 to 15 years old		z-value	0.957		0.024		0.794	
		difference (impact)	3.210		3.207		4.460	
	Cash card	impact	2.800		3.980		3.400	***
		se	2.180		2.000		1.260	
		robust p-value	0.279		0.120		0.001	
		conventional p-value	0.198		0.047		0.007	
		number of obs.	1,208		1,464		2,551	
		Pantawid	96.539		96.944		3.401	
		non-Pantawid	93.738		92.959		96.459	
		bandwidth	354		469		3,008	
	OTC	impact	-0.410		0.130		1.860	
		se	2.550		2.360		1.590	
		robust p-value	0.801		0.895		0.408	
		conventional p-value	0.873		0.958		0.243	
		number of obs.	1,445		1,771		2,534	
		Pantawid	93.057		93.400		1.863	
		non-Pantawid	93.463		93.275		95.053	
		bandwidth	508		677		3,008	
Enrollment of children 16 to 17 years old		z-value	1.062		0.086		1.809	*
		difference (impact)	9.420		9.418		8.830	
	Cash card	impact	17.350	***	14.920	**	10.130	***
		se	6.290		5.690		3.320	
		robust p-value	0.010		0.017		0.002	
		conventional p-value	0.006		0.009		0.002	
		number of obs.	584		698		1,157	
		Pantawid	93.467		92.091		10.130	
		non-Pantawid	76.120		77.173		89.052	
		bandwidth	352		466		3,008	
	OTC	impact	7.930		9.050		11.050	*
		se	6.250		5.450		3.230	
		robust p-value	0.259		0.178		0.068	
		conventional p-value	0.204		0.097		0.001	
		number of obs.	689		799		1,134	
		Pantawid	87.112		88.112		11.045	
		non-Pantawid	79.183		79.061		90.787	
		bandwidth	529		702		3,008	
Outcomes		z-value	1.276		0.037		1.655	*

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
		difference (impact)	4.630		4.637		5.900	
	Cash card	impact	7.700	***	7.550	***	5.570	***
		se	2.540		2.270		1.330	
		robust p-value	0.006		0.005		0.000	
		conventional p-value	0.002		0.001		0.000	
		number of obs.	1,762		2,132		3,708	
		Pantawid	95.622		95.369		5.568	
		non-Pantawid	87.918		87.816		94.120	
Enrollment of children 12 to 17 years old		bandwidth	345		458		3,008	
	OTC	impact	3.070		2.930		5.080	**
		se	2.590		2.300		1.430	
		robust p-value	0.327		0.364		0.025	
		conventional p-value	0.237		0.204		0.000	
		number of obs.	1,878		2,310		3,668	
		Pantawid	91.681		91.576		5.078	
		non-Pantawid	88.613		88.650		93.903	
		bandwidth	429		572		3,008	
Enrollment of children 6 to 14 years old		z-value	1.241		0.010		1.165	
		difference (impact)	1.410		1.409		1.750	
	Cash card	impact	2.550	***	2.720	***	1.930	***
		se	0.680		0.640		0.440	
		robust p-value	0.001		0.000		0.000	
		conventional p-value	0.000		0.000		0.000	
		number of obs.	2,682		3,321		5,924	
		Pantawid	99.225		99.160		1.928	
		non-Pantawid	96.672		96.438		98.420	
		bandwidth	335		445		3,008	
	OTC	impact	1.140		1.240		1.390	***
		se	0.910		0.860		0.570	
		robust p-value	0.273		0.249		0.007	
		conventional p-value	0.207		0.150		0.014	
		number of obs.	2,533		3,146		5,889	
		Pantawid	97.969		97.889		1.395	
		non-Pantawid	96.825		96.652		98.036	
		bandwidth	354		473		3,008	
Enrollment of children 15 to 20 years old		z-value	1.068		0.064		0.445	
		difference (impact)	6.750		6.753		4.320	
	Cash card	impact	6.650		6.870		8.380	***
		se	4.150		3.680		2.170	
		robust p-value	0.146		0.120		0.005	
		conventional p-value	0.109		0.062		0.000	
		number of obs.	1,437		1,729		2,790	
		Pantawid	81.364		81.134		8.365	
		non-Pantawid	74.710		74.264		81.247	
		bandwidth	391		518		3,008	
	OTC	impact	-0.100		1.050		4.760	
		se	4.770		4.130		2.500	
		robust p-value	0.901		0.987		0.457	
		conventional p-value	0.983		0.800		0.057	
		number of obs.	1,511		1,824		2,716	
		Pantawid	75.501		76.132		4.765	
		non-Pantawid	75.601		75.084		79.029	
		bandwidth	475		632		3,008	

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 35. Attendance rates (in %)

Outcomes			CER Optimal		MSE Optimal		Sample	
			Bandwidth					
Attendance rate of children 3 to 5 years old		z-value	0.170		0.008		-0.078	
		difference (impact)	0.930		0.927		-0.450	
	Cash card	impact	4.060		4.090		-1.010	
		se	3.750		3.370		2.240	
		robust p-value	0.224		0.151		0.957	
		conventional p-value	0.280		0.226		0.653	
		number of obs.	396		463		771	
		Pantawid	88.834		89.011		-1.008	
		non-Pantawid	84.779		84.925		87.380	
		bandwidth	414		546		3,008	
	OTC	impact	3.130		1.970		-0.250	
		se	3.990		3.580		2.300	
		robust p-value	0.414		0.527		0.680	
		conventional p-value	0.433		0.583		0.914	
		number of obs.	451		543		795	
		Pantawid	88.642		88.347		-0.235	
		non-Pantawid	85.515		86.381		87.880	
		bandwidth	535		708		3,008	
Attendance rate of children 6 to 11 years old		z-value	-0.320		-0.003		0.542	
		difference (impact)	-0.370		-0.374		0.170	
	Cash card	impact	1.200		1.090		0.120	
		se	0.870		0.760		0.390	
		robust p-value	0.140		0.104		0.738	
		conventional p-value	0.169		0.153		0.760	
		number of obs.	1,787		2,210		3,887	
		Pantawid	97.385		97.369		0.117	
		non-Pantawid	96.187		96.279		97.095	
		bandwidth	343		456		3,008	
	OTC	impact	1.570	*	1.320	*	0.800	**
		se	0.760		0.650		0.350	
		robust p-value	0.054		0.071		0.012	
		conventional p-value	0.038		0.043		0.022	
		number of obs.	1,744		2,151		3,871	
		Pantawid	97.834		97.765		0.799	
		non-Pantawid	96.262		96.449		97.688	
		bandwidth	381		509		3,008	
Attendance rate of children 12 to 15 years old		z-value	0.897		0.010		0.297	
		difference (impact)	1.330		1.331		0.940	
	Cash card	impact	0.720		0.630		0.910	
		se	0.730		0.650		0.410	
		robust p-value	0.352		0.384		0.261	
		conventional p-value	0.322		0.336		0.025	
		number of obs.	1,271		1,536		2,416	
		Pantawid	97.464		97.498		0.911	
		non-Pantawid	96.741		96.869		97.973	
		bandwidth	415		551		3,008	
	OTC	impact	-0.610		-0.250		0.430	
		se	1.290		1.050		0.470	
		robust p-value	0.608		0.716		0.616	
		conventional p-value	0.638		0.812		0.368	
		number of obs.	1,076		1,340		2,388	
		Pantawid	96.310		96.700		0.426	
		non-Pantawid	96.918		96.950		97.585	
		bandwidth	378		503		3,008	
Attendance rate of children 16 to 17 years old		z-value	-2.656	***	-0.032		-0.642	
		difference (impact)	-4.450		-4.454		-3.200	
	Cash card	impact	-2.170		-1.640		-0.040	
		se	1.450		1.320		0.720	

65

Outcomes			CER Optimal	MSE Optimal	Sample
			Bandwidth		
		robust p-value	0.121	0.172	0.361
		conventional p-value	0.134	0.215	0.953
		number of obs.	473	570	964
		Pantawid	96.365	96.704	-0.043
		non-Pantawid	98.535	98.343	97.773
		bandwidth	346	458	3,008
	OTC	impact	2.280 ***	1.410 *	0.940
		se	0.840	0.840	0.770
		robust p-value	0.009	0.080	0.451
		conventional p-value	0.007	0.093	0.222
		number of obs.	407	498	955
		Pantawid	99.736	99.044	0.945
		non-Pantawid	97.452	97.638	98.555
		bandwidth	334	442	3,008
Attendance rate of children 12 to 17 years old		z-value	0.152	0.001	0.035
		difference (impact)	0.180	0.184	0.090
	Cash card	impact	0.000	0.090	0.640
		se	0.580	0.520	0.320
		robust p-value	0.919	0.961	0.703
		conventional p-value	0.998	0.866	0.042
		number of obs.	1,870	2,244	3,380
		Pantawid	97.235	97.356	0.645
		non-Pantawid	97.233	97.268	97.920
		bandwidth	437	580	3,008
	OTC	impact	-0.180	-0.040	0.550
		se	1.030	0.850	0.390
		robust p-value	0.819	0.862	0.455
		conventional p-value	0.859	0.962	0.164
		number of obs.	1,475	1,836	3,343
		Pantawid	96.980	97.167	0.546
		non-Pantawid	97.162	97.207	97.844
		bandwidth	362	483	3,008
Attendance rate of children 6 to 14 years old		z-value	0.165	0.001	0.840
		difference (impact)	0.170	0.171	0.590
	Cash card	impact	1.030	0.940	0.330
		se	0.760	0.670	0.340
		robust p-value	0.151	0.122	0.611
		conventional p-value	0.177	0.165	0.326
		number of obs.	2,559	3,140	5,767
		Pantawid	97.318	97.326	0.333
		non-Pantawid	96.287	96.390	97.326
		bandwidth	323	429	3,008
	OTC	impact	0.860	0.790	0.720 **
		se	0.700	0.600	0.300
		robust p-value	0.272	0.277	0.027
		conventional p-value	0.221	0.187	0.016
		number of obs.	2,377	2,959	5,729
		Pantawid	97.257	97.333	0.720
		non-Pantawid	96.397	96.544	97.686
		bandwidth	342	456	3,008
Attendance rate of children 15 to 20 years old		z-value	-0.698	-0.005	-0.574
		difference (impact)	-0.750	-0.747	-1.010
	Cash card	impact	-0.140	0.110	0.550
		se	0.770	0.670	0.400
		robust p-value	0.785	0.969	0.859
		conventional p-value	0.856	0.865	0.164
		number of obs.	1,223	1,448	2,120
		Pantawid	97.643	97.821	0.554
		non-Pantawid	97.783	97.706	98.234

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
	OTC	bandwidth	459	609	3,008
		impact	0.610	0.710	0.450
		se	0.750	0.700	0.480
		robust p-value	0.459	0.372	0.340
		conventional p-value	0.418	0.311	0.345
		number of obs.	1,111	1,364	2,074
		Pantawid	98.151	98.190	0.454
		non-Pantawid	97.543	97.480	98.081
		bandwidth	465	619	3,008

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 36. Attendance of at least 85%

Outcomes			**Bandwidth**			
			CER Optimal	MSE Optimal		Sample
Attendance of at least 85% among children 3 to 5 years old		z-value	-0.149	-0.018		-0.906
		difference (impact)	-1.690	-1.694		-6.620
	Cash card	impact	8.510	8.100		-1.830
		se	7.820	6.950		4.630
		robust p-value	0.225	0.167		0.873
		conventional p-value	0.277	0.244		0.692
		number of obs.	419	489		771
		Pantawid	75.458	75.436		-1.827
		non-Pantawid	66.952	67.337		71.760
		bandwidth	445	587		3,008
	OTC	impact	10.200	8.700		2.190
		se	8.260	7.290		4.780
		robust p-value	0.204	0.205		0.310
		conventional p-value	0.217	0.233		0.646
		number of obs.	397	469		795
		Pantawid	77.978	77.456		2.223
		non-Pantawid	67.778	68.757		75.433
		bandwidth	431	570		3,008
Attendance of at least 85% among children 6 to 11 years old		z-value	0.197	0.005		1.204
		difference (impact)	0.660	0.661		2.970
	Cash card	impact	3.430	3.620	*	1.690
		se	2.260	2.060		1.130
		robust p-value	0.120	0.071		0.315
		conventional p-value	0.128	0.079		0.134
		number of obs.	1,681	2,051		3,890
		Pantawid	95.074	95.087		1.679
		non-Pantawid	91.639	91.470		94.615
		bandwidth	313	416		3,008
	OTC	impact	2.770	2.650		2.150 *
		se	2.470	2.140		1.140
		robust p-value	0.317	0.310		0.065
		conventional p-value	0.261	0.215		0.060
		number of obs.	1,935	2,366		3,875
		Pantawid	94.664	94.753		2.150
		non-Pantawid	91.890	92.106		95.035
		bandwidth	437	584		3,008
Attendance of at least 85% among children 12 to 15 years old		z-value	0.803	0.028		0.281
		difference (impact)	3.760	3.764		3.710
	Cash card	impact	-0.670	-0.840		0.970
		se	2.620	2.320		1.500
		robust p-value	0.776	0.687		0.778
		conventional p-value	0.798	0.717		0.519
		number of obs.	1,398	1,673		2,417
		Pantawid	93.130	93.258		0.966
		non-Pantawid	93.801	94.101		94.773
		bandwidth	477	633		3,008
	OTC	impact	-4.430	-3.140		-0.140
		se	3.880	3.170		1.550
		robust p-value	0.251	0.301		0.572
		conventional p-value	0.253	0.322		0.927
		number of obs.	1,039	1,293		2,390
		Pantawid	89.788	91.045		-0.145
		non-Pantawid	94.223	94.187		93.921
		bandwidth	359	477		3,008

Outcomes			**Bandwidth**		
			CER Optimal	MSE Optimal	Sample
Attendance of at least 85% among children 16 to 17 years old		z-value	-2.592 ***	-0.094	-0.566
		difference (impact)	-12.810	-12.802	-8.170
	Cash card	impact	-6.520 *	-5.280	-1.070
		se	4.010	3.680	2.330
		robust p-value	0.099	0.129	0.176
		conventional p-value	0.104	0.151	0.646
		number of obs.	511	626	966
		Pantawid	90.897	91.563	-1.071
		non-Pantawid	97.412	96.846	94.088
		bandwidth	402	531	3,008
	OTC	impact	6.290 **	3.490	1.850
		se	2.890	2.730	2.270
		robust p-value	0.031	0.160	0.806
		conventional p-value	0.029	0.201	0.417
		number of obs.	355	443	958
		Pantawid	100.905	98.684	1.848
		non-Pantawid	94.618	95.193	96.309
		bandwidth	286	378	3,008
Attendance of at least 85% among children 12 to 17 years old		z-value	0.137	0.004	0.094
		difference (impact)	0.520	0.519	1.060
	Cash card	impact	-2.170	-2.020	0.400
		se	2.330	2.040	1.160
		robust p-value	0.339	0.297	0.319
		conventional p-value	0.351	0.321	0.731
		number of obs.	1,797	2,171	3,383
		Pantawid	92.521	92.762	0.400
		non-Pantawid	94.692	94.784	94.587
		bandwidth	416	552	3,008
	OTC	impact	-2.690	-2.320	0.380
		se	2.990	2.460	1.140
		robust p-value	0.359	0.327	0.648
		conventional p-value	0.368	0.345	0.738
		number of obs.	1,405	1,747	3,348
		Pantawid	91.920	92.399	0.380
		non-Pantawid	94.610	94.721	94.577
		bandwidth	338	451	3,008
Attendance of at least 85% among children 6 to 14 years old		z-value	0.573	0.012	0.835
		difference (impact)	1.620	1.623	3.220
	Cash card	impact	2.120	2.010	1.380
		se	1.880	1.690	0.950
		robust p-value	0.228	0.186	0.587
		conventional p-value	0.258	0.236	0.145
		number of obs.	2,576	3,169	5,770
		Pantawid	94.222	94.216	1.376
		non-Pantawid	92.099	92.210	94.613
		bandwidth	327	435	3,008
	OTC	impact	0.500	0.770	1.350
		se	2.110	1.790	0.910
		robust p-value	0.879	0.806	0.223
		conventional p-value	0.812	0.667	0.137
		number of obs.	2,471	3,052	5,734
		Pantawid	93.057	93.413	1.346
		non-Pantawid	92.557	92.646	94.662
		bandwidth	356	476	3,008

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
Attendance of at least 85% among children 15 to 20 years old		z-value	-0.363	-0.010	-0.219
		difference (impact)	-1.270	-1.271	-1.390
	Cash card	impact	-0.280	0.070	1.030
		se	2.550	2.260	1.370
		robust p-value	0.935	0.957	0.780
		conventional p-value	0.912	0.974	0.452
		number of obs.	1,063	1,296	2,125
		Pantawid	94.407	94.610	1.029
		non-Pantawid	94.688	94.537	95.569
		bandwidth	377	501	3,008
	OTC	impact	0.990	1.280	1.270
		se	2.400	2.190	1.410
		robust p-value	0.733	0.658	0.508
		conventional p-value	0.680	0.558	0.370
		number of obs.	1,118	1,370	2,080
		Pantawid	95.397	95.507	1.268
		non-Pantawid	94.406	94.224	95.502
		bandwidth	466	620	3,008

*** $p<0.01$, ** $p<0.05$, * $p<0.10$

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 37. School level enrollment

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
Enrollment in daycare, nursery, preschool/kindergarten of children 3 to 5 years old		z-value	0.225		0.055		-0.001	
		difference (impact)	2.970		2.977		-0.040	
	Cash card	impact	1.150		1.700		3.040	
		se	8.740		8.040		5.700	
		robust p-value	0.941		0.923		0.665	
		conventional p-value	0.895		0.833		0.593	
		number of obs.	589		693		922	
		Pantawid	38.279		37.989		3.015	
		non-Pantawid	37.125		36.288		36.626	
		bandwidth	556		735		3,008	
	OTC	impact	-1.820		-0.030		2.300	
		se	9.880		9.000		5.270	
		robust p-value	0.847		0.964		0.525	
		conventional p-value	0.854		0.997		0.662	
		number of obs.	442		541		933	
		Pantawid	38.156		38.582		2.289	
		non-Pantawid	39.979		38.616		38.044	
		bandwidth	393		521		3,008	
Enrollment in preschool or kindergarten children 5 years old		z-value	-0.872		-0.227		-0.915	
		difference (impact)	-16.830		-16.834		-29.850	
	Cash card	impact	-2.840		-4.480		-1.530	
		se	12.630		11.620		7.170	
		robust p-value	0.878		0.803		0.584	
		conventional p-value	0.822		0.700		0.831	
		number of obs.	250		299		519	
		Pantawid	50.864		50.419		-1.515	
		non-Pantawid	53.707		54.898		55.517	
		bandwidth	384		504		3,008	
	OTC	impact	13.990		14.860		1.940	
		se	14.590		13.230		7.580	
		robust p-value	0.359		0.304		0.671	
		conventional p-value	0.338		0.262		0.798	
		number of obs.	249		303		542	
		Pantawid	65.181		65.484		1.939	
		non-Pantawid	51.190		50.627		56.767	
		bandwidth	383		504		3,008	
Enrollment in elementary of children 6 to 11 years old		z-value	1.433		0.025		0.436	
		difference (impact)	3.360		3.363		2.160	
	Cash card	impact	2.100		2.310		0.370	
		se	1.490		1.390		0.980	
		robust p-value	0.162		0.102		0.145	
		conventional p-value	0.160		0.097		0.705	
		number of obs.	1,785		2,211		3,959	
		Pantawid	97.376		97.197		0.372	
		non-Pantawid	95.276		94.892		95.378	
		bandwidth	333		442		3,008	
	OTC	impact	-1.260		-1.190		-1.390	
		se	1.810		1.620		1.080	
		robust p-value	0.523		0.527		0.423	
		conventional p-value	0.484		0.462		0.201	
		number of obs.	2,095		2,571		3,938	
		Pantawid	94.340		94.295		-1.380	
		non-Pantawid	95.604		95.486		94.143	
		bandwidth	478		639		3,008	
Enrollment in junior high school of children 12 to 15 years old		z-value	0.787		0.036		0.995	
		difference (impact)	3.880		3.881		3.850	
	Cash card	impact	9.030	***	9.310	***	6.510	***
		se	3.150		2.770		1.780	

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		robust p-value	0.007	0.003	0.000
		conventional p-value	0.004	0.001	0.000
		number of obs.	2,061	2,462	3,708
		Pantawid	86.177	86.405	6.505
		non-Pantawid	77.144	77.091	85.904
		bandwidth	433	574	3,008
	OTC	impact	5.150	5.580	5.030 *
		se	3.790	3.260	1.920
		robust p-value	0.219	0.151	0.097
		conventional p-value	0.174	0.088	0.009
		number of obs.	1,808	2,219	3,668
		Pantawid	82.608	83.013	5.027
		non-Pantawid	77.455	77.435	84.722
		bandwidth	407	542	3,008
Enrollment in senior high school of children 16 to 17 years old		z-value	1.102	0.209	0.983
		difference (impact)	13.460	13.462	17.610
	Cash card	impact	15.310 **	13.780 *	7.710 **
		se	7.540	6.680	4.230
		robust p-value	0.049	0.050	0.040
		conventional p-value	0.042	0.039	0.068
		number of obs.	655	771	1,157
		Pantawid	59.595	58.587	7.693
		non-Pantawid	44.285	44.809	56.096
		bandwidth	422	558	3,008
	OTC	impact	1.850	1.760	2.340
		se	9.610	8.110	4.770
		robust p-value	0.891	0.913	0.751
		conventional p-value	0.848	0.829	0.624
		number of obs.	600	720	1,134
		Pantawid	48.473	48.624	2.335
		non-Pantawid	46.625	46.868	51.763
		bandwidth	429	569	3,008

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 38. Dropout rate

Outcomes			**Bandwidth**			
			CER Optimal	MSE Optimal	Sample	
Dropout rate among children 6 to 11 years old		z-value	-0.023	-0.011	-0.130	
		difference (impact)	-0.020	-0.018	-0.400	
	Cash card	impact	-0.780	-0.890	-0.530	*
		se	0.710	0.660	0.360	
		robust p-value	0.318	0.253	0.084	
		conventional p-value	0.277	0.179	0.142	
		number of obs.	1,926	2,335	3,875	
		Pantawid	0.354	-0.885	-0.530	
		non-Pantawid	1.130	0.266	0.385	
		bandwidth	380	504	3,008	
	OTC	impact	-0.760	-0.850	0.060	
		se	0.530	0.540	0.340	
		robust p-value	0.196	0.171	0.281	
		conventional p-value	0.155	0.112	0.866	
		number of obs.	1,744	2,146	3,868	
		Pantawid	0.461	0.384	0.056	
		non-Pantawid	1.218	1.237	0.835	
		bandwidth	382	511	3,008	
Dropout rate among children 12 to 15 years old		z-value	-0.241	-0.111	-0.191	
		difference (impact)	-0.550	-0.550	-1.330	
	Cash card	impact	-1.930	-2.140	-1.790	**
		se	1.650	1.460	0.850	
		robust p-value	0.307	0.241	0.019	
		conventional p-value	0.242	0.142	0.034	
		number of obs.	1,103	1,339	2,472	
		Pantawid	1.415	1.375	-1.793	
		non-Pantawid	3.342	3.516	1.469	
		bandwidth	325	431	3,008	
	OTC	impact	-1.380	-1.040	-0.810	
		se	1.580	1.490	1.030	
		robust p-value	0.370	0.434	0.448	
		conventional p-value	0.384	0.482	0.431	
		number of obs.	1,193	1,467	2,445	
		Pantawid	2.293	2.577	-0.813	
		non-Pantawid	3.670	3.621	2.347	
		bandwidth	410	545	3,008	
Dropout rate among children 16 to 17 years old		z-value	-0.603	-0.374	-0.385	
		difference (impact)	-4.130	-4.128	-5.310	
	Cash card	impact	-4.130	-3.310	-2.800	
		se	4.020	3.640	2.460	
		robust p-value	0.394	0.533	0.223	
		conventional p-value	0.304	0.363	0.255	
		number of obs.	514	626	1,022	
		Pantawid	4.151	4.733	-2.808	
		non-Pantawid	8.279	8.047	5.503	
		bandwidth	372	491	3,008	
	OTC	impact	0.000	1.090	-2.780	
		se	5.540	4.620	2.410	
		robust p-value	0.926	0.698	0.821	
		conventional p-value	1.000	0.814	0.247	
		number of obs.	500	609	1,005	
		Pantawid	7.295	7.903	-2.784	
		non-Pantawid	7.296	6.816	4.599	
		bandwidth	412	545	3,008	
Dropout rate among children 12 to 17 years old		z-value	-0.439	-0.168	-0.364	
		difference (impact)	-1.130	-1.130	-2.690	
	Cash card	impact	-2.540	-2.520	-2.070	**
		se	1.860	1.640	0.890	

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		robust p-value	0.228	0.215	0.015
		conventional p-value	0.172	0.124	0.020
		number of obs.	1,552	1,890	3,494
		Pantawid	2.173	**2.303**	-2.067
		non-Pantawid	4.709	**4.825**	2.674
		bandwidth	319	423	3,008
	OTC	impact	-1.410	-0.600	-1.440
		se	1.780	1.540	0.960
		robust p-value	0.473	0.742	0.382
		conventional p-value	0.430	0.696	0.133
		number of obs.	1,546	1,926	3,450
		Pantawid	3.374	**3.973**	-1.437
		non-Pantawid	4.780	**4.572**	2.977
		bandwidth	371	494	3,008
Dropout rate among children 6 to 14 years old		z-value	0.427	0.119	-0.094
		difference (impact)	0.330	0.328	-0.350
	Cash card	impact	-1.300 **	-1.440 ***	-0.930 ***
		se	0.500	0.480	0.320
		robust p-value	0.013	0.005	0.002
		conventional p-value	0.009	0.003	0.004
		number of obs.	2,486	3,045	5,793
		Pantawid	0.540	**0.476**	-0.928
		non-Pantawid	1.838	**1.915**	0.660
		bandwidth	312	414	3,008
	OTC	impact	-1.630 ***	-1.320 **	-0.350
		se	0.590	0.590	0.420
		robust p-value	0.005	0.017	0.170
		conventional p-value	0.006	0.025	0.400
		number of obs.	2,179	2,740	5,766
		Pantawid	0.428	**0.709**	-0.352
		non-Pantawid	2.053	**2.033**	1.165
		bandwidth	306	408	3,008
Dropout rate among children 15 to 20 years old		z-value	-0.396	-0.189	-0.166
		difference (impact)	-2.020	-2.021	-1.860
	Cash card	impact	-2.120	-2.110	-1.950
		se	3.640	3.250	1.640
		robust p-value	0.663	0.701	0.120
		conventional p-value	0.560	0.516	0.235
		number of obs.	999	1,209	2,204
		Pantawid	5.644	**5.813**	-1.948
		non-Pantawid	7.766	**7.927**	6.068
		bandwidth	318	422	3,008
	OTC	impact	-0.100	-0.360	-1.760
		se	3.580	3.060	1.600
		robust p-value	0.941	0.924	0.412
		conventional p-value	0.978	0.907	0.270
		number of obs.	1,052	1,306	2,141
		Pantawid	7.278	**7.225**	-1.762
		non-Pantawid	7.379	**7.584**	5.562
		bandwidth	408	542	3,008

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 39. Child labor

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
At least 1 hour of work (with or without pay) last month, 10-14 years old		z-value	2.222 **	0.854	0.691
		difference (impact)	7.040	7.041	6.250
	Cash card	impact	3.440	3.110	2.340
		se	2.290	2.130	1.390
		robust p-value	0.163	0.191	0.100

		CER Optimal		MSE Optimal		Sample	
		conventional p-value		0.133		0.144		0.091
		number of obs.	1,737		2,071		3,195
		Pantawid	8.824		8.360		2.337
		non-Pantawid	5.388		5.252		6.880
		bandwidth	422		560		3,008
	OTC	impact	-3.600 *		-4.270 **		-0.820
		se	2.190		1.800		1.210
		robust p-value	0.081		0.012		0.284
		conventional p-value	0.101		0.018		0.496
		number of obs.	1,125		1,430		3,169
		Pantawid	2.633		2.444		-0.823
		non-Pantawid	6.237		6.715		4.192
		bandwidth	278		370		3,008
At least 1 hour of paid work last month, 10-14 years old		z-value	2.102 **		0.856		0.737
		difference (impact)	6.690		6.688		6.420
	Cash card	impact	3.420		3.110		2.440 *
		se	2.250		2.090		1.380
		robust p-value	0.165		0.197		0.078
		conventional p-value	0.129		0.137		0.078
		number of obs.	1,743		2,081		3,195
		Pantawid	8.540		8.091		2.442
		non-Pantawid	5.120		4.981		6.689
		bandwidth	423		562		3,008
	OTC	impact	-3.270		-3.910 **		-0.630
		se	2.250		1.790		1.180
		robust p-value	0.114		0.017		0.425
		conventional p-value	0.146		0.029		0.593
		number of obs.	1,095		1,407		3,169
		Pantawid	2.636		2.458		-0.631
		non-Pantawid	5.903		6.373		4.071
		bandwidth	269		358		3,008
Number of days worked (with or without pay) last month, 10-14 years old		z-value	0.195		0.075		0.411
		difference (impact)	0.604		0.604		3.689
	Cash card	impact	-1.390		-0.536		-0.232
		se	2.169		1.796		0.799
		robust p-value	0.469		0.618		0.595
		conventional p-value	0.522		0.765		0.771
		number of obs.	69		78		147
		Pantawid	4.564		4.938		-0.230
		non-Pantawid	5.954		5.474		5.026
		bandwidth	201		252		3,008
	OTC	impact	-1.994		-2.073		0.186
		se	2.213		1.960		0.840
		robust p-value	0.352		0.281		0.794
		conventional p-value	0.368		0.290		0.825
		number of obs.	63		74		132
		Pantawid	3.418		3.342		5.104
		non-Pantawid	5.412		5.416		5.288
		bandwidth	313		392		3,008

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 40. Education expenditures

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
Expenditures on tuition and other fees (per month) in the last school year		z-value	0.531	0.015	0.230
		difference (impact)	0.071	0.071	0.103
	Cash card	impact	-0.099	-0.060	0.081
		se	0.101	0.086	0.049
		robust p-value	0.315	0.427	0.955
		conventional p-value	0.328	0.485	0.097
		number of obs.	2,882	3,566	6,381
		Pantawid	3.202	3.234	0.081

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
		non-Pantawid	3.300		3.294		3.353	
		bandwidth	334		444		3,008	
	OTC	impact	-0.170	*	-0.159	*	-0.157	**
		se	0.088		0.078		0.049	
		robust p-value	0.068		0.065		0.018	
		conventional p-value	0.054		0.043		0.001	
		number of obs.	2,910		3,629		6,415	
		Pantawid	3.080		3.092		3.255	
		non-Pantawid	3.250		3.251		3.099	
		bandwidth	383		511		3,008	
Expenditures on school materials and supplies (per month) in the last school year	Cash card	z-value	-1.097		-0.018		-0.901	
		difference (impact)	-0.089		-0.089		-0.068	
		impact	0.042		0.043		0.082	
		se	0.055		0.051		0.030	
		robust p-value	0.504		0.508		0.217	
		conventional p-value	0.448		0.398		0.006	
		number of obs.	3,848		4,681		7,805	
		Pantawid	3.462		3.472		0.083	
		non-Pantawid	3.420		3.430		3.522	
		bandwidth	379		504		3,008	
	OTC	impact	0.131	**	0.114	**	0.054	*
		se	0.060		0.053		0.031	
		robust p-value	0.031		0.034		0.051	
		conventional p-value	0.028		0.030		0.081	
		number of obs.	3,719		4,619		7,751	
		Pantawid	3.523		3.517		3.443	
		non-Pantawid	3.392		3.403		3.497	
		bandwidth	412		551		3,008	
Expenditures on school uniform (per month) in the last school year	Cash card	z-value	-1.363		-0.019		-0.627	
		difference (impact)	-0.100		-0.100		-0.061	
		impact	-0.002		0.018		0.064	
		se	0.052		0.049		0.031	
		robust p-value	0.911		0.855		0.244	
		conventional p-value	0.976		0.714		0.042	
		number of obs.	2,693		3,296		5,957	
		Pantawid	3.823		3.837		0.064	
		non-Pantawid	3.824		3.820		3.872	
		bandwidth	329		438		3,008	
	OTC	impact	0.099	*	0.082	*	0.054	*
		se	0.052		0.045		0.029	
		robust p-value	0.064		0.079		0.055	
		conventional p-value	0.056		0.068		0.068	
		number of obs.	3,073		3,794		6,097	
		Pantawid	3.891		3.882		3.798	
		non-Pantawid	3.793		3.799		3.851	
		bandwidth	439		586		3,008	
Expenditures on school allowance (per month) last school year	Cash card	z-value	1.293		0.023		0.548	
		difference (impact)	0.175		0.175		0.134	
		impact	0.121		0.139		0.099	**
		se	0.092		0.082		0.052	
		robust p-value	0.228		0.149		0.028	
		conventional p-value	0.186		0.090		0.055	
		number of obs.	4,777		5,659		7,856	
		Pantawid	5.567		5.572		0.099	
		non-Pantawid	5.445		5.433		5.547	
		bandwidth	517		686		3,008	
	OTC	impact	-0.054		-0.054		-0.099	
		se	0.100		0.087		0.052	
		robust p-value	0.686		0.702		0.363	
		conventional p-value	0.591		0.531		0.057	
		number of obs.	3,933		4,840		7,796	

Outcomes			**Bandwidth**		
			CER Optimal	MSE Optimal	Sample
		Pantawid	5.377	5.365	5.406
		non-Pantawid	5.431	5.419	5.308
		bandwidth	437	584	3,008
Total school expenditures (per month) last school year	Cash card	z-value	0.908	0.011	0.662
		difference (impact)	0.089	0.089	0.076
		impact	0.094	0.100	0.118 ***
		se	0.081	0.071	0.036
		robust p-value	0.338	0.323	0.003
		conventional p-value	0.241	0.157	0.001
		number of obs.	3,806	4,650	8,062
		Pantawid	6.011	6.016	0.118
		non-Pantawid	5.916	5.916	6.029
		bandwidth	351	467	3,008
	OTC	impact	0.006	0.019	-0.016
		se	0.055	0.048	0.030
		robust p-value	0.862	0.626	0.762
		conventional p-value	0.916	0.683	0.609
		number of obs.	4,659	5,665	8,000
		Pantawid	5.898	5.902	5.887
		non-Pantawid	5.892	5.883	5.872
		bandwidth	532	712	3,008

*** p<0.01, ** p<0.05, * p<0.10

Notes: : Log-transformed values used in the estimation. Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 41. Household expenditures: Share to total expenditures

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
Share of food to total expenditures		z-value	-2.407	**	-0.054		-1.132	
		difference (impact)	-4.830		-4.836		-5.990	
	Cash card	impact	-1.880		-1.890		-1.640	
		se	1.520		1.370		0.910	
		robust p-value	0.209		0.160		0.175	
		conventional p-value	0.215		0.167		0.069	
		number of obs.	1,723		2,091		3,749	
		Pantawid	62.073		62.021		-1.647	
		non-Pantawid	63.955		63.912		61.907	
		bandwidth	353		469		3,092	
	OTC	impact	2.950	**	2.880	**	2.470	**
		se	1.310		1.180		0.950	
		robust p-value	0.031		0.025		0.015	
		conventional p-value	0.024		0.014		0.009	
		number of obs.	2,191		2,673		3,793	
		Pantawid	66.669		66.495		2.476	
		non-Pantawid	63.715		63.619		66.135	
		bandwidth	537		717		3,092	
Share of non-food to total expenditures		z-value	2.407	**	0.095		1.057	
		difference (impact)	4.830		4.836		5.990	
	Cash card	impact	1.880		1.890		1.640	
		se	1.520		1.370		0.910	
		robust p-value	0.209		0.160		0.175	
		conventional p-value	0.215		0.167		0.069	
		number of obs.	1,723		2,091		3,749	
		Pantawid	37.927		37.979		1.647	
		non-Pantawid	36.045		36.088		38.093	
		bandwidth	353		469		3,092	
	OTC	impact	-2.950	**	-2.880	**	-2.470	**
		se	1.310		1.180		0.950	
		robust p-value	0.031		0.025		0.015	
		conventional p-value	0.024		0.014		0.009	
		number of obs.	2,191		2,673		3,793	
		Pantawid	33.331		33.505		-2.476	
		non-Pantawid	36.285		36.381		33.865	
		bandwidth	537		717		3,092	
Share of education to total expenditures		z-value	-0.244		-0.027		-0.305	
		difference (impact)	-0.100		-0.093		-0.270	
	Cash card	impact	-0.160		0.010		0.280	
		se	0.290		0.250		0.150	
		robust p-value	0.527		0.827		0.176	
		conventional p-value	0.593		0.963		0.064	
		number of obs.	1,663		2,043		3,749	
		Pantawid	2.406		2.475		0.276	
		non-Pantawid	2.562		2.463		2.602	
		bandwidth	338		450		3,092	
	OTC	impact	-0.060		0.010		0.210	
		se	0.290		0.260		0.170	
		robust p-value	0.811		0.958		0.734	
		conventional p-value	0.831		0.973		0.211	
		number of obs.	2,019		2,490		3,793	
		Pantawid	2.349		2.389		0.208	
		non-Pantawid	2.412		2.380		2.515	
		bandwidth	481		643		3,092	
Share of clothing and footwear to total expenditures		z-value	-1.589		-0.225		-1.773	*
		difference (impact)	-0.340		-0.340		-0.270	
	Cash card	impact	0.080		0.130		0.220	*
		se	0.130		0.110		0.070	

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		robust p-value	0.587	0.380	0.053
		conventional p-value	0.509	0.246	0.001
		number of obs.	1,722	2,091	3,749
		Pantawid	1.189	**1.241**	0.219
		non-Pantawid	1.106	**1.108**	1.379
		bandwidth	353	469	3,092
	OTC	impact	0.420 **	0.370 **	0.270 ***
		se	0.170	0.150	0.080
		robust p-value	0.020	0.021	0.002
		conventional p-value	0.016	0.015	0.001
		number of obs.	1,653	2,047	3,793
		Pantawid	1.452	**1.433**	0.268
		non-Pantawid	1.029	**1.061**	1.443
		bandwidth	367	490	3,092
Share of health to total expenditures		z-value	-0.416	-0.126	-0.413
		difference (impact)	-0.150	-0.156	-0.120
	Cash card	impact	0.210	0.170	0.110
		se	0.200	0.170	0.120
		robust p-value	0.305	0.314	0.693
		conventional p-value	0.303	0.322	0.342
		number of obs.	1,858	2,269	3,749
		Pantawid	1.111	**1.105**	0.114
		non-Pantawid	0.903	**0.932**	1.041
		bandwidth	400	531	3,092
	OTC	impact	0.360	0.290	0.000
		se	0.300	0.260	0.130
		robust p-value	0.211	0.222	0.881
		conventional p-value	0.225	0.257	0.991
		number of obs.	1,745	2,169	3,793
		Pantawid	1.219	**1.173**	-0.002
		non-Pantawid	0.855	**0.880**	0.919
		bandwidth	396	529	3,092
Share of alcohol and tobacco to total expenditures		z-value	0.839	0.175	0.469
		difference (impact)	0.380	0.385	0.350
	Cash card	impact	0.300	0.250	-0.120
		se	0.330	0.280	0.140
		robust p-value	0.334	0.326	0.840
		conventional p-value	0.357	0.370	0.392
		number of obs.	1,553	1,903	3,749
		Pantawid	1.824	**1.763**	-0.117
		non-Pantawid	1.521	**1.508**	1.493
		bandwidth	309	410	3,092
	OTC	impact	-0.080	-0.090	-0.220
		se	0.310	0.270	0.140
		robust p-value	0.873	0.896	0.199
		conventional p-value	0.787	0.741	0.109
		number of obs.	1,661	2,068	3,793
		Pantawid	1.516	**1.503**	-0.221
		non-Pantawid	1.598	**1.592**	1.416
		bandwidth	371	495	3,092

*** p<0.01, ** p<0.05, * p<0.10
Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

Table 42. Household expenditures

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
Average total per capita expenditure		z-value	1.324	0.006	1.053
		difference (impact)	0.093	0.093	0.122
	Cash card	impact	0.082 *	0.076 *	0.062 **
		se	0.047	0.043	0.028

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
		robust p-value	0.082		0.077		0.048	
		conventional p-value	0.081		0.077		0.025	
		number of obs.	1,885		2,290		3,749	
		Pantawid	10.331		10.331		0.062	
		non-Pantawid	10.250		10.255		10.326	
		bandwidth	405		539		3,092	
	OTC	impact	-0.012		-0.007		0.016	
		se	0.053		0.046		0.027	
		robust p-value	0.827		0.882		0.967	
		conventional p-value	0.824		0.886		0.553	
		number of obs.	2,069		2,540		3,793	
		Pantawid	10.254		10.262		10.271	
		non-Pantawid	10.266		10.269		10.287	
		bandwidth	496		662		3,092	
Average total per capita food expenditure		z-value	0.225		0.001		0.414	
		difference (impact)	0.017		0.017		0.032	
	Cash card	impact	0.059		0.058		0.043	
		se	0.051		0.047		0.033	
		robust p-value	0.242		0.219		0.176	
		conventional p-value	0.243		0.222		0.193	
		number of obs.	1,890		2,307		3,858	
		Pantawid	9.837		9.838		0.042	
		non-Pantawid	9.778		9.780		9.829	
		bandwidth	394		524		3,092	
	OTC	impact	0.042		0.048		0.060	
		se	0.056		0.049		0.029	
		robust p-value	0.494		0.405		0.197	
		conventional p-value	0.451		0.323		0.041	
		number of obs.	2,100		2,588		3,898	
		Pantawid	9.834		9.840		9.796	
		non-Pantawid	9.792		9.792		9.856	
		bandwidth	491		656		3,092	
Average total per capita non-food expenditure		z-value	3.151	***	0.023		1.283	
		difference (impact)	0.300		0.300		0.341	
	Cash card	impact	0.173	***	0.161	***	0.111	***
		se	0.064		0.058		0.037	
		robust p-value	0.007		0.005		0.006	
		conventional p-value	0.007		0.006		0.003	
		number of obs.	1,982		2,408		4,471	
		Pantawid	9.346		9.343		0.111	
		non-Pantawid	9.172		9.182		9.321	
		bandwidth	331		440		3,092	
	OTC	impact	-0.127	*	-0.113		-0.079	*
		se	0.071		0.063		0.044	
		robust p-value	0.096		0.112		0.082	
		conventional p-value	0.073		0.071		0.068	
		number of obs.	2,210		2,738		4,493	
		Pantawid	9.076		9.096		9.215	
		non-Pantawid	9.203		9.209		9.136	
		bandwidth	427		571		3,092	
Average per capita non-food expenditure (including other disbursements)		z-value	3.191	***	0.023		1.333	
		difference (impact)	0.298		0.298		0.347	
	Cash card	impact	0.174	***	0.166	***	0.116	***
		se	0.063		0.057		0.037	
		robust p-value	0.006		0.004		0.004	
		conventional p-value	0.006		0.004		0.002	
		number of obs.	2,047		2,490		4,471	
		Pantawid	9.328		9.328		0.116	
		non-Pantawid	9.155		9.163		9.306	
		bandwidth	349		463		3,092	
	OTC	impact	-0.125	*	-0.111		-0.079	*

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		se	0.069	0.061	0.043
		robust p-value	0.094	0.112	0.075
		conventional p-value	0.071	0.071	0.068
		number of obs.	2,243	2,769	4,493
		Pantawid	9.058	9.079	9.196
		non-Pantawid	9.183	9.189	9.118
		bandwidth	435	582	3,092
Average per capita expenditure on vice goods (e.g. alcohol, tobacco)	Cash card	z-value	0.693	0.067	0.404
		difference (impact)	0.299	0.299	0.351
		impact	0.127	0.122	0.072
		se	0.313	0.281	0.171
		robust p-value	0.712	0.709	0.757
		conventional p-value	0.684	0.664	0.672
		number of obs.	1,851	2,248	4,125
		Pantawid	3.246	3.217	0.073
		non-Pantawid	3.118	3.095	3.230
		bandwidth	341	453	3,092
	OTC	impact	-0.172	-0.096	-0.152
		se	0.297	0.258	0.167
		robust p-value	0.588	0.735	0.535
		conventional p-value	0.563	0.709	0.362
		number of obs.	2,338	2,863	4,167
		Pantawid	2.983	3.028	3.223
		non-Pantawid	3.154	3.125	3.071
		bandwidth	519	694	3,092
Average per capita expenditure on inpatient care	Cash card	z-value	0.264	0.117	0.523
		difference (impact)	0.066	0.066	0.151
		impact	0.193	0.161	0.113
		se	0.166	0.149	0.096
		robust p-value	0.251	0.283	0.420
		conventional p-value	0.246	0.281	0.240
		number of obs.	2,277	2,752	4,529
		Pantawid	0.603	0.587	0.113
		non-Pantawid	0.410	0.426	0.528
		bandwidth	406	540	3,092
	OTC	impact	0.126	0.084	-0.038
		se	0.189	0.168	0.090
		robust p-value	0.449	0.494	0.772
		conventional p-value	0.503	0.619	0.673
		number of obs.	1,926	2,394	4,545
		Pantawid	0.521	0.495	0.416
		non-Pantawid	0.394	0.411	0.378
		bandwidth	353	472	3,092
Average per capita expenditure on outpatient care	Cash card	z-value	-0.690	-0.156	-0.115
		difference (impact)	-0.146	-0.146	-0.060
		impact	-0.148	-0.094	0.071
		se	0.148	0.133	0.083
		robust p-value	0.274	0.362	0.496
		conventional p-value	0.318	0.481	0.397
		number of obs.	1,980	2,416	4,495
		Pantawid	0.537	0.575	0.070
		non-Pantawid	0.685	0.669	0.616
		bandwidth	332	441	3,092
	OTC	impact	-0.002	0.013	0.065
		se	0.150	0.131	0.088
		robust p-value	0.953	0.995	0.497
		conventional p-value	0.987	0.918	0.461
		number of obs.	2,641	3,190	4,514

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		Pantawid	0.630	0.632	0.558
		non-Pantawid	0.632	0.618	0.623
		bandwidth	543	725	3,092
Average per capita expenditure on medical services and commodities		z-value	0.682	0.058	0.562
		difference (impact)	0.262	0.262	0.358
	Cash card	impact	0.307	0.288	0.467 **
		se	0.249	0.231	0.155
		robust p-value	0.282	0.326	0.040
		conventional p-value	0.216	0.212	0.003
		number of obs.	2,114	2,567	4,618
		Pantawid	3.535	3.523	0.467
		non-Pantawid	3.228	3.235	3.591
		bandwidth	350	465	3,092
	OTC	impact	0.045	0.007	0.010
		se	0.294	0.257	0.163
		robust p-value	0.885	0.974	0.953
		conventional p-value	0.877	0.979	0.949
		number of obs.	2,354	2,879	4,634
		Pantawid	3.239	3.198	3.140
		non-Pantawid	3.194	3.191	3.150
		bandwidth	447	598	3,092
Average per capita expenditure on education per school age child		z-value	-0.229	-0.013	-0.247
		difference (impact)	-0.099	-0.099	-0.155
	Cash card	impact	0.106	0.232	0.519 ***
		se	0.308	0.278	0.146
		robust p-value	0.887	0.676	0.006
		conventional p-value	0.731	0.403	0.000
		number of obs.	1,780	2,182	4,565
		Pantawid	5.710	2,182	0.519
		non-Pantawid	5.604	5.778	5.983
		bandwidth	282	375	3,092
	OTC	impact	0.205	0.209	0.268
		se	0.302	0.272	0.175
		robust p-value	0.529	0.497	0.563
		conventional p-value	0.497	0.441	0.126
		number of obs.	2,093	2,581	4,578
		Pantawid	5.643	5.615	5.477
		non-Pantawid	5.438	5.406	5.744
		bandwidth	389	520	3,092
Average per capita expenditure on clothing and footwear		z-value	-2.123 **	-0.100	-1.151
		difference (impact)	-0.651	-0.651	-0.546
	Cash card	impact	0.097	0.161	0.407 ***
		se	0.227	0.201	0.109
		robust p-value	0.813	0.685	0.004
		conventional p-value	0.671	0.425	0.000
		number of obs.	1,777	2,189	4,485
		Pantawid	4.769	4.855	0.407
		non-Pantawid	4.672	4.694	5.154
		bandwidth	287	381	3,092
	OTC	impact	0.748 ***	0.673 ***	0.470 ***
		se	0.206	0.188	0.114
		robust p-value	0.000	0.001	0.000
		conventional p-value	0.000	0.000	0.000
		number of obs.	2,003	2,480	4,505
		Pantawid	5.305	5.277	4.791
		non-Pantawid	4.558	4.605	5.261

Outcomes	Bandwidth		
	CER Optimal	MSE Optimal	Sample
bandwidth	373	498	3,092

*** p<0.01, ** p<0.05, * p<0.10

Notes: : Log-transformed values used in the estimation. Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 43. Income

Outcomes			CER Optimal		MSE Optimal		Sample	
					Bandwidth			
Per capita income including grants		z-value	1.551		0.023		0.726	
		difference (impact)	0.300		0.300		0.295	
	Cash card	impact	0.658	***	0.673	***	0.609	***
		se	0.124		0.114		0.087	
		robust p-value	0.000		0.000		0.000	
		conventional p-value	0.000		0.000		0.000	
		number of obs.	1,936		2,355		4,505	
		Pantawid	9.789		9.776		0.609	
		non-Pantawid	9.131		9.103		9.706	
		bandwidth	320		425		3,092	
	OTC	impact	0.358	**	0.422	**	0.532	***
		se	0.148		0.133		0.093	
		robust p-value	0.034		0.011		0.000	
		conventional p-value	0.016		0.001		0.000	
		number of obs.	1,661		2,098		4,531	
		Pantawid	9.557		9.588		9.097	
		non-Pantawid	9.199		9.166		9.629	
		bandwidth	298		398		3,092	
Per capita income without grants		z-value	2.117	**	0.049		1.088	
		difference (impact)	0.627		0.627		0.644	
	Cash card	impact	0.445	**	0.420	**	0.064	
		se	0.179		0.166		0.126	
		robust p-value	0.017		0.017		0.302	
		conventional p-value	0.013		0.012		0.612	
		number of obs.	1,685		2,088		4,491	
		Pantawid	9.383		9.330		0.064	
		non-Pantawid	8.938		8.910		9.062	
		bandwidth	269		357		3,092	
	OTC	impact	-0.182		-0.079		-0.093	
		se	0.236		0.208		0.137	
		robust p-value	0.431		0.635		0.850	
		conventional p-value	0.439		0.703		0.496	
		number of obs.	2,142		2,668		4,514	
		Pantawid	8.851		8.900		9.002	
		non-Pantawid	9.033		8.979		8.908	
		bandwidth	412		550		3,092	
Per capita income from salaries and wages		z-value	3.199	***	0.194		1.174	
		difference (impact)	1.894		1.894		2.032	
	Cash card	impact	1.216	***	1.115	***	0.434	***
		se	0.389		0.351		0.254	
		robust p-value	0.003		0.003		0.007	
		conventional p-value	0.002		0.002		0.087	
		number of obs.	1,907		2,321		4,622	
		Pantawid	8.026		7.879		0.434	
		non-Pantawid	6.809		6.764		7.178	
		bandwidth	304		404		3,092	
	OTC	impact	-0.678		-0.698	*	-0.532	
		se	0.446		0.411		0.291	
		robust p-value	0.134		0.098		0.143	
		conventional p-value	0.129		0.089		0.067	
		number of obs.	2,017		2,491		4,638	
		Pantawid	6.294		6.229		6.680	
		non-Pantawid	6.972		6.927		6.148	
		bandwidth	364		487		3,092	
Per capita income from		z-value	0.478		0.013		0.319	
		difference (impact)	0.152		0.152		0.199	
	Cash card	impact	0.053		0.103		0.009	
		se	0.205		0.188		0.125	

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
entrepreneurial activities		robust p-value	0.790	0.594	0.782
		conventional p-value	0.797	0.582	0.944
		number of obs.	1,021	1,206	1,958
		Pantawid	8.147	8.174	0.009
		non-Pantawid	8.094	8.071	8.173
		bandwidth	459	608	3,092
	OTC	impact	-0.099	-0.071	-0.194
		se	0.243	0.219	0.118
		robust p-value	0.768	0.887	0.309
		conventional p-value	0.683	0.747	0.099
		number of obs.	895	1,120	2,081
		Pantawid	7.997	8.005	8.175
		non-Pantawid	8.096	8.075	7.981
		bandwidth	381	507	3,092
Per capita income from other receipts (excluding grants)		z-value	-0.050	-0.001	-0.056
		difference (impact)	-0.016	-0.016	-0.044
	Cash card	impact	-0.150	-0.131	-0.215
		se	0.185	0.167	0.121
		robust p-value	0.501	0.585	0.149
		conventional p-value	0.417	0.433	0.077
		number of obs.	1,029	1,236	1,887
		Pantawid	7.867	7.880	-0.215
		non-Pantawid	8.017	8.011	7.852
		bandwidth	495	657	3,092
	OTC	impact	-0.134	-0.077	-0.046
		se	0.264	0.228	0.135
		robust p-value	0.637	0.761	0.532
		conventional p-value	0.612	0.736	0.736
		number of obs.	933	1,154	1,911
		Pantawid	7.917	7.970	8.092
		non-Pantawid	8.051	8.047	8.046
		bandwidth	456	608	3,092

*** p<0.01, ** p<0.05, * p<0.10

Notes: : Log-transformed values used in the estimation. Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias

The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 44. Hunger and self-rated poverty

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
Incidence of hunger		z-value	0.130		0.023		0.081	
		difference (impact)	0.600		0.607		1.260	
	Cash card	impact	-4.260		-3.470		-2.690	
		se	2.880		2.630		1.980	
		robust p-value	0.154		0.205		0.119	
		conventional p-value	0.139		0.186		0.176	
		number of obs.	2,729		3,250		4,622	
		Pantawid	14.295		14.350		-2.691	
		non-Pantawid	18.552		17.822		13.913	
		bandwidth	517		687		3,092	
	OTC	impact	-4.860		-4.530		-2.860	
		se	3.610		3.240		2.130	
		robust p-value	0.189		0.175		0.136	
		conventional p-value	0.178		0.163		0.180	
		number of obs.	2,287		2,830		4,638	
		Pantawid	14.232		13.922		-2.861	
		non-Pantawid	19.096		18.448		13.577	
		bandwidth	431		576		3,092	
Number of days experienced hunger in the past 3 months		z-value	0.584		0.179		0.246	
		difference (impact)	0.272		0.272		0.394	
	Cash card	impact	-0.321		-0.319		-0.235	
		se	0.343		0.316		0.216	
		robust p-value	0.332		0.280		0.559	
		conventional p-value	0.349		0.313		0.276	
		number of obs.	2,244		2,703		4,613	
		Pantawid	0.710		0.702		-0.235	
		non-Pantawid	1.030		1.021		0.621	
		bandwidth	381		507		3,092	
	OTC	impact	-0.593	*	-0.496	*	-0.027	
		se	0.317		0.298		0.233	
		robust p-value	0.062		0.090		0.404	
		conventional p-value	0.062		0.096		0.909	
		number of obs.	2,243		2,786		4,630	
		Pantawid	0.524		0.595		0.826	
		non-Pantawid	1.117		1.090		0.800	
		bandwidth	422		565		3,092	
Self-rated poverty status (Poor)		z-value	0.384		0.079		0.041	
		difference (impact)	2.340		2.337		0.540	
	Cash card	impact	-0.100		-0.460		0.990	
		se	4.100		3.740		2.370	
		robust p-value	0.906		0.781		0.340	
		conventional p-value	0.980		0.901		0.676	
		number of obs.	1,714		2,131		4,609	
		Pantawid	20.408		20.042		0.991	
		non-Pantawid	20.512		20.506		20.672	
		bandwidth	266		354		3,092	
	OTC	impact	-2.440		0.420		4.080	
		se	4.500		3.810		2.200	
		robust p-value	0.534		0.891		0.164	
		conventional p-value	0.587		0.912		0.064	
		number of obs.	1,860		2,316		4,626	
		Pantawid	19.034		20.793		4.078	
		non-Pantawid	21.475		20.371		23.436	
		bandwidth	329		440		3,092	
Self-rated poverty status (Not-Poor)		z-value	3.681	***	0.815		1.313	
		difference (impact)	14.670		14.671		15.090	
	Cash card	impact	8.180	***	7.570	**	3.640	**
		se	2.950		2.760		1.760	
		robust p-value	0.008		0.010		0.012	

Outcomes			CER Optimal		MSE Optimal		Sample	
		Bandwidth						
		conventional p-value	0.006		0.006		0.039	
		number of obs.	2,010		2,436		4,609	
		Pantawid	20.295		19.554		3.645	
		non-Pantawid	12.114		11.982		16.258	
		bandwidth	324		430		3,092	
OTC		impact	-6.490	**	-5.840	**	-4.600	***
		se	2.680		2.300		1.610	
		robust p-value	0.022		0.022		0.002	
		conventional p-value	0.016		0.011		0.004	
		number of obs.	2,449		3,014		4,626	
		Pantawid	6.817		7.284		-4.595	
		non-Pantawid	13.308		13.123		7.948	
		bandwidth	475		635		3,092	

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation

Table 45. Employment

Outcomes			Bandwidth					
			CER Optimal		MSE Optimal		Sample	
Labor force participation		z-value	0.817		0.026		0.352	
		difference (impact)	2.120		2.122		2.340	
	Cash card	impact	0.580		0.940		0.850	
		se	1.780		1.520		0.780	
		robust p-value	0.771		0.607		0.197	
		conventional p-value	0.744		0.534		0.273	
		number of obs.	7,980		9,564		15,308	
		Pantawid	58.540		58.549		0.846	
		non-Pantawid	57.957		57.607		58.456	
		bandwidth	410		545		3,008	
	OTC	impact	-1.540		-1.920		-0.650	
		se	1.890		1.640		0.710	
		robust p-value	0.349		0.174		0.688	
		conventional p-value	0.414		0.244		0.358	
		number of obs.	4,708		6,039		15,013	
		Pantawid	56.987		56.670		-0.656	
		non-Pantawid	58.526		58.586		56.984	
		bandwidth	235		314		3,008	
Employment		z-value	-1.064		-0.017		-0.177	
		difference (impact)	-2.190		-2.189		-1.110	
	Cash card	impact	-2.270		-2.260	*	0.330	
		se	1.450		1.280		0.710	
		robust p-value	0.106		0.064		0.651	
		conventional p-value	0.116		0.079		0.644	
		number of obs.	3,573		4,379		8,819	
		Pantawid	90.972		90.753		0.327	
		non-Pantawid	93.245		93.008		92.093	
		bandwidth	288		383		3,008	
	OTC	impact	-0.080		0.120		1.100	*
		se	1.460		1.270		0.720	
		robust p-value	0.863		0.881		0.092	
		conventional p-value	0.954		0.927		0.128	
		number of obs.	3,528		4,382		8,590	
		Pantawid	92.932		92.708		1.101	
		non-Pantawid	93.017		92.592		92.917	
		bandwidth	323		432		3,008	
Usual work hours per week in primary occupation		z-value	1.109		0.051		0.605	
		difference (impact)	2.770		2.771		1.629	
	Cash card	impact	6.196	***	5.158	***	1.436	**
		se	1.511		1.396		0.804	
		robust p-value	0.000		0.000		0.014	
		conventional p-value	0.000		0.000		0.074	
		number of obs.	3,356		4,089		8,032	
		Pantawid	44.367		43.745		1.439	
		non-Pantawid	38.171		38.587		41.628	
		bandwidth	300		399		3,008	
	OTC	impact	3.426	*	3.005	**	-0.909	
		se	1.989		1.718		0.940	
		robust p-value	0.065		0.047		0.397	
		conventional p-value	0.085		0.080		0.333	
		number of obs.	2,428		3,099		7,860	
		Pantawid	41.665		41.393		39.978	
		non-Pantawid	38.240		38.388		39.072	
		bandwidth	229		306		3,008	
Other job or business besides primary occupation		z-value	0.867		0.277		0.109	
		difference (impact)	2.430		2.428		0.430	
	Cash card	impact	2.400		2.100		1.080	
		se	2.040		1.930		1.050	

Outcomes			Bandwidth		
			CER Optimal	MSE Optimal	Sample
		robust p-value	0.212	0.224	0.552
		conventional p-value	0.240	0.276	0.301
		number of obs.	3,108	3,832	8,003
		Pantawid	8.320	8.058	1.085
		non-Pantawid	5.925	5.961	7.553
		bandwidth	274	365	3,008
	OTC	impact	-0.030	0.350	-0.890
		se	1.920	1.730	0.980
		robust p-value	0.990	0.862	0.598
		conventional p-value	0.987	0.839	0.364
		number of obs.	3,293	4,085	7,820
		Pantawid	6.404	6.706	-0.889
		non-Pantawid	6.436	6.354	6.167
		bandwidth	335	449	3,008
Usual work hours per week in other jobs		z-value	4.371 ***	0.704	0.808
		difference (impact)	18.290	18.291	15.273
	Cash card	impact	5.038	5.101	3.168
		se	3.111	2.893	2.185
		robust p-value	0.157	0.157	0.102
		conventional p-value	0.105	0.078	0.147
		number of obs.	231	285	548
		Pantawid	21.414	21.112	3.159
		non-Pantawid	16.377	16.011	19.066
		bandwidth	347	455	3,008
	OTC	impact	-13.253 ***	-11.641 ***	0.941
		se	2.799	2.659	2.136
		robust p-value	0.000	0.000	0.527
		conventional p-value	0.000	0.000	0.660
		number of obs.	160	193	550
		Pantawid	6.912	8.226	16.844
		non-Pantawid	20.165	19.867	17.784
		bandwidth	235	307	3,008
Total usual work hours per week		z-value	2.073 **	0.098	0.911
		difference (impact)	5.408	5.407	3.885
	Cash card	impact	7.860 ***	6.934 ***	1.857 ***
		se	1.722	1.560	0.808
		robust p-value	0.000	0.000	0.003
		conventional p-value	0.000	0.000	0.022
		number of obs.	2,765	3,431	8,033
		Pantawid	46.749	46.078	1.859
		non-Pantawid	38.889	39.144	43.040
		bandwidth	232	308	3,008
	OTC	impact	2.453	2.305	-1.015
		se	1.959	1.677	0.900
		robust p-value	0.164	0.103	0.256
		conventional p-value	0.211	0.169	0.259
		number of obs.	2,421	3,092	7,861
		Pantawid	41.976	41.921	41.137
		non-Pantawid	39.523	39.615	40.124
		bandwidth	228	305	3,008
Looking for additional work if employed		z-value	-1.972 **	-0.409	-0.546
		difference (impact)	-5.800	-5.800	-4.140
	Cash card	impact	-3.200 *	-3.110 **	0.930
		se	1.820	1.620	0.970
		robust p-value	0.067	0.040	0.377
		conventional p-value	0.079	0.054	0.340
		number of obs.	3,656	4,440	8,135
		Pantawid	7.276	7.196	0.926
		non-Pantawid	10.475	10.304	9.374

| Outcomes | | | Bandwidth | | |
			CER Optimal	MSE Optimal	Sample
	OTC	bandwidth	332	441	3,008
		impact	2.600	1.940	-0.030
		se	2.310	1.990	0.930
		robust p-value	0.268	0.335	0.627
		conventional p-value	0.261	0.331	0.971
		number of obs.	3,301	4,104	7,950
		Pantawid	12.140	11.209	-0.034
		non-Pantawid	9.540	9.271	8.464
		bandwidth	330	442	3,008
Unemployed and looking for work		z-value	0.440	0.168	0.059
		difference (impact)	9.580	9.579	3.680
	Cash card	impact	-0.690	-3.560	3.550
		se	13.950	12.530	6.280
		robust p-value	0.977	0.910	0.977
		conventional p-value	0.960	0.776	0.572
		number of obs.	338	406	721
		Pantawid	37.823	34.390	3.586
		non-Pantawid	38.517	37.949	35.046
		bandwidth	333	438	3,008
	OTC	impact	-10.270	-15.410	-0.800
		se	16.740	14.680	7.110
		robust p-value	0.462	0.230	0.744
		conventional p-value	0.539	0.294	0.911
		number of obs.	270	333	675
		Pantawid	31.901	26.317	-0.779
		non-Pantawid	42.174	41.724	30.530
		bandwidth	296	388	3,008

*** p<0.01, ** p<0.05, * p<0.10

Notes: Std. error presented is based on the conventional RD estimation while the p-value is from the robust version that corrects for bias
The conditional probability exceeds 100 due to the use of a linear probability model in the estimation