



Optimizing Pantawid for Nutrition

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Abstract: The stunting rate in the Philippines is high for the country's level of income. Almost one in three children under age five is stunted, and the rate is significantly higher among children from low income households. The undernutrition challenge is likely to exacerbate with the economic shock and food insecurity that COVID-19 has brought. The country's flagship safety net program, Pantawid Pamilyang Pilipino Program (4Ps), has a great potential to improve nutrition outcomes of children living in poverty, by providing cash assistance conditional upon their health check-ups and growth monitoring and raising caregiver's knowledge and awareness on nutrition through family development sessions. There was strong evidence of the effectiveness of 4Ps on nutrition outcomes during the early stage of program implementation. Over time, however, 4Ps' impact on nutrition faded for several reasons, most notably with the decreasing number of young children (who need nutrition the most) served by the program. This policy note proposes key areas where 4Ps can further strengthen to improve the nutrition outcomes among children in poor and vulnerable households.

I. Introduction

The nutrition outcomes among children in the Philippines have remained poor despite the country's sustained growth and steady poverty reduction. Prior to the COVID-19 pandemic, the country was experiencing robust growth benefitting from strong macroeconomic fundamentals, favorable external conditions, and the cumulative effects of structural reforms. The average growth rate was 6.3 percent per year in 2010-2019, and this contributed to a decline in poverty from 26.4 percent in 2009 to 16.6 percent in 2018. In contrast, the stunting rate remained essentially unchanged over a decade and the National Nutrition Survey in 2015 showed that nearly 1 in 3 children under age five were stunted, being exposed to the risk of cognitive and physical limitations that can last a lifetime. The country's stunting rate is high for its level of income as other countries with similar levels of development have an average stunting rate of 20 percent.

The **Philippine Social Protection Note** series aims to disseminate experiences, good practices, and key findings from the Philippines on the topics related to social protection. It also aims to broaden the dialogue on social protection and stimulate public engagement in moving forward the policy agenda. The views expressed here are those of the authors and do not necessarily reflect those of the World Bank.

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The lagging nutrition status poses a threat to the overall human capital outcomes of the country. The World Bank's Human Capital Index (HCI), a composite indicator of child's survival probability by age five as well as other health and education measures, shows that the Philippines's index in 2018 was at 0.55. This indicates that the country is achieving only 55 percent of its growth potential due to poor health, nutrition, and education outcomes, placing it at 84th rank out of 157 countries. The recently updated HCI in 2020 shows that the index is 0.56, remaining essentially the same.² While the public expenditure for education and health has been increasing recently, its impact on HCI may take more time to materialize.

The COVID-19 shock is likely to bring about the deterioration of the already struggling nutrition outcomes. The country is now facing substantial and sustained COVID-19 infections, posing significant challenges for the health system. Community quarantines to suppress the spread of the virus, implemented since March 2020 have significantly reduced economic activities. The economy contracted by 9.0 percent year-on-year in the first half of 2020, the worst performance in over three decades. Unemployment rose to 17.7 percent in April. Remittances inflows contracted by 4.2 percent in the first half of 2020. As confirmed cases continue to increase, exceeding 300,000 as of end-September 2020, the country may need to continue with community quarantines beyond the initially anticipated periods. With the economic shock and mobility constraints, many households are experiencing income loss and food insecurity, which would further exacerbate the challenge of child undernutrition.

In this context and given that stunting is particularly prevalent among children from low income families, there is an urgent need to enhance the ability of poverty reduction programs to address nutrition where possible. The stunting rate gap between high- and low- income households is striking that children in families in the bottom 20 percent of the income distribution are more than twice as likely to be stunted than children from families in the top 20 percent of the income distribution.³ There is also a large variation in the prevalence of stunting by region with an almost linear relationship between the stunting and poverty rates. For instance, the stunting rate among children aged 19-60 months was 28 percent in the National Capital Region where the poverty rate was about 4 percent in 2018. Meanwhile, the stunting rate among children in the same age group was around 50 percent in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) where over 60 percent of the population lived in poverty in 2018. The Pantawid Pamilyang Pilipino Program (4Ps or Pantawid Program), the country's flagship poverty reduction safety net program has a great potential to tackle the human capital challenge, and this note aims to discuss policy options for Pantawid Program.

II. Can Pantawid Improve Nutrition?

The Pantawid Program aims to build the human capital of children living in poverty. The program provides conditional cash transfers (CCTs) to poor households, to improve the health, nutrition and education of the beneficiaries.⁴ By investing in children's human capital, the program is intended to break the intergenerational cycle of poverty. Eligible households have been identified by *Listahanan*, the national targeting system or social registry, and commit to comply with education and health conditions. Since its introduction in 2007, the program has grown over time and is being currently implemented in 145 cities and 1,483 municipalities based on the records from by the Department of Social Welfare and Development (DSWD). As the national poverty reduction strategy, the 4Ps benefits more than 4 million households (close to 20 percent of the country's population), including 8.7 million children. It is estimated that the program was responsible for a quarter of the total poverty reduction between 2006 and 2015 in the country (World Bank 2018 Poverty Assessment).

Beneficiary households receive cash benefits every two months upon verification of their compliance with conditions (Figure 1 shows the monthly Pantawid benefits and program conditions). Health grants are provided for households with monitored family members (i.e. pregnant women and children aged 0-14) complying with health conditions, and education grants for households with school-age children (aged 3 to 18) complying with education conditions. Pantawid beneficiaries also receive benefits from other programs including health coverage from the National Health Insurance Program and rice subsidy⁵ for food security, and also temporary assistance from the unconditional cash transfer (UCT) program.⁶

² See World Bank (2020).

³ Capanzana, et al. (2020).

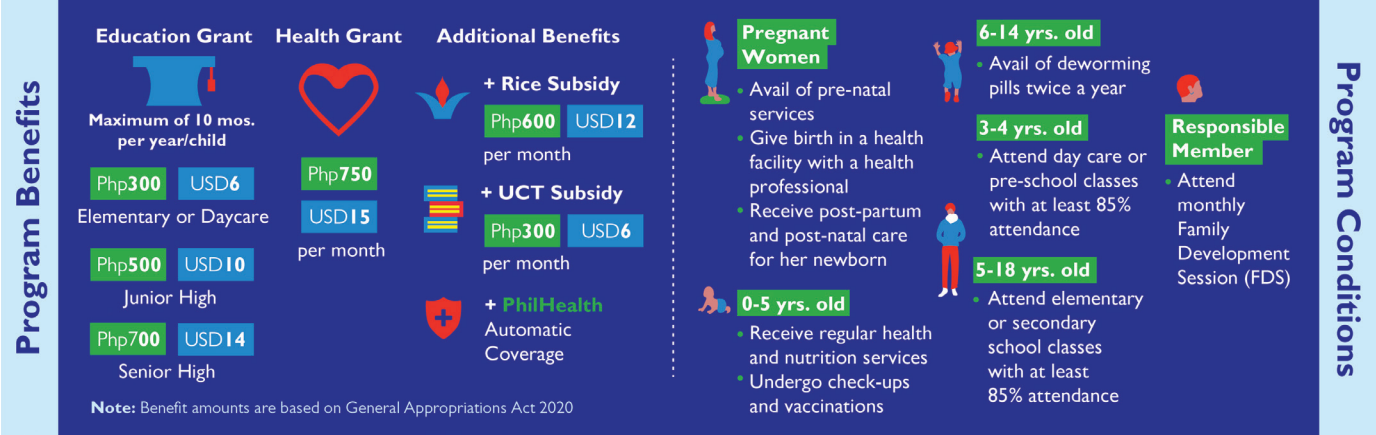
⁴ See Acosta et al. (2019a) for summary of Pantawid Pamilyang Pilipino Program and its Act.

⁵ DSWD Memorandum Circular No. 6, series of 2017, *Guidelines on the Provision of Rice Subsidy to Pantawid Pamilyang Pilipino Program Households*.

⁶ DSWD Memorandum Circular No. 3, series of 2018, *Implementing Guidelines for the Unconditional Cash Transfer Program*. The UCT benefits will likely come to an end in 2020 as it is a temporary mitigation program to support 4Ps, the Social Pension Program for Indigent Senior Citizens, and other poor households who were adversely affected by rising prices despite the benefit of lower income tax from the Tax Reform for Acceleration and Inclusion (TRAIN) Law. Republic Act No. 10963 or the TRAIN Act is the initial package of comprehensive tax reform program signed into law on December 19, 2017.

The cash benefits along with conditions of the program help beneficiary families manage consumption flows and invest in their children’s human capital. In 2017, the average beneficiary households received a 6-month grant of Php 5,458 (US\$107).⁷ This corresponds to about 6.6 percent of beneficiary households’ pre-transfer income, and 10.2 percent for households in the bottom quintile. Following the passage of Pantawid Act in 2019 and its Implementing Rules and Regulations (IRR), the total benefit amount increased in 2020. For instance, the household receiving health grant and a Junior High School child used to receive Php 2,000 per payment (i.e. Php 500 health grants and Php 500 for education grants per month for two months), while the same household is now entitled to receive Php 2,500 per payment (e.g. health grants per household increased from Php 500 to Php 750) upon compliance to all conditions.

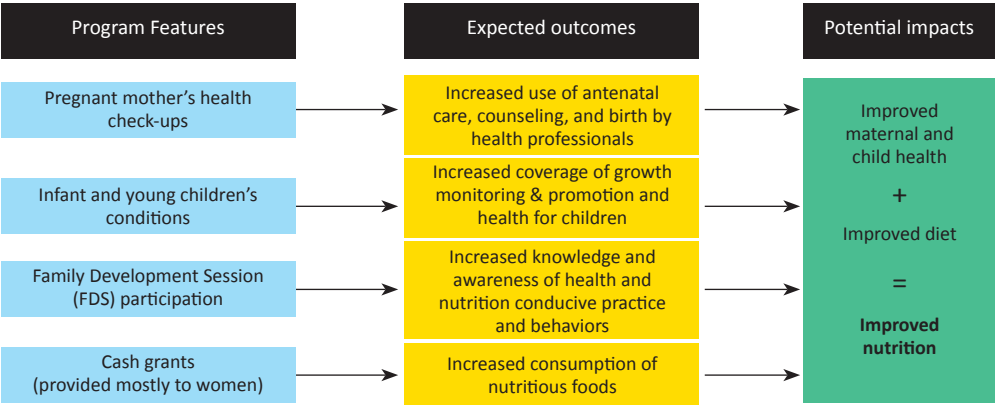
Figure 1. Summary of Pantawid Program Benefits and Conditions for Entitlement.



Source: Pantawid Pamilyang Pilipino Program Act (Republic Act 11310) and IRR infographic.

The Pantawid Program has a significant potential to help improve nutrition outcomes. Nutrition outcomes are determined by the quantity and quality of food consumption, access to health services and sanitation, and knowledge and practices for nutrition. While the Pantawid program does not directly address nutrition,⁸ it can contribute to reducing malnutrition through its conditional cash grants and support services (as illustrated in Figure 2). In particular, the family development session (FDS) has been considered as a major channel for information dissemination on good parenting and hygiene practices conducive to improved health and nutrition of children.⁹ The fact that the cash grants are mostly received by women (about 86 percent), who are likely the main caretakers of children, also provides an important channel through which 4Ps can affect nutrition outcomes.

Figure 2. Theory of Change: Pantawid’s Pathways to Potential Nutrition Related Impacts.



Source: Authors.

⁸ Some nutrition-specific interventions aim to reduce extreme stunting by transferring nutritional supplements, providing access to clean water, and promoting nutrition-supporting behaviors (e.g., hand washing and breast-feeding).

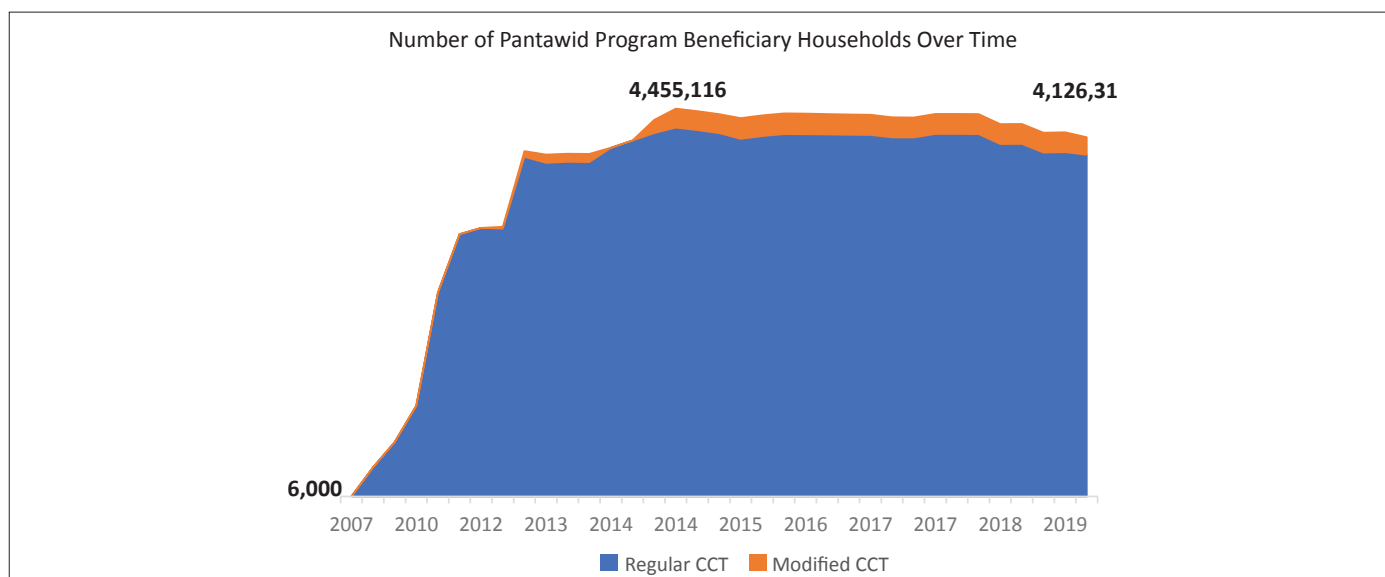
⁹ FDS modules includes the lessons on exclusive breastfeeding, good feeding practices, remedies for children with diarrhea, child stimulation and positive parenting, backyard gardening, and access to and use of other social services.



By covering pregnant women and young children, the program targets the critical window of opportunity of the first 1,000 days for nutrition. A large body of literature emphasizes the substantial costs of inaction in addressing human capital challenges during the early years of child development, especially the first 1,000 days. Almost 70 percent of stunting occurs during this period of child’s life, with substantial long-term consequences on future educational and economic outcomes.¹⁰ In the Philippines, stunting is principally associated with sub-optimal prenatal conditions and inadequate food security and diversity.¹¹ Undernutrition and disease in early childhood can also lead to impaired cognitive and brain development, lower socio-emotional skills, lower educational outcomes, and ultimately lower incomes.¹² Early childhood malnutrition thus leads to lost earnings for individuals with economy-wide consequences – studies estimate productivity losses as high as 11 percent of Gross Domestic Product (GDP) in Latin America, Africa and Asia each year.

As the country’s flagship safety net program covering almost a quarter of the population, Pantawid’s wide coverage can make a large-scale impact. In 2007, Pantawid was piloted among 6,000 households. Since its formal launch in 2008, Pantawid has expanded to over 4 million households, peaking over 4.4 million in 2014 (Figure 3).¹⁴ A small number of modified conditional cash transfer (MCCT) beneficiaries were also added to cover vulnerable populations not identified through the household survey for *Listahanan*.¹⁵ In terms of the absolute number of households covered, Pantawid ranks fourth globally after Brazil, Indonesia, and Mexico.¹⁶

Figure 3. Pantawid Pamilyang Pilipino Program Coverage: 2007-2019.



Sources: Data on beneficiary households from DSWD Pantawid Pamilyang Pilipino Program Implementation Status Reports (2012-2019).

¹⁰ Jef L. Leroy, Marie T. Ruel, Jeanne-Pierre Habicht, and Edward A. Frongillo, “Linear Growth Deficit Continues to Accumulate beyond the First 1000 Days in Low- and Middle-Income Countries: Global Evidence from 51 National Surveys,” *Journal of Nutrition* 144, no. 9 (2014): 1460–66.

¹¹ Capanzana, et al. (2020).

¹² Emanuela Galasso and Adam Wagstaff, “The Aggregate Income Loses from Childhood Stunting and the Returns to a Nutrition Intervention Aimed at Reducing Stunting” (policy research working paper WPS 8536, World Bank Group, Washington, DC, 2018).

¹³ Rodrigo Martinez and Andres Fernandez, “The Cost of Hunger: Social and Economic Impact of Child Undernutrition in Central America and Dominican Republic,” *Documentos de Proyecto’s*, no. 144 (2008).

¹⁴ As a share of population, relative to other countries with large CCT programs, Pantawid has the third largest coverage in the world, next to Colombia and Mexico, each covering 22 percent of its population. The basis for determining the size of the CCT program is the number of individuals covered by the program. Source: World Bank. 2018, “The State of Social Safety Nets 2018”. Only the top 8 largest CCT programs with coverage data in the last 5 years are included as comparison.

¹⁵ Beneficiaries for MCCT were not selected through the *Listahanan* but by community identification. The intention was to reach out to families who were vulnerable and in need of assistance but were not covered in the regular CCT because they were not captured by the enumeration of *Listahanan*. The beneficiaries comprised of Homeless Street Families (HSF), Indigenous Peoples (IPs), and Families in Need of Special Protection (FNSP). Since introduced in 2011, the number of MCCT beneficiaries has increased to reach 200,000 in 2014 households and remained at the similar level. After the passage of the Pantawid Act, all MCCT beneficiaries were absorbed under the regular CCT.

¹⁶ Based on the coverage of the program, the Pantawid ranks third in the world behind Colombia and Mexico. See Acosta et al. (2019a).

III. What are the Impacts of Pantawid on Nutrition?

The impact of Pantawid on nutrition was strong in its early stage of program implementation, but the findings on recent impacts are inconclusive. Several studies have investigated the impact of Pantawid on nutrition using different methodologies over various timespans (Table 1). The first round of impact evaluation (IE1)¹⁷ using data collected in 2011 from a randomized control trial (RCT) approach showed very positive program impacts on the reduction of severe stunting.¹⁸ Specifically, the prevalence of severe stunting among beneficiary children aged 6-36 months was 10 percentage points lower in program localities (treatment) than among children in the same age group from low-income households in non-program localities (control).¹⁹ Using the same data, Kandpal et al. (2016) also revealed that Pantawid increased height-for-age Z scores (HAZ) among beneficiary children between 6-36 months of age. The anthropometric impacts of the program were encouraging, as they indicated behavioral changes among parents, including on their children's diet choices. However, the second impact evaluation (IE2)²⁰ using data collected in 2013 did not find a similar impact on stunting. Preliminary results from the third impact evaluation (IE3)²¹ using data collected in 2017-18 suggest that there was an increase in the severe stunting rates among children 0 to 5 years old, which appears to be driven by an increase in the stunting rate of non-monitored children who were not exposed to the program at the most effective time – during the critical first 1,000 days of a child's life.²²

The heterogeneous findings are in part due to different samples, time periods, and evaluation strategies. Evaluations based on the RCT method compare outcomes of randomly selected treatment localities (where poor households participated in the Pantawid Program) and control localities (which were not exposed to Pantawid). Due to this random selection, RCT results can be confidently attributed to Pantawid. The early studies using RCT during the initial implementation phase of Pantawid were based on sample localities from the country's poorest areas, and the results represent the high poverty and vulnerability context of these areas. After the program expanded to cover the whole country, the RCT method was no longer a viable evaluation strategy, and studies instead used a regression discontinuity design (RDD) approach. Given that households were assigned a Proxy Means Test (PMT)-based²³ poverty score, and only those below a predetermined cutoff score were eligible for Pantawid, the RDD studies compare the outcomes of households very close to the cutoff.²⁴ The outcomes of Pantawid beneficiaries just below the cutoff were compared with households just above the cutoff which were otherwise similar but ineligible for Pantawid. The RDD results were drawn from a nationwide sample, but an important weakness of this strategy is that it is unable to capture the impact on the poorest (those households far below the cutoff) whom the program intended to help the most. Moreover, given that the value of transfers eroded over time (which will be discussed further below), levels of impact similar to those found in earlier studies were not expected.

¹⁷ World Bank (2013).

¹⁸ Measured as height-for-age <-3SD applying the WHO Child Growth Standards.

¹⁹ An impact of a similar magnitude was also found in Indonesia's Program Keluarga Harapan (PKH).

²⁰ Orbeta Jr., et al. (2014).

²¹ PIDS and DSWD. Forthcoming.

²² A parallel study which revisited the original RCT sample households from IE1 found that receipt of the program benefits during the first 1,000 days of life results in better nutrition outcomes (reduced likelihood of being severely underweight) among children who received program benefits during this critical period compared to children who received program benefits later.

²³ PMT is a statistical model that aggregates multiple proxy indicators into a single score that represents the household's welfare level. See Fernandez (2012) for a discussion of the design and implementation of the Philippines' targeting system.

²⁴ RDD is a quasi-experimental method of evaluating program impact that is applicable when observation units (e.g., households) can be sorted using some continuous metric (e.g., PMT score). Program eligibility is defined using a predetermined threshold or cutoff point of the metric. In RDD, observations just below the cutoff are similar to, and therefore, compare well to those just above the cutoff.



Table 1. Review of Impact Evaluations of Pantawid and Findings on Nutrition.

| Studies | Year of Survey | Methodology / Research entity | Notes on Methodology | Main Findings on Nutrition |
|--|----------------|---------------------------------------|---|---|
| First impact evaluation (IE1) | 2011 | RCT / World Bank researchers and DSWD | <ul style="list-style-type: none"> ▪ Random selection of treatment/control group ▪ Sample drawn from pilot districts which are poorer, more remote and lagging | Significant reduction in stunting and severe stunting |
| Kandpal et al. (2016) | | | | Improvement in anthropometric measures (e.g., height for age) |
| Filmer et al. (2019) | | | | Increases in stunting among non-beneficiary children |
| Second impact evaluation (IE2) | 2013 | RDD / PIDS* researchers and DSWD | <ul style="list-style-type: none"> ▪ Nationwide coverage of beneficiaries ▪ Sample drawn only around the cut-off level and results not applicable to the poorest households | No significant effect on stunting outcomes |
| Third impact evaluation (IE3, forthcoming) | 2017-18 | RDD / PIDS* researchers and DSWD | <ul style="list-style-type: none"> ▪ Nationwide coverage of beneficiaries ▪ Sample drawn only around the cut-off level & results not applicable to the poorest households ▪ Significant time lapse since the decision on the cut-off level | Negative results among non-monitored children in beneficiary households No significant impact for children aged 0-2 years Positive impact on older children monitored |

*PIDS stands for Philippines Institute for Development Studies, the Pantawid law specifies that PIDS in collaboration with DSWD shall carry out regular impact evaluations for the program.

For intermediate outcomes, the evaluation studies suggest generally positive impacts. The likely pathways that may explain positive changes in nutrition include increased utilization of health services among poor children and pregnant women, increased quantity and quality of food, and behavioral changes, as discussed above. Evaluations find that there was a significant increase in health service utilization (Annex 1). In particular, regardless of methodologies used, the studies agree that Pantawid increased access to maternal and child healthcare, increased household consumption of children’s health and education, and improved dietary diversity. Parenting advice provided through FDS appears to have changed mothers’ feeding patterns, so they pursue better quality food (particularly dairy products) while reducing packaged food consumption (Kandpal et al, 2016).

Can CCTs inadvertently worsen the stunting outcomes of non-beneficiary children? A recent study investigating Pantawid’s impact on non-beneficiary children’s stunting outcomes adds to the already mixed literature of the CCT’s impact on nutrition. Filmer et al. (2019) hypothesizes that cash transfers could increase the price of certain nutritionally sensitive foods, which in turn could hurt children in the most saturated treatment localities. The negative impact would likely be particularly pertinent among non-beneficiaries without the means to mitigate the negative price impacts. Using nationwide price data, the study found that price levels were indeed higher in localities with a higher share of Pantawid beneficiaries. The study then investigated the RCT (IE1) data from 2011 to see if similar price patterns were observed and if it led to changes in children’s stunting. The RCT data showed that the higher the share of beneficiaries in treatment localities, the larger the increase in the prices of perishable goods including high protein food (e.g., eggs). The increased prices of high protein foods critical for children’s growth in turn appears to have reduced consumption by non-beneficiaries, leading to an increase in stunting rates.

The RCT results on the price inflation effect may be less relevant to the overall Pantawid program today, but they provide important policy lessons. The price inflation results were found in the poorest villages where the majority of households were Pantawid beneficiaries, and in remote villages where food supply – particularly that of perishable protein-rich foods -- could not keep up with the increased demand. Such localities represent only a small share (4 percent based on 2015 data) of households in the Philippines, as Filmer et al. (2019) acknowledges. Moreover, the price effects would be expected to dissipate over time if the real value of CCT benefit decreases and as the market adjusts supply to meet the increased demand. Finally, with the massive increase in transportation infrastructure, market connectivity today has improved significantly since 2011 when the RCT survey was conducted.²⁵ Nonetheless the results are an important reminder of the need to monitor the general equilibrium effects – both intended and unintended -- of programs and to adjust policy parameters accordingly.

In a similar vein, the IE3 investigated the impacts of Pantawid separately on monitored and non-monitored children in beneficiary households. There is a sizable number of non-monitored children in beneficiary households, because health and nutrition grants are unrelated to the number of monitored children. The preliminary results suggest a higher stunting rate among non-monitored children in Pantawid households compared to other children in non-Pantawid households.

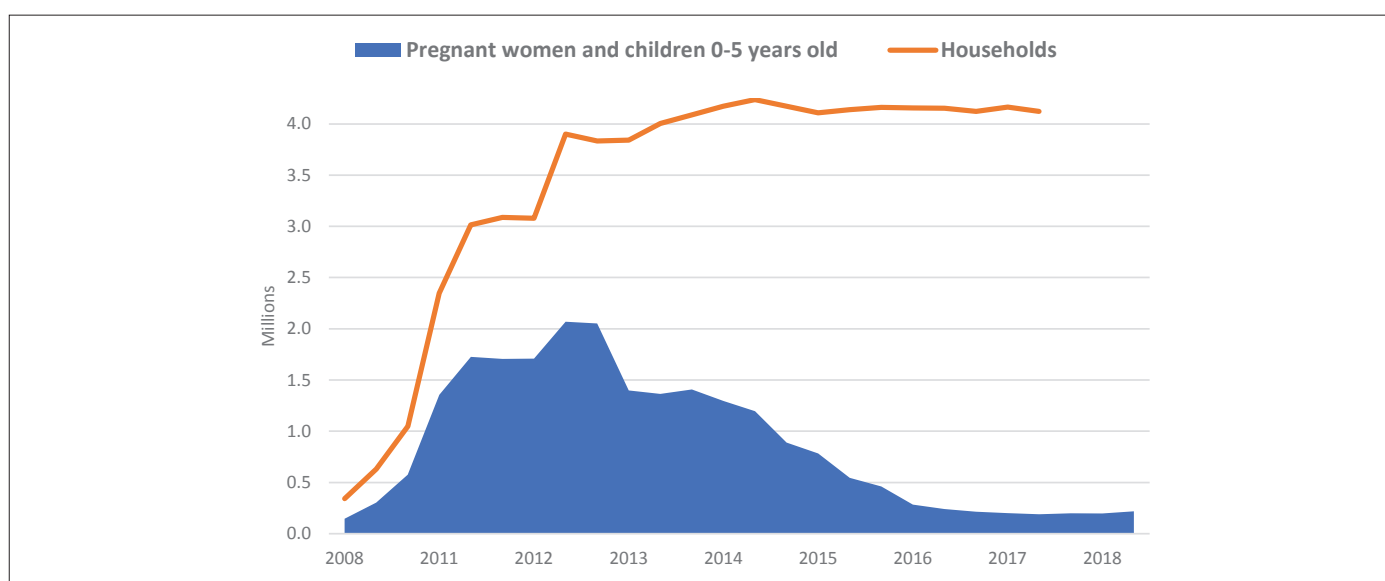
²⁵ Multiple sources of data suggest that there has been a significant improvement in infrastructure in the Philippines over time. For instance, the WEF Global Competitiveness Index reports that the score for infrastructure increased from 3.19 in 2012 to 3.43 in 2015 with strengthened road, port, and transport infrastructure; also, the proportion of paved roads and total length of arterial roads significantly increased during the same period.

IV. Why is Pantawid not Having a Greater Impact on Nutrition?

A. Declining Share of Pregnant Women and Young Children among Pantawid Beneficiaries

New pregnancies and newborns of current beneficiaries are often not monitored for compliance. By design, the program conditions apply only to monitored individuals. These monitored individuals are identified at the time of program enrollment, unless the beneficiary voluntarily reports updated information (e.g. a new pregnancy in the household). As the program matured and expansion slowed down, the number of monitored pregnant/post-partum mothers and children aged 0-5 has declined significantly. This means that succeeding pregnancies and newborns were not linked to the program's compliance verification system. Figure 4 shows the number of households and pregnant women and children monitored from 2008 to 2018. While the coverage of households was leveling off from 2014, the number of pregnant women and young children has rapidly declined. In 2018, less than 200,000 pregnant women and 0-to-5-year-old children were monitored for compliance with health conditions compared with a peak of over 2 million in 2012.

Figure 4. Number of Monitored Households, Pregnant Women, and Children Aged 0-5, 2008-2018.



Sources: Author's illustration based on program's MIS data.

City and municipal links, the front-line social welfare staff of the program, encourage pregnant women and new mothers to report their children for monitoring,²⁶ but there are few incentives to do so from the households' perspective. The health condition is "all or nothing" where a flat benefit is offered per household regardless of the number of individuals (i.e. pregnant/post-partum mothers and young children 0-5 years) monitored for compliance. Compliance is met when all individuals who are monitored satisfy the conditions. Registering newborn children in the program increases the burden of compliance without increasing the benefits. Compliance rate to the health condition among monitored children has been historically high, but the absolute number of monitored young children and pregnant women has rapidly decreased and remained low since 2015. The Pantawid National Advisory Committee, the inter-governmental body regulating the program, issued a resolution 2012, mandating that all new pregnant and newborns should be monitored for compliance. However, without incentives to beneficiary households to voluntarily visit the health center and report new pregnancies and newborns, Pantawid staff face difficulties in implementing this new policy.

²⁶ Measures were taken to strengthen engagement of city and municipal links, such as the revision of the Oath of Commitment from beneficiaries to report all children in the household and to develop a task force "Malusog na Batang 0-5" to help address children malnutrition.

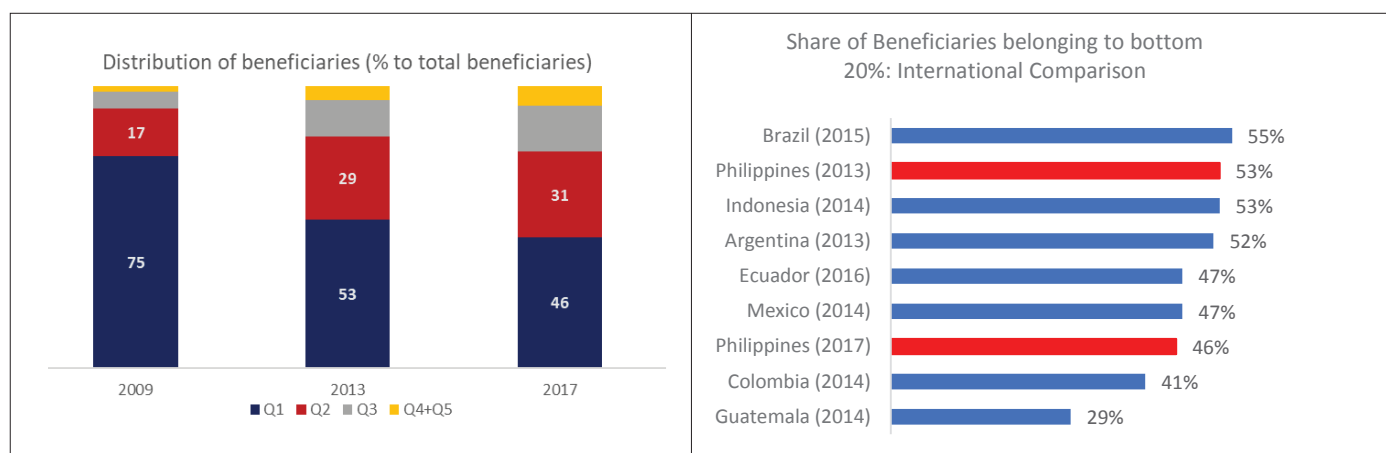


After the program reached its peak number of beneficiaries in 2014, few new beneficiaries have been enrolled. Originally, most beneficiaries were identified through Listahanan 1 (L1) conducted in 2009-10. After five years of program implementation, the plan was to enroll new beneficiaries identified through Listahanan 2 (L2) conducted in 2015, in place of households that exited the program after their children grew out of the eligibility age. However, a moratorium on the enrollment of new households in 2015 prevented the replacement of households, as it was learned that many extant Pantawid beneficiaries were not surveyed in L2. Further, although L2 includes information about pregnant women and young children of Pantawid beneficiaries, it was not used to update official Pantawid beneficiary information. Newly identified pregnant women and young children were not able to participate in and/or be monitored under the Pantawid program, limiting the program’s ability to tackle maternal and child health and nutrition challenges through CCTs.

B. Declining Share of Poor People among Pantawid Beneficiaries

Failing to enroll new beneficiaries based on the up-to-date registry undermines the program’s ability to help the country’s poorest and most vulnerable population. Based on the nationally representative data from the Annual Poverty and Indicator Survey (APIS) in 2013 and 2017, an incidence analysis shows a clear pattern of worsening targeting performance for the Pantawid program (Acosta et al. 2019a). The share of the lowest income quintile households among Pantawid beneficiaries has decreased from 75 percent in 2009 to 53 percent in 2013 and to 46 percent in 2017 (Figure 5 left). When compared with other major CCT programs in the developing world, Pantawid’s targeting performance has regressed (Figure 5 right).

Figure 5. Distribution of Beneficiaries by Income Quintile.



Source: Acosta and Velarde (2015) and Acosta et al. (2019a)

The main reason for the worsening targeting performance is the use of an outdated registry of beneficiaries. As discussed above, current Pantawid beneficiaries were identified in 2009-2010 based on L1, and the new enrollment of beneficiaries replacing households that exited the program did not start until 2019. Natural attrition from the program has been increasing over time, and in 2019, about 2.2 percent of the total beneficiaries (93,000 households) exited the program. As the program aims to maintain the number of households at the 2014 level, i.e. 4.4 million households, the DSWD issued implementing guidelines on the replacement of Pantawid households²⁷ and has enrolled around 300,000 new households using L2.

With nutrition outcomes lagging significantly among poorer households, declining targeting accuracy indicates an inefficient use of resources in policy efforts to reduce malnutrition. The poorest households persistently have the highest prevalence of underweight, wasting, and stunting across the country. In 2015, almost half of all children less than five years old in the poorest income quintile were classified as severely stunted. Moreover, pregnant women from the poorest quintile were more nutritionally at-risk, with increased incidence of delivering low birth weight infants and experiencing other pregnancy complications, conditions experienced by about 30 percent of the poorest pregnant women. The prevalence of low birth weight is also highest (17 percent) for the poorest households. There is substantial room for improvement in channelling assistance towards individuals with the most need at crucial stages of health and nutrition, where it could make the greatest difference.

²⁷ DSWD Memorandum Circular No. 12, series of 2019, *Implementing Guidelines on the Replacement of Pantawid Pamilya Households to Reach the Annual Household Coverage*.

C. Low and Declining Cash Value

The real value of benefits has been low and declining with inflation. Multiple analyses suggest that the benefit amount is too low to have a significant impact on important outcomes. When the program started, the benefit amount was estimated at 23 percent of beneficiary households' income. The grant amount has remained the same, and its value has eroded over the years due to inflation. The average Pantawid benefit was around 10 percent of the pre-transfer income of households from the lowest quintile in the income distribution in 2017, despite the additional Php 500 for high-school children introduced in 2014.²⁸ Compared to CCT programs in other countries, this is at the lower end of the spectrum (27 percent in Ecuador in 2016, 20 percent in Brazil in 2015, for instance).

Recognizing the low real value of benefits, the government added assistance from other programs for Pantawid beneficiaries and later introduced a modest increase in the CCT benefits as well. Cash benefits from rice subsidies and UCT have been distributed through Pantawid's payment delivery system. But these benefits are relatively small and are temporary measures as top up benefits. The Pantawid Act increased the health and nutrition grants by 50 percent (from Php 500 to Php 750 per month), the implementation of which was initiated with the last payment of 2019. The increase in the benefits amount is likely to help households invest in children's human capital development.

D. Weak Service Delivery

A wider range of topics in FDS may inadvertently impact information dissemination on nutrition. The Pantawid program requires mandatory participation in FDS, targeting behavioral changes in health, nutrition and education. In the early years of Pantawid, there were only six modules focusing exclusively on these three areas, but now there are over 50 modules and sub-modules on multiple topics. Some of the new topics include climate change mitigation measures and financial literacy and entrepreneurship. While the expansion of topics covered in FDS has been necessary, the relative emphasis on the core health and education topics may have weakened. In addition, the program does not have a system to monitor how effectively these sessions are delivered to beneficiaries. In a qualitative assessment of the impact of Pantawid on nutrition outcomes, Economic Policy Research Institute (2019) found that while some positive behavioral changes are associated with FDS attendance, perspectives on its implementation are mixed. Some beneficiaries find the sessions informative and apply what they learn, especially in diet and food preparation. Others do not find FDS particularly helpful given the lecture-based delivery with little interaction between the speaker and participants.

Significant implementation challenges in BARMM undermine the CCTs' potential to improve nutrition outcomes in the region. There have been significant delays in payment delivery in BARMM, where poverty incidence (53 percent in 2018) and stunting prevalence (44 percent in 2015) are the highest in the country. Since the beginning of the Pantawid Program, data errors and payment delays have been a prevailing issue in the region.²⁹ After more than a year of waiting, for example, beneficiaries in Lanao del Sur received their full-year payment for 2018 in August 2019 while others in BARMM still wait for the 2018 payments. Several reasons were identified for the recurrent overdue Pantawid pay-outs, including problems with the system's data cleansing of duplicates and fraudulent beneficiary profiles; a low proportion of cash card distributions, with the majority of beneficiaries relying on over-the-counter payments; and an insufficient number of merchants as Land Bank of the Philippines conduits to deliver cash grants. The delay of payments defeats the program's purpose of providing consumption support to the poorest.

There is scope for health services to be further utilized. Despite the program's health conditions, there are variations in beneficiaries' utilization of health services. The rate of utilizing pre-natal care is quite high and there is robust evidence that Pantawid has increased the take-up rate among its beneficiaries. The latest impact evaluation suggests that about 86 percent of pregnant women in Pantawid households used at least four prenatal check-ups in line with Department of Health (DOH) guidelines, 11.8 percentage points higher than the average of non-Pantawid low income households.³⁰ However, the use of other health services, such as post-natal care, children's immunization, and growth monitoring, is not as high. For instance, only around 1 in 3 children age 0 to 5 in the latest impact evaluation study sample visited a health facility in the past 2 months.

²⁸ This is according to the last three Benefit Incidence Analysis of the program. The second Impact Evaluation of the program in 2014 finds that benefits represent 7% of household's total expenditure.

²⁹ See Acosta et al. (2019b).



V. How Can Pantawid Strengthen its Impact on Nutrition?

Based on the issues identified and discussed above, the following recommendations can be considered to strengthen Pantawid’s impact on nutrition outcomes. Major challenges identified in the previous section and the corresponding solutions proposed are summarized in Table 2.

Table 2. Pantawid Challenges in Nutrition and Proposed Solutions

| Challenges | Proposed Solutions |
|---|---|
| 1. Declining share of pregnant women and young children | <ul style="list-style-type: none"> • New enrollment through an up-to-date social registry • Incentives for reporting pregnancies and registering newborns and young children |
| 2. Declining targeting performance | <ul style="list-style-type: none"> • New enrollment, recertification, and exit through an up-to-date social registry • Regular monitoring of targeting performance (in collaboration with research institutes such as PIDS) and dynamic social registry updates |
| 3. Declining cash value and unintended price effect | <ul style="list-style-type: none"> • Regular monitoring of price impact (in collaboration with research institutes such as PIDS) • Adjustments in benefits possibly by indexing the benefits level to inflation |
| 4. Weak service delivery | <ul style="list-style-type: none"> • Refinement of FDS curriculum to emphasize core health and education goals and improved delivery • Improved service delivery in BARMM |

First, ensure that the CCT program serves the most nutritionally vulnerable populations – pregnant women and young children. This can be done by adopting the updated registry to identify vulnerable populations, and by developing a more dynamic system to update beneficiary information frequently. As discussed above, many young children under the age of 5, particularly those living in poverty, did not benefit from the program because the enrollment of new households has not widely actualized. Once the new round of *Listahanan* becomes available, the Pantawid Program should immediately adopt it to enroll newly identified poor households and ensure coverage of pregnant women and young children. Further, efforts are required to make the social registry to be more dynamic. A dynamic social registry allows regular updates of key information to reflect the changing socio-economic wellbeing of a household and enables the entry of poor and vulnerable households so they can be considered for relevant social safety net systems. There have already been discussions regarding the implementation of a more dynamic *Listahanan* in the near future to better facilitate the assessment, identification, and registration of new poor and vulnerable households. Further, discussions have also suggested the use of the Community Based Monitoring System (CBMS) for a more frequent update of beneficiary information.

Second, create the necessary incentives to report pregnancy and newborns for monitoring under the program. To this end, the program could redesign the flat health benefit level linked to the health condition and instead increase payments with the number of eligible members (e.g. pregnant women and children). The benefit structure can be designed such that the incremental benefit for each additional child decreases with the number of children in the household. This will give the beneficiary household an incentive to enroll the child for monitoring while minimizing concerns about fertility increases. If increases in benefits are not feasible due to fiscal constraints, strong labeling of commitment can be considered. Some studies (Heinrich and Knowles 2020; Benhassine et al. 2015) argue that clearly informing beneficiaries of the intention and purpose of grants can be as effective as hard conditions. Pantawid can introduce stronger commitment for child’s health monitoring with monetary consequences of non-compliance. Given that all beneficiary families are required to sign the Oath of Commitment, the oath can include a clause on registering all succeeding pregnancies and eligible children with a clear indication that non-compliance can lead to the termination of the benefits. In addition to adjusting the benefit structure or requiring stronger beneficiary commitment, utilizing relevant information from the DOH database (i.e., birth, health check-ups) can be considered. Timing of initiation of young children into monitoring programs matters. Evidence shows that cash transfer programs tend to have greater benefits for children enrolled at younger ages than when they are older (Manley and Gitter 2013; Sanchez et al. 2020). Enrolling on time means initiating the treatment when younger i.e. higher dose, exposure during early-life critical window, and with growth monitoring sessions and vaccinations.

³⁰ This finding is based on fuzzy RD results within Coverage Error (CER) bandwidth.

Third, renew the health and nutrition messages of the FDS and improve its delivery and monitoring systems. FDS' social and behavior change communication strategy on health and nutrition of mothers and newborns can be repeated in refresher sessions. Moreover, FDS can further strengthen the delivery of the parenting modules. Evaluations find that parenting interventions can improve child development outcomes, notably in cognition and language development. Existing evidence (as summarized in Arriagada et al., 2018) from successful parenting programs identify multiple key features for success, including: (i) target both parents (not just mothers), (ii) include demonstrations with children and opportunities to practice and receive feedback during the training sessions, (iii) invest in strong program protocols and materials to ensure consistency, (iv) establish a frequent and supportive supervision scheme including on-the-job training and coaching for field staff, and (v) invest in a monitoring and evaluation system for quality assurance.

Fourth, implement a mechanism to monitor inflation and price impacts on consumption, especially food security, and adjust the level of cash benefits and coverage accordingly. The Pantawid Act aims to protect beneficiaries from the risk of inflation by mandating regular reviews of the real value of the benefit over time. Periodic adjustments of benefits to offset overall inflation are required. The Pantawid IRR also recommends regular updates of benefit levels, although the recommended frequency (i.e. 6 years) may need to be revisited depending on the policy environment and economic conditions. In addition, given the potential price increase in perishable food items in poor and remote villages with high beneficiary saturation and imperfect local markets, the program can monitor beneficiary saturation rates so the prevalence of negative spillover effects in such localities can be further examined. Fundamental solutions would include better connectivity through infrastructure in remote areas and better livelihood activities to increase the production of perishable goods. Meanwhile, Pantawid can consider the use of digital payments to smooth out transfers and reduce market day price spikes, along with an option to include all villagers to reduce the unintended impact on non-beneficiaries.³¹

Fifth, improve service delivery in BARMM where poverty is prevalent and nutrition outcomes are poor. While there is ample anecdotal evidence about inefficiencies associated with payment delays in BARMM, there have been no clear strategies to tackle BARMM-specific implementation challenges. There is a need to thoroughly assess the geographic distribution of cash-out points and the status of payments delivery. Moreover, FDS and messaging for health and nutrition can be refined, taking BARMM's cultural context into consideration.

³¹⁰ In this case, villages' high saturation and remoteness conditions should be specified for rule-based program implementation.



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Annex 1. The Impact of Pantawid Program on Health and Education.

Impacts on Health

- Pantawid mothers and children beneficiaries have better access to maternal care and basic health services due to the program. Results from the second IE study found that more Pantawid mothers had institutional deliveries in the past five years, with 7 in 10 live births among Pantawid mothers compared to 5.5 in 10 births among non-beneficiary mothers. This is in line with the first IE study that shows a higher number of poor mothers living in Pantawid villages were also receiving antenatal care (ANC) services and making ANC visits more frequently (by 0.6 times) compared to mothers in non-Pantawid villages. Similarly, the use of postnatal care (PNC) at home within 24 hours of delivery in Pantawid villages was higher (by 10 percentage points) than in non-Pantawid villages.
- Pantawid children have access to basic health services such as vitamins and mineral supplementation that are vital for improving health outcomes. Eighty-six percent of Pantawid children aged 6 months to 6 years old reported receiving vitamin A supplementation compared to 73 percent non-beneficiaries. Thirty-five percent of children beneficiaries receive iron supplements compared to 23 percent non-beneficiaries.
- The program has increased, and successfully sustained the impact on, regular weight and growth monitoring as found in each impact evaluation study. Similarly, significant increases in intake of deworming pills have been found since the first IE of the program.
- The first IE study found that the program helped improve the long-term nutritional status of younger children (6-36 months old) by reducing severe stunting by 10 percentage points compared to areas that did not receive the program.
- The program changed the spending patterns of poor households, with beneficiary households spending more on health and education than poor households who had not benefited from the program.

Impacts on Education

- Higher rates of school enrollment among children in beneficiary households were observed. Particularly, the first IE study found that enrollment increased by 10.3 percentage points among pre-school and daycare-aged children (3-5 years old) and by 4.5 percentage points among elementary school-aged children (6-11 years old). The second IE found gross enrollment of elementary-aged children (6-11 years old) was equally high for both Pantawid children and non-beneficiaries at 98 percent.
- Increased school attendance, which was found across all school-aged groups, suggests that Pantawid is meeting the objective of keeping poor children in school. The first IE found school attendance in Pantawid areas was 3.8 percentage points higher among 6-11 years old, 4.9 percentage points higher among 12-14 years old, and 7.6 percentage points higher among 15-17 years old. The positive impact on pre-school attendance was found in the second evaluation; 94 percent of preschool Pantawid children attend classes 85 percent of the time, compared to a low of 55 percent among non-Pantawid children.
- Pantawid keeps high school children in school. Gross enrollment rate for high school children (12-15 years old) is higher for Pantawid children living near the poverty threshold, gross enrollment rate of 95 percent compared to non-Pantawid children (89 percent). This shows that the program keeps children in school during the critical stage when they are prone to dropping out in order to earn a living.
- Pantawid reduces the time children spent working and encouraged parents to invest more in their children's education.

Sources: Compilation from various IE studies (see Table 1).



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