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A Review of Public Expenditures for Nutrition in National Government Agencies of the Philippines (2017–2019)

Jhanna Uy, Julienne Lechuga, and Valerie Gilbert T. Ulep



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Abstract

Given the persistently high under-5 stunting prevalence in the Philippines, it is important to look at how the country has invested in nutrition interventions to inform priorities for future resource mobilization. Measuring and tracking of nutrition financing are not only critical for transparency and accountability but also to improve resource mobilization and bolster advocacy activities. This review analyzes the level of public spending for nutrition of 19 national government agencies (NGAs) in the Philippines for 2017-2019 including an analysis of patterns of allocation across and within sectors. For this, we used the methodology of the Scaling Up for Nutrition (SUN) Movement to measure public spending on nutrition in select national government agencies (NGAs).

Based on our findings, international aid (including loans) for nutrition to the Philippines was one of the lowest among countries in South and Southeast Asia with high stunting prevalence. Locally, total national-level nutrition-related expenditures for 2017-2019 were estimated to be PHP 492.7 billion, equivalent to approximately an average annual per capita of PHP 1,554.3, 0.95% share of gross domestic product (GDP), and 7.9% share of total government expenditures. Majority of nutrition-related expenditures were for nutrition sensitive activities (95.28%), followed by specific activities (3.87%), with the least for enabling interventions (0.85%). The Department of Social Welfare and Development (DSWD) accounted for the largest share at 59.6% or PHP 293.5 billion. In terms of budget execution efficiency, for all nutrition expenditures across agencies, the absorption remained steady from 2017-2019 at 73%. The DOH had one of the lowest absorptions at less than 38% next to nutrition-sensitive interventions of DepEd at 11%. Countries which have made great reductions in stunting prevalence in the past decade made coherent and simultaneous investments in the most influential drivers of under-5 stunting while in the country, overall NGA expenditures for nutrition are incoherent in that they fail to account for interconnected risk factors that cause stunting.

To improve the coherence of Public Expenditures for Nutrition, it is recommended to increase funding for enabling interventions, prioritize investments in the first 1000 days of a child's life, especially interventions at home that directly impact child dietary intake, and conduct further implementation research to understand how best to deliver interventions at home.

Keywords: nutrition, public expenditure review, Philippines

Executive Summary

Given the persistently high under-5 stunting prevalence in the Philippines, it is important to look at how the country has invested in nutrition interventions to inform priorities for future resource mobilization. This review analyzes the level and patterns of public spending for nutrition of 19 national government agencies (NGAs) in the Philippine for 2017-2019.

Key findings are summarized below:

International and National Expenditures for Nutrition

- International aid (including loans) for nutrition to the Philippines was one of the lowest among countries in South and Southeast Asia with high stunting prevalence. Total international aid from 2014-2018 totaled only US\$ 3.7 million or US\$ 3 cents per capita. In comparison, Indonesia, which has similar stunting prevalence and a higher GDP per capita than the Philippines, received US\$ 92 million or US\$ 34 cents per capita.
- Total national-level nutrition-related expenditures for 2017-2019 were estimated to be PHP 492.7 billion, equivalent to approximately average annual per capita of PHP 1,554.3, 0.95% share of gross domestic product (GDP), and 7.9% share of total government expenditures. This figure is comparable to nutrition expenditure in other low-and middle-income countries.
- Majority of nutrition-related expenditures were for **nutrition sensitive activities** (95.28%), followed by **specific activities** (3.87%), with the least for **enabling** interventions (0.85%).
- The Department of Social Welfare and Development (DSWD) accounted for the largest share at 59.6% or PHP 293.5 billion. An amount of PHP 8.49 billion went to nutrition specific interventions such as the supplementary feeding program (8.36 billion). Around PHP 278.6 billion was spent on social protection services (nutrition sensitive), including the Pantawid Pamilyang Pilipino Program (PHP 233 billion) the top nutrition expenditure in the country.
- Access to healthcare interventions was the second largest nutrition sensitive intervention (PHP 67 billion) in the form of DOH's Health Human Resources for Health Deployment Program (HHRDP) and Health Facilities Enhancement Program (HFEP).
- Expenses for enabling interventions increased across the years. Of the PHP 1.4 billion, 55% can be attributed to food and nutrition research programs by DOST-FNRI (PHP 773 million) with the remaining 34% (PHP 484 million) going to NNC's assistance to local and national nutrition programs.
- From 2017 to 2019, 23.1% of PhilHealth claims and 12.7% of reimbursements were nutrition related. Nutrition specific claims accounted for less than 1% (PHP 312.7 million out of PHP 39.52 billion) of nutrition-related reimbursements. The nutrition sensitive reimbursements that comprised 99% (PHP 39.21 billion) of all claims were from maternal health, neonatal health, disease management, family planning, and oral health.
- Looking at DOH under their Women and Men's Health Development Division (WMHDD) and Children's Health Development Division (CHDD), **nutrition specific disbursements totaled PHP 1.13 billion** (69% of allocations disbursed; 1.2% of DOH budget) for 2017 and PHP 1.40 billion (98% disbursed; 1.3% of DOH budget) for 2018. Majority of the expenses were **supplies for micronutrient supplementation** (2017: 968 million, 2018: 474 million) and the integrated management of acute malnutrition (2017: 151.4 million, 2018: 924.8 million).

- Nutrition sensitive expenses of DOH were PHP 8.21 billion (87% of obligated disbursed; 8.6% of DOH budget) in 2017 and PHP 8.24 billion (91% disbursed; 8.5% of DOH budget) in 2018. The disease prevention and management domain constituted the bulk (90%) of nutrition sensitive expenses.
- Expenses for enabling interventions comprised only 0.04% (PHP 3.57 million;
 <0.01% of DOH budget) and 0.72% (PHP 70.3 million; 0.07% of DOH budget) of total disbursements.
- Expenditures were also mostly for supplies and medicines, with only around PHP 359.8 million pesos in soft component expenses (e.g., mass media, research, training, workshops for crafting guidelines, events).

Budget Execution Efficiency

To determine how efficiently NGAs utilize their given resources, estimated budget execution efficiency (BEE) as the proportion of allotments (budget) disbursed (expenditure).

- For all nutrition expenditures across agencies, the absorption remained steady from 2017-2019 at 73%, but there was variation in efficiency by type of intervention. BEE was highest for enabling interventions (86%-94%), followed by nutrition specific interventions (45%-94%), and then sensitive interventions (71%-78%),
- There were also large variations in budget efficiency across agencies and by type of intervention. The domain with the highest absorption was "Strengthened management support to PPAN 2017-2022" (91%) which can be attributed to NEDA, FNRI, and PSA. NNC had higher absorption for its nutrition-specific (77%) and enabling (86%) programs as compared to its nutrition-sensitive programs (50%). The second domain with highest absorption was Mobilization of NGAs and LGU for nutrition outcomes (90%) which can be attributed to NNC's support and assistance to LGU nutrition programs
- DepEd also had moderately good absorption for nutrition specific interventions (57%), including Physical Fitness Program (71%) and School-based Feeding Program (56%), but had the lowest absorption for its nutrition sensitive interventions (24%).
- The DOH had one of the lowest absorptions at less than 38% next to nutritionsensitive interventions of DepEd at 11%. Specific programs with the efficiency were the Maternal and Child Health Programs by DOH (24%) and livelihood education and oral health programs by DepEd (1%).

Assessing the Distribution of Funding across Nutrition Risk Factors

- Countries which have made great reductions in stunting prevalence in the past decade
 made coherent and simultaneous investments in the most influential drivers of
 under-5 stunting: sensitive interventions outside the health sector, sensitive and
 specific interventions within the health sector, and an enabling environment that
 consisted of consistent high-level political and financial support, robust monitoring,
 and strong capacity to implement nutrition programs.
- While the Philippines has made significant investments outside the health sector targeting the social determinants of stunting, there has been a lack of investment within the health sector for risk factors we know have low or stagnating coverage over time: family planning, reducing adolescent fertility, micronutrient deficiencies in mothers and children, breastfeeding, appropriate infant young child feeding, and treatment of common childhood diseases like diarrhea.
- Overall, NGA expenditures for nutrition are incoherent in that they fail to account for interconnected risk factors that cause stunting. While there are great investments

in maternal care, there are minimal investments in child health care and factors at home which directly determine child dietary intake. From a life course perspective, there are investments in interventions before a child is born, treatment for when stunting occurs, but no visible investments in the first 1000 days of life to prevent stunting. For instance, in 2018, only 29% of infants were exclusively breastfed up to 6 months while only 13% of children 6-23 months were fed a minimum acceptable diet (decreased from 19% in 2015).

Recommendations

To improve the coherence of Public Expenditures for Nutrition, we recommend:

- Increasing funding for enabling interventions, particularly
 - o Intensify public advocacy in NGAs and LGUs.
 - o Develop a clear strategic plan and a strong PPAN that is anchored on a holistic understanding of the interrelated factors that cause stunting.
 - Ensure that multi-sectoral efforts are coordinated and address all important risk factors simultaneously as an integrated package.
 - o Leverage donor support and funding to augment resources needed for implementation of interventions
 - Advocate to LGUs and help them organize and design local nutrition programs tailored to their contexts and that can be implemented at scale.
 - o Invest in monitoring and evaluation for nutrition in NGAs and LGUs, particularly for budget, expenditures, and risk factor coverage indicators.
- DOH and NNC should prioritize investments in the First 1000 days of a child's life, especially interventions at home that directly impact child dietary intake.
- Conduct further implementation research to understand how best to deliver interventions at home. These could be in areas of: caregiver child feeding knowledge and behavior, access and health seeking for care for common childhood diseases, supports needed by LGUs to implement nutrition interventions in the first 1000 days.

To create a platform for more routine and systematic PERs in the future, we recommend:

- Determine the exact information or results that will be useful to policy- and decision makers for nutrition.
- DOH and NNC should increase efforts on public advocacy and education for nutrition in NGAs and their program managers to decrease barriers to data sharing.
- Remove reliance on finance departments for disbursement data and the need for post hoc manual tagging of expenditures.
- NNC, as the highest policy making and coordinating body on nutrition, should compile
 and a comprehensive list of agencies and programs judged to have nutrition-related
 activities.
- Work with the Department of Budget and Management and Department of Finance to institutionalize nutrition budget and expenditure tagging within existing NGA and LGU accounting systems.

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I. Introduction

Given the persistently high under-5 stunting prevalence in the Philippines, it is important to look at how the country has invested in nutrition interventions through a public expenditure review (PER). PERs are designed to assess how government has spent its resources from planning, allocation, and execution to achieve strategic goals and outcomes. Results of PERs can then be used by decision makers to improve future fiscal policy, planning, and management PERs are useful in informing fiscal management, areas of policy reform, and future budgetary planning. Measuring and tracking of nutrition financing are critical for transparency, accountability, improving resource mobilization, and bolstering advocacy activities [1–3]. This report analyzes the level and patterns of public spending for nutrition of national government agencies (NGAs) in the Philippines.

II. Methods

We used the methodology of the Scaling Up for Nutrition (SUN) Movement to measure public spending on nutrition. The National Nutrition Council (NNC) used this approach to estimate nutrition spending in 2014-2016. This study conducts the nutrition PER for 2017 to 2019, includes more NGAs, and disaggregates expenditures for the DOH and PhilHealth where we acquired line-item data.

Scope and Data Collection

The **scope** of the study is focused on the **19 NGAs** listed in Table 1.

Table 1. NGAs and examples of their nutrition programs

Agency	Sector
1. Department of Health (DOH)	Health
2. Philippine Health Insurance Corporation (PhilHealth)	Health
3. National Nutrition Council (NNC)	Health
4. Food and Nutrition Research Institute (FNRI)	Science and research
5. Philippine Statistics Authority (PSA)	Science and research
6. Philippine Council for Health Research and Development (PCHRD)	Science and research
7. Department of Agriculture (DA)	Agriculture and food system
8. Department of Agrarian Reform (DAR)	Agriculture and food system
9. Bureau of Fisheries and Aquatic Resources (BFAR)	Agriculture and food system
10. National Food Authority (NFA)	Agriculture and food system
11. Department of Social Welfare and Development (DSWD)	Social protection
12. National Anti-Poverty Commission (NAPC)	Social protection
13. National Commission on Indigenous Peoples (NCIP)	Social protection
14. Department of Education (DepEd)	Education
15. Department of Environment and Natural Resources (DENR)	Environment
16. Department of Labor and Employment (DOLE)	Labor

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17. Commission on Population (PopCom)Economics18. National Economic Development Authority (NEDA)Economics19. Department of Interior and Local Government (DILG)Governance

Documents: From these agencies, we requested the following documents for 2017-2019:

- i. Nutrition action plan, work financial plans (WFP), or any document that outlines plans for nutrition-related activities
- ii. Statement of appropriations, allotments, obligations, disbursements, and balances (SAAODB) or Financial Accountability Report No. 1 (FAR-1)
- iii. Registry of Allotments, Obligations and Disbursements (RAOD) for Personnel Services, Maintenance and Other Operating Expenses (MOOE), Capital Outlay (CO), and Financial Expenses (FE) by line-item transactions/particulars

We were able to acquire program plans from the DOH Women and Men's Health Development Division (WMHDD) and Children's Health Development Division (CHDD) as of the writing of this report. We relied on **SAAODBs for the rest of the agencies**.

We abstracted the following variables using the categories as defined by the DBM [4]:

- 1. Name of Agency
- 2. Year
- 3. Type of Appropriation (current, continuing, or unprogrammed)
- 4. Program / Activities / Projects (P/A/P) line-item activities, projects, and programs
- 5. Sub-Programs refers to the line-item sub-programs of each P/A/P
- 6. Expense Class
- 7. Personnel Services (PS) payment of salaries, wages, and other compensation
- 8. Maintenance and Other Operating Expense (MOOE) expenses to support operations such as supplies, transportation, utilities (water, power, etc.)
- 9. Capital Outlay (CO) expense class for the purchase of goods and services, the benefits of which extend beyond the fiscal year and add to government assets
- 10. Financial Expense (FE) management supervision/trusteeship fees, interest expenses, guarantee fees, bank charges, commitment fees and other financial charges incurred in owning or borrowing an asset property.
- 11. Value type
- 12. Allotment amount authorized by DBM permitting the agency to commit/incur obligations and/or pay out funds
- 13. Obligation incurred liabilities that NGAs have committed to pay in the future as authorized under the General Appropriations Act (GAA)
- 14. Disbursement settlement/liquidation/payment of an obligation incurred in the current or prior years, involving cash or non-cash transactions
- 15. Value (in Millions)

Classifying Nutrition Interventions

We classified or tagged relevant expenditures based on three typologies:

- i. In general, "**nutrition specific**" interventions address **immediate** determinants of nutritional status (e.g., food and micronutrient intake, feeding practices).
- ii. A "nutrition sensitive" intervention addresses intergenerational (e.g., maternal, neonatal, and child health) and social causes of malnutrition. They are also largely beneficial to the most vulnerable population particularly children and women. They target broad issues related to food security, hygiene and sanitation, general health care access, reproductive health, maternal education and empowerment, agriculture, and social protection.
- iii. "Enabling" interventions encompass back-end technical support for nutrition specific interventions. These include advocacy to secure financial/political support,

technical support (e.g., management, research, monitoring, policy), and capacity building of LGUs.

Table 2 to Table 4 summarize the *a priori* list of intervention domains used to tag and disaggregate nutrition specific, sensitive, and enabling interventions. This was developed using frameworks from the Philippine Plan of Action for Nutrition 2017-2022 and literature [5, 6].

Table 2. List of nutrition specific interventions

Domain	Interventions
1. Micronutrient supplementation	Vitamin A, iron, folic acid, zinc Multiple micronutrient powder
2. Infant and Young Child Feeding	Breastfeeding, appropriate complementary feeding Dietary diversification in young children
3. Integrated Management of Acute Malnutrition	Therapeutic foods (e.g., RUTF and RUSF) provision Enhancement of facilities for provision of PIMAM services
4. Supplementary feeding	For 6-23 months, 24-59 months, school children Food plants for producing supplementary foods
5. Mandatory Food Fortification	Iodine in salt, Iron in rice, Iron and vitamin A in flour, vitamin A in cooking oil or sugar Technology development, regulation and monitoring, promotion
6. Nutrition interventions in emergencies	Capacity building for mainstreaming nutrition in emergencies Intervention package for malnutrition and support for IYCF
7. Overweight/Obesity Management and Prevention	Weight management interventions Promotion of healthy lifestyle (e.g., childhood obesity) Healthy food environment
8. Nutrition Promotion for Behavior Change	Mass and social media campaigns, events, and fora Community-based nutrition programs

Table 3. List of nutrition sensitive interventions

Domain	Interventions
1. Maternal and neonatal health	 Antenatal care, facility-based delivery, postnatal care Essential Intrapartum and Newborn care (EINC)
2. Disease prevention and management	 Expanded Program on Immunization Integrated management of childhood illnesses (IMCI) - malaria, diarrhea, acute respiratory infections, measles, helminthiases
3. Family Planning and Responsible Parenting	 Provision of FP commodities (short-acting and long-acting) Counselling, information, community-based demand generation
4. Women's Empowerment and child protection	 Maternal education, maternity protection in the workplace Reduced gender discrimination Violence against women and children
5. Early Childhood Care and Development (ECCD)	 Responsive caregiving - training parents and caregivers Early childhood education and learning (0 to 3 years)
6. Oral health	Oral examination, prophylaxis, hygiene education
7. Water and Sanitation (Environment)	 Access to safe and improved drinking water and sanitation Handwashing and food safety
8. Social safety nets	 Transfers of cash, food, or in-kind (conditional or unconditional) Poverty reduction, livelihood Programs

• /	Increased food production (e.g. seed buffer stocking) Community mechanization, equipment, and facilities Availability, access, and use of local foods for women/children
10. Access to health care services	Social health insurance Primary health care facilities
11. Humanitarian Relief and Emergency Fund	Quick response and calamity fund Health emergency response

Table 4. List of enabling support for nutrition specific interventions

Domain	Interventions
1. Public development for food and nutrition	 Securing policy support for improving nutrition (esp. legislative) Public advocacy for improved support for nutrition
2. Strengthened management support to PPAN 2017-2022	 Nutrition policy, plans and program formulation Research and monitoring (e.g. FIES, NNS) Regulation (e.g. food, drugs, commodities for nutrition)
3. Mobilization of NGAs and LGU for nutrition outcomes	 Local health systems development and assistance Subregional NNC networks Leadership capacity building, training, and incentives NGA grants for local nutrition-related projects (e.g. PAMANA, KALAHI-CIDDS, bottom up budgeting)

Budget Execution Process

Figure 1 summarizes the Budget Execution Process of NGAs [7]. For this PER, actual spending of NGAs is defined as the disbursement of cash or non-cash transactions to pay for goods, services, or activities performed. To get the budget execution efficiency (% absorption), the ratio of Expenditures (Disbursements) to Budget (Allotments) was used.

Figure 1. Budget Execution Process



For this PER, the most granular descriptions of programs or expenditures were reviewed first, one-by-one, to create intervention tags. This was important to standardize intervention names and allow aggregation across NGAs and time through keywords, especially since there were changes in the naming or report structure in different years. The interventions are then categorized in their appropriate domains and linked to the overall classification (i.e. specific, sensitive, enabling).

We present unweighted expenditures in this report. This means that nutrition sensitive and total nutrition-related expenditures at the central level are overestimated. Moreover, these data do not include subnational allocations or nutrition expenditures to regions since this level of granularity was not available in the SAOOBD.

III. Key Findings

A. International and National Expenditures for Nutrition (Unweighted)

International aid (including loans) for nutrition to the Philippines was one of the lowest among countries in South and Southeast Asia with high stunting prevalence (Table 5). Total international aid from 2014-2018 totaled only US\$ 3.7 million or US\$ 3 cents per capita. In comparison, Indonesia, which has similar stunting prevalence and a higher GDP per capita than the Philippines, received US\$ 92 million or US\$ 34 cents per capita.

Table 5. Basic Nutrition Official Development Assistance, 2014-2018 (US\$)

	GDP per Capita (2018; current \$)	Under-5 Stunting (2018)	Total Nutrition ODA (millions)	Nutrition ODA per capita
Lao PDR	2542	33	59	8.17
Cambodia	1512	32	30	1.82
Bangladesh	1698	31	158	0.97
Pakistan	1482	38	130	0.6
Indonesia	3893	31	92	0.34
Myanmar	1418	29	8.1	0.15
India	2005	35	165	0.12
Philippines	3252	30	3.7	0.03
Thailand	7295	11	0.2	0
Vietnam	2567	24	5.1	0
China	9977	8	2.2	0

Source: Author's analysis of OECD statistics and World Bank Development Indicators

Among included NGAs, cumulative nutrition-related expenditures were estimated to be PHP 492.7 billion for 2017 to 2019 (Table 6). This is equivalent to approximately an average annual per capita of PHP 1,554.34, 0.95% share of gross domestic product (GDP), and 7.90% share of total government expenditures for the same period. The Philippine's national nutrition expenditure (% of GDP) seems to be comparable to other low-and middle-income countries (1.19% of GDP for countries included in the database) as seen in Figure 2.²

Table 6. National Government Expenditures for Nutrition-related Activities, 2017-2019

	_		Average Annual	Share
	Expenditure (PHP Billions)	Share of GDP*	Per Capita (PHP)	Government Expenditure**
Total Nutrition*	492.7	0.95%	1,554.34	7.9%
Specific	19.06	0.04%	60.13	0.3%
Sensitive	469.5	0.91%	1,481.05	7.5%
Enabling	4.173	0.01%	13.16	0.1%

Note: No data for BFAR (2017), DAR (2018), DENR (2019)

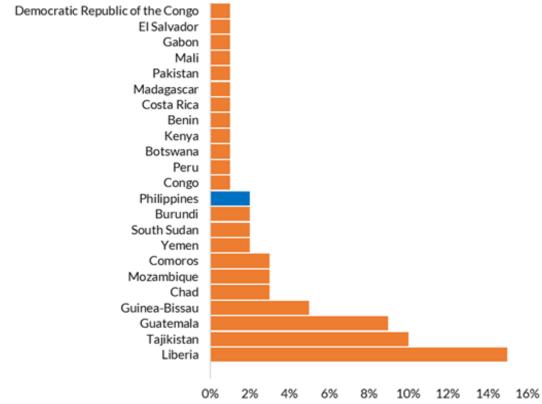
Source: Author's calculations using data from NGA SAAOBDs from 2017 to 2019

² Countries included in the analyses were only those that submitted data to the SUN investment database. As such, this comparison should be taken with caution; It only serves to give an idea of the spending in other countries. It does not give an evaluation of whether national expenditure is sufficient.

^{*} Sum of nutrition expenditures from 2017-2019 over the sum of Philippine GDP from 2017- 2019

^{**} Denominator is the sum of nutrition and non-nutrition expenditures

Figure 2. National nutrition expenditures as share of country GDP



Source: Author's analysis of the SUN database and World Bank Development Indicators

Table 7. Nutrition-related Expenditures (PHP millions) by Year and Expense Class

	2017		2018		2019	
	Expenses	% of Total	Expenses	% of Total	Expenses	% of Total
Total Nutrition	161,639	100	168,069	9 100	163,019	100
Specific	5,324	3.3	8,126	5.0	5,611	3.64
PS	283.9	0.2	13.05	0.01	13.09	0.01
MOOE	5,040	3.1	8,083	5.0	5,598	3.43
CO	-	•	29.63	0.02	0.04	< 0.01
Sensitive	155,114	96.8	158,474	97.62	155,904	95.64
PS	11,947	7.5	9,033	5.56	16,548	10.2
MOOE	135,260	84.4	133,468	82.22	130,623	80.1
CO	7,328	4.6	15,686	9.66	8,615	5.28
FinExp	579.7	0.36	287.1	0.18	118.6	0.07
Enabling	1,200	0.75	1,469	0.91	1,503	0.92
PS	264.4	0.16	268.8	0.17	297.7	0.18
MOOE	916.9	0.57	1,194	0.74	1,176	0.72
CO	18.69	0.01	6.970	< 0.01	29.09	0.02

PS – personnel services; MOOE - Maintenance and Other Operating Expenses; CO – Capital Outlay.

Source: Author's calculations using data from NGA SAAOBDs from 2017 to 2019

*No data for BFAR (2017), DAR (2018), DENR (2019)

A.1 National Expenditures for Nutrition by Typology

Majority of NGA expenditures were for nutrition sensitive activities (95.28%) followed by specific activities (3.87%), with the least for enabling interventions (0.85%). Over the three years, total nutrition-related expenditure and the ratio intervention types was steady (Table 7). Enabling interventions have experienced slight increases from PHP 1.2 billion in 2017, to 1.5 billion 2018 and 2019. Annually, nutrition-related expenditures were 80-84% MOOE and 5%-10% PS (Table 7). In total for the three years, MOOE was 98% of nutrition specific expenditures, 85% of nutrition sensitive expenditures, and 73% of enabling interventions. PS was largest for enabling interventions at 24% of expenses in this category.

Table 8 shows that in terms of share of agency-specific expenditure for nutrition, the **DSWD** accounted for the largest shssare at 59.6% or PHP 293.5 billion. Around PHP 8.49 billion was spent on nutrition specific interventions such as the supplementary feeding program (8.36 billion) and Bangsamoro Umpungan sa Nutrisyon Program (132 million), while PHP 278.6 billion was spent for social protection services (nutrition sensitive) including the Pantawid Pamilyang Pilipino Program among others.

Table 8. Nutrition-related Expenditures (PHP millions) by national agency, 2017-2019

	Specific	Sensitive	Enabling	NGA Total	Share of Total
Total Nutrition	19,062	469,493	4,173	492,727	100%
DSWD	8,497	285,025		293,521	59.6%
DA		53,206		53,206	10.8%
DOH**		50,426		50,426	10.2%
PhilHealth***		39,518		39,518	8.0%
DAR		12,702		12,702	2.6%
DOLE		12,508		12,508	2.5%
DEPED	10,418	1,160		11,578	2.4%
BFAR		6,880		6,880	1.4%
DENR		3,591		3,591	<1%
DILG		2,465		2,465	<1%
PCHRD			1,740	1,740	<1%
NNC	146.3	402.8	643.9	1,193	<1%
PopCom		933.3		933.3	<1%
FNRI			773.4	773.4	<1%
NEDA			517.0	517.0	<1%
NCIP		501.9		501.9	<1%
PSA			498.5	498.5	<1%
NAPC		149.4		149.4	<1%
NFA		24.10		24.10	<1%

Source: author's calculations using data from NGA SAAOBDs from 2017 to 2019

The second and third largest share of expenditures were the DA (10.8%) and the DOH (10.2%). Only three NGAs (DSWD, DepEd, and NNC) were identified to have nutrition specific interventions based on line-items present in the SAAODB. Expenditures for enabling

^{**} DOH caveats: Indigent premiums were excluded to avoid double counting, since we are counting PhilHealth expenditures.

^{***} Social health insurance is, in general, nutrition sensitive, but in PhilHealth, a portion of reimbursements pay for nutrition specific interventions. See section B.2. of results.

interventions were all less than 1% of total nutrition related expenditures. To note, some specific and enabling interventions were found in the DOH through an analysis of the more detailed RAOD for 2017 and 2018 (see section A.6). Moreover, while PhilHealth expenditures are nutrition sensitive (domain: access to health care services), some reimbursements are for nutrition specific interventions (see section A.5 of results).

A.2 Breakdown of Nutrition Specific Interventions

Table 9 shows the nutrition expenditures by intervention domain. Among nutrition-specific interventions, supplementary feeding had the largest expenditure at PHP 17.86 billion across 3 years. The two major programs under this intervention domain were the Supplementary Feeding Program (PHP 8.3 billion) of DSWD and School-Based Feeding Program of DepEd (PHP 9.5 billion) which ranked at number 10 amongst the top nutrition-related programs. It was also the only nutrition-specific intervention in that list (Table 10). The second largest nutrition-specific domain intervention was Overweight/Obesity Management and Prevention (PHP 919.2 million) through the Physical Fitness Program of DepEd, including the Palarong Pambansa.

Table 9. Nutrition-related Expenditures (PHP millions) by Intervention Domain and Year

Domains	2017-2019	2017	2018	2019
Total Nutrition	492,727	161,639	168,069	163,019
A. Nutrition Specific	19,062.00	5,324.00	8,126.00	5,611.00
Supplementary Feeding	17,864	5,046	7,672	5,146
Overweight/Obesity Management and Prevention	919.2	278.1	321.9	319.3
Nutrition Promotion for Behavior Change	146.3	-	80.6	65.74
Integrated Management of Acute Malnutrition	132.4	-	51.48	80.88
B. Nutrition Sensitive	469,493	155,114	158,474	155,904
Social Safety Net	294,881	96,891	97,584	100,406
Access to Healthcare	67,123	14,465	30,300	22,359
Agriculture and Food Systems	56,286	17,118	21,335	17,832
Humanitarian Relief and Emergency Response	25,494	13,997	4,541	6,956
Disease Prevention and Management	19,057	8,152	3,897	7,008
Maternal and Child Health	2,919	2,267	25	627
WASH	2,358	1,844	255.3	258.2
Family Planning and Responsible Parenting	933	255	325.5	353.2
Early Childhood Care and Development	402.8	115.6	209.4	77.81
Oral Health	22.3	-	-	22.3
Women's Empowerment and Child Protection	16.36	10.36	1.63	4.37
C. Enabling	4,173	1,200.00	1,469.50	1,503.10
Strengthened management support to PPAN 2017-2022	3,610	958.5	1,294.80	1,356.60
Mobilization of NGAs and LGU for nutrition outcomes	483.6	162.4	174.7	146.5
Public development for food and nutrition	79.06	79.06	-	-

Source: Author's calculations using data from NGA SAAOBDs from 2017-2019

⁻ No expenditures identifiable for this category in the agency SAOOBDs.

The NNC spent 146 million for nutrition promotion for behavior change interventions through its Promotion of Good Nutrition Program which decreased (PHP 80.6 to 65.74 billion) from 2018 to 2019. Meanwhile, the Integrated Management of Acute Malnutrition intervention domain increased from 2018 to 2019 (0.6% to 1.4% of nutrition specific interventions) at PHP 132.4 million. This was mostly driven by expenditures for the Bangsamoro Umpungan sa Nutrisyon (Bangun) Program. It was a program by DSWD that aimed to reduce vulnerabilities of children from hunger and malnutrition in the ARMM region.

A.3 Breakdown of Nutrition Sensitive Interventions

Social safety nets accounted for the largest share (59%) of 62% of all nutrition-sensitive related expenditure from 2017-2019 (Table 10). These social safety net programs included conditional cash transfer projects, assistance to victims of natural calamities, and poverty reduction programs, among others. The biggest social safety net program was the Pantawid Pamilyang Pilipino Program (4Ps) of DSWD, which contributed to 79% of all social safety net expenditures (PHP 233 billion). It is also the top nutrition-related intervention by expenditure (Table 10). It is followed by DAR's Agrarian reform program at 12.7 billion and DOLE's employment and livelihood programs at 12.4 billion.

Access to healthcare interventions was the 2nd largest nutrition-sensitive intervention (PHP 67 billion). It doubled from 2017 to 2018 due to the increase in expenditure for Human Resources for Health (HRH) Program of the DOH as well as the Health Facilities Enhancement Program (HFEP). Expenditures from the HRH program increased from 764 million in 2017 to 7.2 billion in 2018 while HFEP expenditures increased from PHP 578 million to 8.4 billion during the same period. Both programs were amongst the top 10 interventions as seen in Table 10.

However, during the same years (2017-2018)—expenditures for **Disease Prevention and Management**, a nutrition-sensitive intervention, decreased by half from PHP 8 to 4 billion. Specifically, the expenditures for the National Immunization Program decreased from PHP 6.6 to 1.2 billion and the Infectious Disease Program from PHP 1 billion to PHP 242 million. Maternal and Child Health expenditures under the Family Health Sub-program of DOH sharply declined from PHP 2.2 billion to PHP 25 million (2017-2018) but since then increased to PHP 627 million in 2019. Even though there was a decrease in expenses for the National Immunization Program, it was still the 9th largest nutrition-expense by programs.

Table 10. Top 10 nutrition-related programs of national government agencies, 2017-2019

#	NGA	Programs	Type	Expenses (Mil)	Share of Total
1	DSWD	Pantawid Pamilya Pilipino Program	Sensitive	233,285	59.7%
2	PhilHealth	National Health Insurance Program	Sensitive	39,518	10.1%
3	DA	National Programs of the DA	Sensitive	33,022	8.5%
4	Multi-Agency	Quick Response Fund	Sensitive	15,048	3.9%
5	DOH	Human Resource for Health	Sensitive	13,337	3.4%
6	DSWD	Social Protective Services for individuals and families in difficulty circumstances	Sensitive	12,692	3.2%
7	DA, DAR	Agrarian Reform and Land Distribution Program	Sensitive	11,962	3.1%
8	DOH	Health Facilities Enhancement Program	Sensitive	11,292	2.9%
9	DOH	National Immunization Program	Sensitive	11,113	2.8%
10	DepEd	School-Based Feeding Program	Specific	9,499	2.4%

Agriculture and Food Systems was the 3rd largest contributor to nutrition-sensitive expenses (PHP 56.2 billion). The national programs of DA for rice, corn, livestock and high-value crops contributed to 59% of all agriculture and food systems expenses. It was also the 3rd biggest intervention expense by program (PHP 33.02 billion).

Humanitarian Relief and Emergency Response (PHP 25 billion) interventions included Quick Response Fund (PHP 15 billion) and other calamity funds. These are funds appropriated under the General Appropriations Act (GAA) and allocated to various agencies to cover for aid, relief, and rehabilitation of services and communities affected by calamities [8]. They contributed 2.6% of total nutrition-related expenditures.

Expenditure for WASH programs also declined significantly from 2017 to 2018 but almost remained the same from 2018 to 2019. The Water Supply Program (PHP 1.6 billion) of DILG was one of the main programs under WASH that was present in 2017 but did not incur any expenses in 2018.

Family Planning and Responsible Parenting (PHP 933 million) expenses remained steady across 3 years. However, a caveat of this domain was that it only included the Population Commission's reproductive health and population programs. This did not include other family planning and responsible parenting interventions of DOH as the SAOODB did not provide disaggregation to distinguish FP expenses from other programs (see Section A.6).

Early Childhood Care and Development expenses were incurred by NNC for the First 1000 Days Program (PHP 402 million). The bottom 2 interventions are for Oral Health which included the Dental Program of DepEd (PHP 22.3 million) and Women's Empowerment and Child Protection (PHP 16.36 million) composed of DepEd's child protection program (PHP 6 million) and Department of Agrarian Reform's support services for rural women (PHP 10 million).

A.4 Breakdown of Enabling Interventions

Expenses for enabling interventions increased across the years. Of the PHP 4.1 billion, 42% can be attributed to research programs by PCHRD (PHP 1.7 billion). Followed by nutrition research of FNRI PHP 773 million. The third biggest enabling intervention amounts to PHP 644 million and is divided across 3 major programs of NNC, the largest of which was the assistance to local and national nutrition programs at PHP 483.6 million. It is followed by NEDA which contributed PHP 517 million and PSA at PHP 498 million.

A.5 Nutrition-related PhilHealth Claims and Reimbursements for 2017-2019

The following section presents disaggregated PhilHealth expenditures based on an analysis of claims data tagged with ICD-10 (i.e., all case rates) and procedure (i.e. RVS) codes. See the Appendix for a listing of benefit codes and their classification tags for type of intervention (specific/sensitive) and domain. To note, aside from long acting and permanent contraception and maternal/newborn benefits, procedure codes were tagged as non-nutrition related since they do not describe which diseases they treat. Moreover, this analysis only looked at reimbursements for healthcare services; we did not account for administrative costs or expenses for enabling interventions like those incurred in the process of developing benefit policies for nutrition-related interventions.

From 2017 to 2019, 23.1% of PhilHealth claims and 12.7% of reimbursements were nutrition-related (Table 11). Compared to 2017 (2.37 million; PHP 12.53 billion), nutrition-related claims increased in 2018 (2.79 million; PHP 14.49 billion), then decreased in 2019 (2.26 million; PHP 12.49 billion).

Table 11. PhilHealth claims (millions) and reimbursements (billions), 2017-2019

	Total PhilHealth claims			Nutrition-related claims				
Year	Year Number of claims Reimbursement		Number of claims	% of Total claims	Reimbursement	% of Total Reimbursement		
2017	10.1	99.43	2.37	23.5	12.53	12.6		
2018	11.9	114.56	2.79	23.5	14.49	12.7		
2019	7.42	97.39	2.26	22.4	12.49	12.8		
All years	32.1	311.38	7.42	23.1	39.52	12.7		

Source: Author's calculations using PhilHealth claims data from 2017 to 2019

Nutrition specific claims accounted for less than 1% (PHP 312.7 million out of PHP 39.52 billion) of nutrition-related reimbursements from 2017 to 2019 (Table 12). Nutrition specific reimbursements were for the treatment of malnutrition, micronutrient deficiencies, and problems with IYCF feeding. Claims for the malnutrition, totaling PHP 181.3 million, made up more than half of the nutrition specific reimbursements for this three-year period. Reimbursements for micronutrient deficiencies followed at PHP 120.0 million, with treatment for nutritional anemias accounting for PHP 105.1 million. Lastly, claims for treatment for conditions caused by inappropriate IYCF totaled PHP 11.4 million. The following made up the majority of the IYCF claims: slow feeding (PHP 4.2 million), unspecified problems (PHP 3.17 million), dehydration (PHP 1.78 million), and regurgitation/rumination (PHP 1.78 million).

Table 12. Nutrition-related PhilHealth claims, number and amount (millions) claims

	2017-2019			2017		_	2018			2019		
Domains	Count	Amount	%Total Amount	Count	Amount	% Total Amount	Count	Amount	% Total Amount	Count	Amount	% Total Amount
Total Nutrition	7,416,764	39,519	100	2,367,575	12,534	100	2,791,260	14,488	100	2,257,929	12,497	100
A. Nutrition Specific	29,611	312.7	0.79	9,432	100.6	0.80	11,698	122.6	0.85	8,481	89.47	0.72
Malnutrition - treatment (e.g. kwashiorkor, marasmus, malnutrition- related diabetes)	16,431	181.3	0.46	5,415	60.5	0.48	6,260	68.5	0.47	4,756	52.3	0.42
Micronutrient deficiencies (e.g. vitamins, iron, zinc)	12,039	119.9	0.30	3,738	37.3	0.30	4,982	49.7	0.34	3,319	33.0	0.26
Infant and young child feeding problems	1,141	11.4	0.03	279	2.76	0.02	456	4.51	0.03	406	4.17	0.03
B. Nutrition Sensitive	7,387,153	39,206	99.21	2,358,143	12,433	99.2	2,779,562	14,365	99.2	2,249,448	12,408	99.28
Maternal health (e.g. antenatal, delivery, postpartum, comorbidities, complications)	2,737,931	17,344	43.89	898,155	5,735	45.76	981,192	6,242	43.09	858,584	5,367	42.94
Neonatal health (e.g. postnatal; newborn complications and infections; congenital disorders of GI tract; metabolic disorders)	3,474,574	15,379	38.91	1,069,129	4,541	36.23	1,344,849	5,635	38.90	1,060,596	5,203	41.63
Family planning (e.g. implant, vasectomy, ligation)	59,713	182.5	0.46	17,557	48.2	0.38	26,328	75.6	0.52	15,828	58.7	0.47
Disease management** (e.g. malaria, acute gastroenteritis, helminthiases)	1,109,705	6,273	15.87	371,758	2,101	16.76	425,150	2,401	16.57	312,797	1,771	14.17
Oral health (e.g. congenital malformations of oral cavity, dental disorders)	5,230	26.7	0.07	1,544	7.82	0.06	2,043	10.5	0.07	1,643	8.34	0.07

^{* 2019} data on is incomplete for RVS reimbursements, data is only for cities.

** Currently excludes claims for dengue and respiratory tract infections, because we do not have data on age distribution of claims.

The nutrition sensitive reimbursements that comprised 99.2% (PHP 39.21 billion) of all claims from 2017 to 2019 were from five intervention domains (Table 13). Maternal health had the highest total reimbursements at PHP 17.34 billion. The normal spontaneous delivery package (PHP 7.61 billion), maternal care package (PHP 7.46 billion), and treatment of maternal comorbidities (PHP 1.57 billion) contributed to the bulk of maternal care benefit claims. Next, reimbursements for neonatal health were at PHP 15.4 billion for 2017 to 2019. The top neonatal health claims were for the newborn care package (PHP 5.10 billion), newborn sepsis (PHP 3.37 billion), complications of low birthweight/preterm (PHP 2.31 billion), neonates affected by maternal factors (PHP 1.20 billion), perinatal infections (PHP 1.30 billion), and pulmonary complications (PHP 1.13 billion). Third, disease management had PHP 6.27 billion in claims, with acute gastroenteritis (PHP 5.75 billion), amoebic dysentery (PHP 467.9 million), and helminthiases (PHP 55.2 million) contributing the most. We have not yet included claims for dengue and respiratory tract infections since we do not have age-disaggregated claims data. Fifth, reimbursements for long acting and permanent contraception under the family planning totaled PHP 182.5 million while oral health totaled PHP 26.7 million.

In general, total reimbursements for all intervention domains increased from 2017 to 2018, then decreased from 2018 to 2019 to levels slightly lower than those in 2017. An exception to this trend were claims for IYCF problems which increased from PHP 2.76 billion in 2017 to PHP 4.51 billion in 2018 and PHP 4.17 billion in 2019. Annually, the top three nutrition-related reimbursements for this period were consistently for maternal health (43-45% of total reimbursements), neonatal health (36-40%), and disease management (14-17%). Similarly, fourth and fifth place for annual reimbursements were claims for the treatment of malnutrition (0.42-0.48%) and family planning procedures (0.38-0.52%).

A.6 DOH Central Office Expenditures for select Programs for 2017 and 2018

Here we present a finer breakdown of the obligations and expenditures for the Disease Prevention and Control Bureau's (DPCB) Women and Men's Health Development Division (WMHDD) and Children's Health Development Division (CHDD). Expenditures for these two divisions are listed in DOH SAAOBDs as **three programs**: (1) **Family Health**, **Nutrition and Responsible Parenting**, (2) Expanded Program on **Immunization (EPI)**, and (3) **Public Health Management** which was created in 2018 to consolidate the soft components of all DPCB programs. Estimates here were calculated using the RAOD for 2017 and 2018 as provided by the DOH accounting department (March 2020). The RAOD has descriptions of line-item transactions that allows tagging based on descriptions of the transactions.

In these three programs, PHP 11.05 billion and PHP 10.5 billion pesos were obligated/allocated to nutrition-related activities for 2017 and 2018 (Table 13). This is equivalent to 11.6% (of PHP 95.27 billion) and 9.9% (of PHP 106.1 billion) of DOH's approved budget for 2017 and 2018, respectively. The proportion of obligated funds disbursed was 82% in 2017 and 93% in 2018. The bulk of expenditures were for nutrition sensitive interventions (2017: 87.8%, 2018: 84.5%), followed by nutrition specific interventions (2017: 12.1%, 2018: 14.8%), and then enabling interventions (2017 and 2018: <1%).

Table 13. Nutrition-related expenditures of the DOH*, number and amount (millions) claims

	2017**			2018***		
Domains	Obligated	Disbursed	% of Disbursed	Obligated	Disbursed	% of Disbursed
Total Nutrition	11,048	9,350	100	10,493	9,760	100
A. Nutrition Specific	1,650	1,134	12.13	1,398	1,445	14.81
Micronutrient supplementation (e.g. micronutrient powder, zinc, vitamin A, iron, calcium; supply chain)	1,114	967.5	10.35	470.5	474.5	4.86
Infant and young child feeding (i.e. IEC materials for breastfeeding)	0.73	-	-	-	-	-
Management of acute malnutrition (e.g. therapeutic foods, supply chain)	504.1	151.4	1.62	858.8	924.8	9.48
Nutrition interventions in emergencies (e.g. flipcharts for barangay health workers)	0.24	-	-	-	-	-
Nutrition promotion for behavior change (i.e. nutrition caravans)	2.87	2.87	0.03	-	-	-
Overhead	28.4	12.3	0.13	69.0	46.0	0.47
B. Nutrition Sensitive	9,388	8,212	87.83	9,023	8,245	84.47
Maternal and neonatal health (e.g. medicines, birthing kits trainings)	310.4	80.4	0.86	42.3	39.6	0.41
Disease prevention and management (e.g. IMCI, EPI, helminthiases)	8,154	7,767	83.07	7,902	7,612	77.99
Family planning and responsible parenthood	325.2	48.5	0.52	325.0	271.0	2.78
Women's Empowerment and child protection (e.g. guidelines, trainings)	0.92	0.91	0.01	0.23	0.19	0.00
Oral health (e.g. dental supplies and logistics, research, training)	429.7	225.3	2.41	303.7	55.0	0.56
Primary care equipment (e.g. microtoise, weighing scale, thermometer)	5.81	1.05	0.01	4.68	4.68	0.05
Overhead	161.5	89.4	0.96	445.2	262.4	2.69
C. Enabling	9.44	3.57	0.04	71.7	70.3	0.72
Public development for nutrition	-	_	_	2.31	2.31	0.02
PPAN management support (e.g. NNS)	6.12	0.46	0.00	63.53	63.49	0.65
Mobilization of LGUs/NGAs (e.g. trainings for IYCF, PIMAM, WIFA; workshops for policy formulation)	3.16	3.07	0.03	2.30	2.23	0.02
Overhead	0.16	0.04	0.00	3.54	2.24	0.02

^{*}Program RAODMO data only includes: NIP, FHNR, and PH Management (created in 2018 for DPCB soft components).

^{**} Includes funds carried over from 2016 under "Continuing Appropriations" (CONAP).

^{***} Includes funds put under CONAP for 2019, but not all may have not been disbursed as of date of receipt of the financial data (March 2020).

⁻ No expenditures recorded in the RAOD.

Nutrition specific disbursements totaled PHP 1.13 billion (1.2% of DOH budget) for 2017 and PHP 1.40 billion (1.3 % of DOH budget) for 2018. Majority of the expenses were supplies for micronutrient supplementation (2017: 968 million, 2018: 474 million) and the integrated management of acute malnutrition (2017: 151.4 million, 2018: 924.8 million). Micronutrient supplement supplies were mostly for calcium carbonate (2017: PHP 416M), micronutrient powder (2017: PHP 302 million), and iron (2017: PHP 250 million, 2018: PHP 404 million). Supplies for acute malnutrition were for therapeutic foods such as lipid based nutrient supplements and ready-to-use supplementary foods (RUSF). The low proportion of allocated funds disbursed (30%) for therapeutic foods in 2017 was for RUSF; RUSF was allotted PHP 339 million in 2017 with no record of disbursement in the RAOD. A nutrition caravan was conducted in 2017 at a cost of PHP 2.87 million. Meanwhile, allotments were made for information materials for breastfeeding (PHP 0.73 million) and flip charts for nutrition in emergencies (PHP 0.24 million), but there were no records of disbursements.

Nutrition sensitive expenses were PHP 8.21 billion (8.6% of DOH budget) in 2017 and PHP 9.02 billion (8.5% of DOH budget) in 2018. The disease prevention and management domain constituted the bulk (90%) of nutrition sensitive expenses. Majority of the disease prevention expenses (80%) were for EPI vaccines and cold chain logistics services (2017: PHP 7.71 billion, 2018: PHP 7.57 billion). Moreover, PHP 78.2 million in operational costs were downloaded to regional offices for measles and polio supplemental immunization in 2017. Other fund transfers from DOH to regional offices include monitoring and evaluation for IMCI (PHP 26 million), soil transmitted helminthiases program (PHP 15.45), and schistosomiasis program (PHP 11.6 million).

Dental health was the next top nutrition sensitive expense, with PHP 283.4 million for supplies (e.g., fluoride, varnish, ionomer cement, sealant kits) and around PHP 200 thousand for program reviews and capacity building for primary care dentists. **Maternal and neonatal health supplies** (e.g., birthing kits) **and drugs** (e.g. oxytocin, antibiotics) followed at PHP 80.4 million (2017) and PHP 39.6 million (2018). Soft components for maternal and neonatal health accumulated to PHP 3.17 million for training in newborn screening, essential maternal and newborn care, basic emergency obstetric and newborn care, and newborn research agenda in hospitals. **Family planning** expenses were for short-acting contraception and injectables. Women's empowerment and child protection (PHP 1 million) were all for soft components (e.g., guidelines development, training in hospitals for the identification and referral of abuse cases).

Expenses for enabling interventions comprised only 0.04% (PHP 3.57 million; <0.01% of DOH budget) and 0.72% (PHP 71.5 million; 0.07% of DOH budget) of total disbursements in 2017 and 2018. PPAN management support came in the form of transfer of funds to DOST-FNRI in 2018 for the national nutrition survey (PHP 57.3 million) and research for implementation of ECCD in Pangasinan (PHP 5.62 million); Around PHP 0.95 million were for workshops to develop guidelines on lactation management, IYCF, PIMAM, and weekly iron folic acid (WIFA) supplementation. Mobilization of LGUs and NGAs, amounting to PHP 5.26 million for both years, consisted of various capacity building for breastfeeding, nutrition policies for target populations (i.e., mothers, children, adolescents), IYCF, PIMAM, and WIFA. Finally, the only cost for public development for nutrition was expenses for an ASEAN workshop in 2018 (PHP 2.31 million).

Overall, the national-level expenditures for the three DOH programs were mostly for supplies and medicines, with only around PHP 359.8 million pesos in soft component expenses (e.g. mass media, research, training, workshops for crafting guidelines, events). To recap, the top three expenses were (1) EPI vaccines under disease prevention and control; (2) micronutrient supplements; and (3) therapeutic foods for PIMAM.³

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³ This total for enabling activities and soft components only reflect those of the three programs at the DOH central office. There are likely other enabling expenses in (1) regional offices in charge of directly supporting LGUs and, the (2) NNC as the agency responsible for national policy making for nutrition.

B. Budget Execution Efficiency (% Absorption)

To determine how efficiently NGAs utilize their given resources, estimated budget execution efficiency (BEE) as the proportion of allotments (budget) disbursed (expenditure).

For all nutrition expenditures, the absorption remained steady from 2017-2019 at 73% (Table 14), but there was variation in efficiency by type of intervention. BEE was highest for enabling interventions, followed by nutrition specific interventions, and then sensitive interventions where allotments have increased but expenditures remained the same.

Table 14. Absorption for nutrition-related expenditures by year and intervention type

		<u>. </u>	v	
		2017	2018	2019
All Interventions				
Allotments Adjusted		212,615	235,390	222,310
Total Disbursed		161,639	168,069	163,019
Total Obligations		194,467	223,478	199,549
	Budget Execution Efficiency	76%	71%	73%
A. Specific				
Allotments Adjusted		11,708	9,195	9,189
Total Disbursed		5,324	8,126	5,611
Total Obligations		5,868	8,807	7,539
	Budget Execution Efficiency	45%	94%	91%
B. Sensitive				
Allotments Adjusted		199,520	224,635	211,470
Total Disbursed		155,114	158,474	155,904
Total Obligations		187,258	213,142	190,411
	Budget Execution Efficiency	78%	71%	74%
C. Enabling				
Allotments Adjusted		1,387.9	1,561.0	1,651.1
Total Disbursed		1,200.0	1,469.5	1,503.1
Total Obligations		1,339.8	1,528.7	1,598.8
	Budget Execution Efficiency	86%	94%	91%

Source: author's calculations using data from NGA SAAOBDs from 2017 to 2019

There were also large variations in budget efficiency across agencies (Table 15). PCHRD and NEDA were the most efficient in spending allocated budgets at 98% and 95% respectively. NNC had higher absorption for its nutrition-specific (77%) and enabling (86%) programs as compared to its nutrition-sensitive programs (50%). The domain with the highest absorption was "Strengthened management support to PPAN 2017-2022" (91%) which can be attributed to NEDA, FNRI, and PSA. The second domain with highest absorption was Mobilization of NGAs and LGU for nutrition outcomes (90%) which can be attributed to NNC's support and assistance to LGU nutrition programs (Table 15).DepEd also had moderately good absorption for nutrition specific interventions (57%), including Physical Fitness Program (71%) and School-based Feeding Program (56%), but had the lowest absorption for its nutrition sensitive interventions (24%).

^{*}No data for DENR (2019), DAR (2018), BFAR (2017)

At the bottom of the list in terms of BEE, the DOH had one of the lowest absorptions at less than 38% next to nutrition-sensitive interventions of DepEd with a ratio of 11% (Figure 3). Specific programs with the least BEE were the Maternal and Child Health Programs by DOH (24%), livelihood education and oral health programs by DepEd (1%), and Nutrition in emergency situations by DSWD (0%)

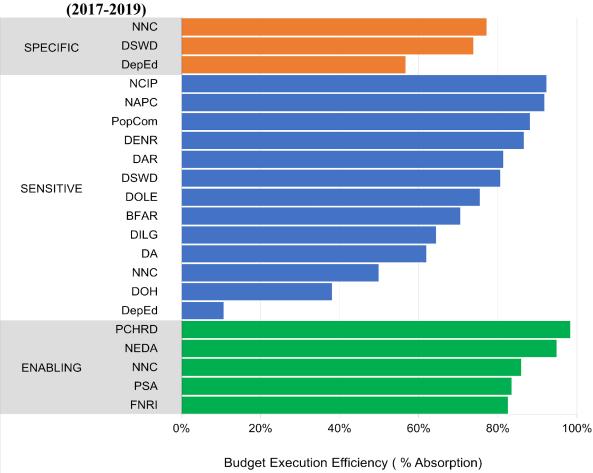


Figure 3. Budget Execution Efficiency by Agency and Type of Nutrition Intervention (2017-2019)

Source: Author's calculations using data from NGA SAAOBDs from 2017 to 2019

Table 15. Budget Execution Efficiency by Nutrition Intervention Domain (2017-2019)

		Total	BEE
Domains	Total Allotments	Disbursements	(% Absorption)
Strengthened management support to PPAN 2017-2022	3,951	3,610	91%
Mobilization of NGAs and LGU for nutrition outcomes	537.8	483.6	90%
Family Planning and Responsible Parenting	1,059	933.3	88%
Access to Healthcare	76,202	67,123	88%
Social Safety Net	362,308	294,881	81%
Nutrition Promotion for Behavior Change	189.7	146.3	77%
Overweight/Obesity Management and Prevention	1,286	919.2	71%
Public development for food and nutrition	111.3	79.06	71%
WASH	3,457	2,358	68%
Agriculture and Food Systems	86,144	56,286	65%
Supplementary Feeding	28,269	17,864	63%
Humanitarian Relief and Emergency Response	50,212	25,494	51%
Women's Empowerment and Child Protection	32.29	16.36	51%
Early Childhood Care and Development	808.1	402.8	50%
Disease Prevention and Management	40,410	19,057	47%
Integrated Management of Acute Malnutrition	342.7	132.4	39%
Maternal and Child Health	12,186	2,919	24%
Oral Health	2,807	22.30	1%
Nutrition interventions in emergencies	4.00	-	0%

^{*}PhilHealth data was excluded in this analysis

Source: Author's calculations using data from NGA SAAOBDs from 2017 to 2019

C. Assessing the Distribution of Funding across Nutrition Risk Factors

This section gives a summative evaluation of whether the investments detailed in the prior section are spent coherently across the most influential drivers of under-5 stunting. "Exemplar" countries which have driven down stunting prevalence in the past 10 years show that wholistic and simultaneous investments were necessary:

- i. Sensitive interventions **outside the health sector** (led 36-70% of reductions in stunting),
- ii. Sensitive and specific interventions within the health sector (contributed 20-64%),

An **enabling environment** that consisted of consistent high-level political and financial support, robust monitoring, and strong capacity to implement nutrition programs.

Table 16 lists the interventions and risk factors that exemplar countries addressed to achieve large reductions in stunting. These are interventions that are also known to be highly cost-effective in global literature. [9]

Table 10. Top 10 nutrition-related programs of national government agencies, 2017-2019 illustrates that we already have significant investments outside the health sector targeting the social determinants of stunting: Majority of the top investments are in poverty reduction, social safety nets, agriculture and food systems, and supplementary feeding in schools. Even in these domains, however, there are slow improvements in household sanitation and maternal education, and household food security (Table 16).

There has been a lack of investment within the health sector for risk factors we know have low or stagnating coverage over time (Table 16). Consequently, performance in indicators is uneven.

- i. Majority of DOH and PhilHealth funding has gone into improving maternal health and the availability of health care services during pregnancy and the postpartum period. This is reflected in improvements in decreases in energy and iodine deficiency in women of reproductive age and increases the coverage for antenatal care.
- ii. Despite progress in some indicators, **neglected risk factors are plentiful**: family planning, reducing adolescent fertility, micronutrient deficiencies in mothers and children, breastfeeding, appropriate infant young child feeding, and treatment of common childhood diseases like diarrhea.

Lastly, national investments for building enabling environments were negligible (0.8%). Based on the research team's inquiries with various NGAs for data, not many understand (see section D.1 for more details) the issue of childhood malnutrition and how their agencies contribute to solving this public health challenge.

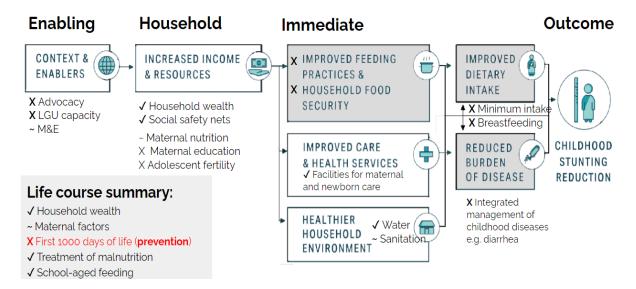
Overall, NGA expenditures for nutrition are incoherent in that they fail to account for interconnected risk factors that cause stunting. Figure 4 below shows this study's conceptual framework organized in a way that emphasizes the causal links between risk factors of malnutrition. Investment seems to be a patchwork across sectors, with each sector doing their own programs. There is also a lack of continuity in all parts of the causal chain (grey boxes): we have large investments in households and maternal health, but lack investments in child health care and factors at home which directly determine child dietary intake (i.e. maternal education, adolescent fertility). From the perspective of the life course, we have investments in households, mothers, treatment options when a child is already malnourished, and supplementary feeding after children are irreversibly stunted - but we do not have visible investments in the first 1000 days of life which is crucial to prevent stunting.

Table 16. Performance and Philippine investments in effective strategies to reduce stunting

		Coverage Indicators		Investment	
Inte	rventions	Indicator for Risk Factor Improvement?		Relative share for 2017-2019	
Sup	port and Monitoring				
1	High level political/financial support	Based on data inquiries with agen not understand how their interven	•	0.8%	
2	Granular data for decision making	child nutrition.			
Non	-health Sector, Sensitive Strategies				
3	Food security and reach marginalized sectors	% HH with food security	2015: 34% 2018: 46%	11.4%	
4	Education, especially for girls	% of Women (15-49 years) with at least secondary education	2013: 64.5% 2017: 64.0%	2.43%	
5a	Water	% HH with improved water source	2013: 96% 2017: 95%	0.52%	
5b	Sanitation and hygiene	% HH with improved sanitation	2013: 70% 2017: 76%	0.3270	
Hea	Ith Sector, Sensitive Strategies				
6	Excess Fertility	Unwanted fertility (average births per woman)	2013: 0.8 2017: 0.7	0.2%	
7	Reduce high-risk pregnancies	Adolescent fertility (births/1000 girls 15-19 y.o)	2013: 56.6 2017: 54.8	0.270	
		% Women (15-49 years) with Chronic energy deficiency	2015: 11% 2018: 8%		
		% Women (15-49 years) with Iodine deficiency	2015: 22% 2018: 11%	4.11%	
8a	Maternal nutrition and access to health care	% Pregnant women with anemia	2015: 25% 2018: 26%		
		% Lactating women who are overweight/obesity	2015: 22% 2018: 29%	0.2%	
		% Pregnant women with 4 antenatal care visits	2013: 84% 2017: 87%	13.6%	
8b	Child nutrition and access to health care	% Children 6-11 months with anemia	2015: 41% 2018: 48%	0.6%	
		% Children under-5 with diarrhea who received Zinc	2015: 5% 2018: 24%	3.9%	
Hea	Ith Sector, Specific Strategies				
9	Promoting early and exclusive breastfeeding	% Infants exclusively breastfed up to 6 months	2015: 25% 2018: 29%	-0.010/	
10	Improving Infant and Young Child Feeding (6-24 months)	% Children (6-23 months) with minimum acceptable diet	2015: 19% 2018: 13%	<0.01%	

Source: Author's analysis of NGA SAAOBD 2017-19, National Nutrition Survey (2015, 2018), and National Demographic Survey (2013, 2017). **Legend for Improvement**: Low level or Worsened, Stagnated, High level or improved significantly

Figure 4. Mapping of NGA investments among the causal factors that lead to stunting



D. Challenges on the Process and Methodology

The research team faced **several challenges** while executing the SUN methodology to produce a PER for nutrition in NGAs. In the following section, we lay out our experiences and **difficulties per step** of the process, discussing **implications on the results and things to resolve future routine PERs** under NNC's budget tracking initiatives.

D.1 Scoping and Coordinating with NGAs with Nutrition-related Activities

This step involves identifying and contacting agencies with nutrition-related activities. In this PER, we tried to be comprehensive in identifying agencies and go beyond the NGAs included in NNC's governing council.

The **two** challenges in this step were:

(1) Absence of a comprehensive list of agencies and government programs judged to have nutrition-related activities.

We initially started with interventions in the PPAN 2017-2022. We realized, however, that the PPAN, particularly for nutrition sensitive activities, was limited for the purposes of a PER or budget/expenditures tracking for the whole-of-government. Specifically, PPAN is meant to be a listing of individual programs or projects committed by NGAs; whereas a comprehensive PER necessitates a listing of the universe of nutrition-related interventions by typology (i.e. sensitive, specific, enabling) to ensure that they would be included in the analysis.

Subsequently, through a review of literature and consultation with UNICEF, DOH, and the NNC, we developed a more comprehensive list of possible nutrition-related interventions (Tables 2 to 4). This was used to judge whether NGAs should be included in the analysis. Consequently, the PER was able to include NGAs and interventions not explicitly committed to PPAN. For example, several intervention domains for nutrition sensitive activities in the global literature are not explicitly listed in the PPAN: maternal health, disease prevention and management, family planning and responsible parenthood, and social protection, among others [4, 5]. PopCom and DAR are examples of the agencies included in the PER, but who do not have formal commitments to the PPAN.

Despite this of an expanded listing of the nutrition-related intervention, judgements on what NGAs and programs to include were difficult for activities that affected nutrition (i.e. nutrition sensitive), but were designed for broader objectives beyond nutrition. Two examples are the DOH health facility enhancement program and health emergency response funds that have the primary goal of improving access to routine and emergency healthcare services, respectively. We decided to err on the side of inclusion while recognizing that an official, more specific, listing of intervention domains, activities, and their definitions must be developed based on the expertise of DOH, NNC, and the expert panel.

Implication on results: Overall, our analysis may overestimate nutrition-related activities, particularly because of nutrition sensitive interventions.

(2) Point persons in NGAs were not easily accessible or entirely knowledgeable about PPAN and nutrition-related programs in their NGAs.

Except for DOH, NNC, FNRI, and the DA, there were significant challenges in connecting with point persons for PPAN or nutrition programs in the various NGAs.

For one, NGAs not in the PPAN, as somewhat expected, had limited understanding of their role or involvement in nutrition. For example, the National Meat Inspection Service under the DA (which is part of PPAN) declined to participate or share SAOODB data because they were not aware that their mandate is nutrition sensitive.

- However, even NGAs who are part of the PPAN or NNC governing board also had these difficulties:
- Our interview with the DA representative revealed that they have a *hard time determining which activities were nutrition-related* even if their overall mandate is food security.
- For agencies, like DSWD, with *multiple programs across departments, there was no one point person* knowledgeable about all the nutrition-related activities in the NGA and who could collate all the relevant data.
- There were also issues with *fading institutional memory of nutrition programs* due to staff turnover and lack of succession planning. In the DA, the focal person who had served since 2005, is retiring. The responsibility for PPAN was transferred from the Planning and Monitoring Department to the Special Concerns office. Staff of this office expressed to us that they do not know much about PPAN nor have the documentation/data for past nutrition-related activities.
- Similarly, the Department of Trade and Industry's focal person was recently changed to someone who is a part of the Consumer Protection office and who is not knowledgeable about past nutrition activities (e.g. Diskwento Caravans conducted in regions).

<u>Implications for routine PERs:</u> The difficulties in contacting and coordinating with NGAs may reflect gaps in PPAN awareness, knowledge, and buy-in among NGAs who actually already devote significant resources for nutrition.

For methods, these challenges mean that the first bottleneck for routine PERs for nutrition is having a reliable point person who can (1) retain the institutional memory of NGAs for nutrition-related activities and (2) consolidate data across programs in different departments and administrative levels (e.g. regions).

D.2 Obtaining Financial Data

The PER requires identifying and obtaining official documents on both allocations and disbursements (i.e. money paid out).

There were **two** challenges in this step.

(1) Access to granular financial data is dependent on the permission of higher officials and administrative departments who are not familiar with nutrition programs.

NGA program managers for nutrition-related activities do not usually track the disbursements for the nutrition-related activities they list in their work financial plans (WFP). The task of recording and obligations and disbursements rely on two different administrative offices: allocations are tracked by the budget office while disbursements are tracked by the accounting office.

Agencies were unsure as to who is responsible for granting requests for financial data and those with authority to release financial data were not knowledgeable about nutrition programs. Contacting program managers would merit referral to higher offices who may have authority, but do not understand the concept of nutrition sensitive interventions. In one instance, the office of the director advised us to request from the office of the assistant secretary; and the office of the assistant secretary referred us back to the office of the director. More often, we were referred back to finance departments. In general, finance officers also did not understand why we requested data for nutrition sensitive interventions (e.g. Pantawid Pamilyang Pilipino Program).

Ideally, the budget and accounting offices should align and reconcile all obligations and disbursements. It is up to the officers to record the specific line-item disbursements in their RAODs, since this document is only internal and not submitted to the Department of Budget and Management (DBM) or Commission on Audit (COA). Rather, disbursements are recorded as part of "journal entry vouchers" (JEV) in the electronic New Government Accounting System (e-NGAS) of the DBM, which are not directly linked to the line-items in a program's detailed WFP. Thus, there is a disconnect between program manager WFP and financial data which makes it difficult to assess disbursement for line-items in WFP. Producing the detailed analysis for DOH required manual extraction of JEVs from the e-NGAs system and matching them to recorded line-items of RAODs for the three DOH programs.

Implication on results:

- We were **forced to rely on the less granular SAOODB**, downloading them from websites and encoding them ourselves **to expedite the process**. This **precludes producing detailed analyses at the** *activity-level*, which may be much more useful in informing policy or the re-allocation of resources.
- Our estimates of the **percent disbursements for DOH**, from whom we were able to acquire detailed RAOD data, **may be underestimated.** Moreover, because of the disconnect between WFP and RAODs, it is possible that we missed nutrition activities in the WFP and or disbursements made but were not recorded in the RAOD. To illustrate, the DOH disbursements for RUSF was only 30% in 2017, but their procurement monitoring report indicated a contract was awarded on 27th of December 2017 for the remaining PHP 339 million. Further validation with DOH is necessary to determine whether there were actual disbursements or not.

(2) Other data sharing barriers include: privacy issues with detailed line-item data, difficulty obtaining even SAOOBD data, and the lack of data on subnational expenses at central offices.

Some agencies, like DSWD, are reluctant to release their line-item transaction data, because it may contain sensitive information about the disbursements of NGAs. One specific reason cited was that RAODs line-items contained the name of program recipients or NGA personnel.

SAOOBD data must be posted in government websites as part of the "Transparency Seal" (Section 94 of R.A. 11465 of the (General Appropriations Act). Despite this, several agencies do not post their FAR-1 reports online. A few examples are: NMIS (2017-2019), DPWH (2017-2019), ECCD council (all years), and DENR (2019). Moreover, all these reports were in portable document format (PDF) which are difficult to analyze and decipher. Requests for missing FAR-1 reports are still pending.

Subnational data, including WFPs and disbursements, are not available at the central offices and must be requested from regional offices. This is an additional bureaucratic barrier and time lag if the data is requested.

Implications for routine PERs:

- The next major bottleneck to routine PER is overcoming data access and sharing barriers with NGAs and their finance departments to obtain encoded financial data. More extensive advocacy and education of NGA data owners on nutrition may be necessary to facilitate data sharing. This could include impressing on them the value of routinely analyzing their program financial data.
- Analysis of distributional equity of key nutrition programs is not possible with only SAAOBD data or RAOD records limited to NGA central offices.

D.3 Processing the Financial Data

Generating results that disaggregate by intervention type, domain, and activity involves tagging expenditures based on *keywords found in text descriptions*. The SUN methodology is, thus, **highly dependent on the granularity and specificity of descriptions** available in the financial files

The **three** challenges in making data analyzable and producing the results are listed below.

(1) Line-items in financial data required *post hoc* manual tagging using available descriptions for programs or transactions.

Manual tagging by going through each line-item description is highly time consuming. It must also be done by someone well versed in reading with both financial reports and nutrition interventions.

Differences in reporting structure of financial data per agency increase the complexity of the exercise. For example, in SAOOBDs, some agencies do not provide sub-programs, while others do. Some agencies also include subnational breakdowns while others do not. Changes in report templates by DBM, such as the one between 2017 and 2018, further hampered data processing efforts. This also led to renaming of programs across the years. The analyst must be cognizant and devote enough time to investigate and tag the intervention appropriately to permit analysis over time. An example is DepEd, they had a program called "Health and nutrition services" in their 2017 SAOOBD, but we deduced that the name was changed to

"Supplementary feeding" in 2018 and 2019. Moreover, because the process of tagging involves uncertainty, this also necessitates additional steps of validation with NGA program managers.

<u>Implications for routine PERs:</u> The current process, from data collection to analysis, described for this PER is not conducive to automation. We assume that this was a similar process to the NNC's PER for 2014-2016. We provide detailed, step-by-step, recommendations on how to address these challenges and facilitate routine PERs in section C.4.

(2) Without granular line-item data, nutrition specific and enabling interventions cannot not be extracted as they are hidden under programs that seem nutrition sensitive.

Several of the specific projects in the PPAN could not be identified from the SAAODB, including Diskwento Caravans and Gulayan sa Paaralan which fall under the intervention domain of Nutrition Promotion for Behavior Change (Table 2). Using the DOH "Family Health, Nutrition, and Responsible Parenting" (FHNRP) program, we were able to showcase how the granular line-item data allowed a scan of descriptions and tagging based on the exact purpose of the disbursement. We were able to dissect how much of the FHNRP program's expenses were spent on nutrition specific and enabling interventions as opposed to wholly categorizing this program as nutrition sensitive based on program name alone.

<u>Implication on results</u>: This analysis, and any future PERs based on SAAODB, underestimate expenditures nutrition specific and enabling activities.

(3) Lack of weights for nutrition sensitive interventions to account for that fact that not all spending goes towards addressing malnutrition.

The current analysis reports unweighted expenditures. Weights may be developed upon consultation with NNC, DOH, and the expert panel.

<u>Implication on results</u>: Consequently, both the unweighted analyses and the challenge (2) discussed immediately prior, means that nutrition sensitive and total nutrition-related expenditures at the central level are overestimated.

IV. Recommendations

A. Recommendations to Improve Public Expenditures for Nutrition

(1) Increase funding for enabling interventions: Intensify public advocacy, planning, monitoring, and ensure LGUs have capacity to implement interventions at scale.

Based on the challenges encountered in coordinating with agencies, NGA program managers and officials may not be fully aware of PPAN, especially for nutrition sensitive interventions. The list of nutrition-related activities in NGAs from this PER may serve as a starting point to guide which NGA departments and program officials to target for advocacy. Moreover, results of this PER may be an opportunity to help NGAs recognize that they already devote significant resources to nutrition and contribute to PPAN unknowingly. The recognition could be a platform to open talks about further strategic commitments to PPAN through existing nutrition-related programs. This will also promote stewardship of nutrition-related programs to the different sectors, making them more accountable to their targets.

To secure high-level political support, NNC and DOH may consider partnering with the NEDA and link nutrition targets to the Philippine Development Plan. Part of securing political and financial support among agencies is a clear strategic plan and a strong PPAN that is

anchored on a holistic understanding of the interrelated factors that cause stunting. On this basis, each NGA's role in nutrition should be clear and communicated to them, ensuring that multi-sectoral efforts are coordinated and address all important risk factors simultaneously. Part of this strategy should include acquiring and leveraging donor support and funding to augment resources needed for implementation of interventions.

Lastly, LGUs are the direct implementers of all NGA programs. As such, NGAs also need to spend resources advocating to LGUs and helping them organize and design local nutrition programs tailored to their contexts and that can be implemented at scale as **one integrated package** and not siloed, vertical interventions.

(2) DOH and NNC should prioritize investments in the First 1000 days of a child's life, especially interventions at home that directly impact child dietary intake.

Increased investment in health sector specific interventions during the First 1000 days such as exclusive and extended breastfeeding, infant and young child feeding (IYCF) and Integrated Management of Childhood Illnesses (IMCI) necessary to address the immediate risk factors of stunting. Furthermore, other health related interventions such as access to family planning, and micronutrient deficiencies also need additional investment.

(3) Implementation research to understand how best to deliver interventions at home.

Further research is needed to understand problems in uptake for IYCF, food security, and micronutrient interventions. Some issues include how to improve caregiver behavior for child feeding, how to increase access to care for common childhood diseases, and what support LGUs require to deliver these interventions to target populations.

B. Recommendations Establish Routine Nutrition PER or Expenditure Tracking

Both this PER for 2017-2019 and the prior NNC PER for 2014-2016 were *post hoc* exploratory analyses of secondary data. Such analyses entail significant time and effort to extract, process, and standardize administrative data. The recommendations laid out here seek to facilitate the use of administrative data for easier routine PERs.

(1) Foremost, it is critical to determine what information or results will be useful to policy- and decision makers for nutrition.

Specifically, this means what sorts of **statistics, tables, figures, and disaggregated** could be helpful in routinely informing planning and allocation of expenditures for nutrition-related activities. The **results section in this paper presented an assortment of information that serve as examples of possible PER outputs.** Results were over time and at different levels of granularity: totals, agency, by type, by expense class and by domain - with some detail on the specific activity.

The type of information needed will determine the data source, data structures, tagging efforts, and the data analyses plan. For example, if nutrition decision makers want activity level information (e.g. expenditures for calcium carbonate, vitamin A), then the SAAOBD will not suffice; transaction-level finance data from documents like the RAOD or e-NGAS journal entry vouchers are necessary. We believe that the more granular data the better, since activity level information would be extremely helpful in answering policy relevant questions like:

- What nutrition interventions are we funding?
- Which nutrition intervention domains are we lagging behind in?
- What additional interventions are needed to reach goals of reduced stunting prevalence?
- Do investments align with population needs as indicated by our epidemiologic surveillance data (e.g. results of the National Nutrition Survey)?

For this recommendation, stakeholder consultations with the primary end-users of PER information would stipulate the dummy tables/figures and the standard format of the PER report.

(2) Remove reliance on finance departments for disbursement data and the need for *post hoc* manual tagging of expenditures.

In the 2016 Workshop on Public Finance for Nutrition in Asia, the Philippines planned to work with the DBM to institute changes in administrative reporting to better tag and track nutrition expenditures [8]. This included advocating with NGAs who are part of NNC's governing to highlight nutrition-related P/A/Ps in their budgets by 2017. While the specificity of P/A/P naming in SAAOBDs did somewhat improve, it does not solve data sharing challenges, does not allow analyses at the activity level and subnational level, and still necessitates *post hoc* manual tagging. It is expected that changes to administrative systems require time, but while awaiting these changes, it **might be easier to build on existing program administrative reports to remove dependence on administrative offices for data**.

Particularly, we can **build on program WFPs and delegate disbursement tracking to nutrition program clerical staff.** WFPs are already required annually and they are detailed to the activity-level (Figure 5). Program staff need only **add a column to record disbursements**, which we assume they are privy to since they receive notice of final contracts as part of the procurement process of all these activities.

Figure 5. Sample Work Financial Plan from the Department of Health

Department DEPARTMENT OF HEALTH RO/Bureau/Office : DPCB- WOMEN, MEN AND CHILD HEALTH DEVELOPMENT DIVISIONS Calendar Year January 20, 2017 RESOURCE REQUIREMENTS TARGETS RESPONSIBLE TIME PERFORMANCE PRIORITY ACTIVITIES PER MAJOR FINAL OUTPUTS PERSON/S/ INDICATORS Q1 Q2 Q3 Q4 Physical Target ITEM / QUANTITY MFO I. POLICY, STANDARDS, GUIDELINES Policy, Guidelines Development / Review /Revision/ Finalization/writeshop/Workshop 1. Ante-natal Care Policy Implementing Guidelines P1600/day/person *45persons*3day 216,000 7 Recidoro 2 TechSupport Staff 2. AO on Achieving the Desired Family size through Sustained and draft implementing TWG Miss with selected FF Accelerated Reduction in Unmet Need for Modern FP Methods and AO on the 01-03 D. Danila Certification of free Standing Clinics P1600/day/person *30persons*2days* 3. Nutrition for Women of Reproductive Age Draft Guidelines 288,000 04 Stakeholders Consultations conducted 1 Technical Writeshop; 1 Tech L. Tagunica 288,000 4. Guidelines on the delivery of GP Package of Services for Children Q4 Draft Guidelines onsultation; 1 Stakeholders P1600/day/person*25persons*2days* 3mtg onsult'n 5. Guidelines on the weekly Iron Folic Acid Implementation for Female Draft Guidelines Stakeholders Consultation P1600/day/person*10persons*2days* 3mtgs 96.000 L. Tagunicar Adolescents Learners in Public High School conducted Z meetings with development partner, and online consultations among AHDP 6. Revision of the Adolescent Friendly Health Facility Standards by Levels of P250/person*10persons*1day*2mtgs 01-02 Regional Coordinators 7.MNCHN Policy update onducted 1,065,600 B. Dissemination Dissemination Forum on MNCHN Policies conducted MNCHN- Programs related Policy Dissemination Fora Q1 -Q3 240.000 MCHDD Star Sub-total Policy Standards, Guidelines, Development/ Dissemination

WORK AND FINANCIAL PLAN

Ideally at the start of every year, program managers (at national and regional levels) share with the NGA PPAN focal person their final WFPs (i.e. approved congressional budget allocations) in excel or csv format. NNC, as the agency in charge of nutrition budget tracking, can then compile a database of activities in all participating NGAs, formatting it as part of a standard data structure and tagging the activity's type, domain, intervention description, and target population. A simple data structure that produced the tables/graphs in the results section is given below (Figure 6). The disbursement data column can then be filled after reports from the program managers are received at the end of the year.

agency	year	office	activity description	nutri_class	nutri_domain	nutri_interventi	target population	budget	disbursed
DOH	2017	WMCHDD	Antenatal care policy implem	sensitive	maternal health	policy developm	national	₱216,000.00	
DOH	2017	WMCHDD	AO on achieving desired fami	sensitive	family planning	policy developm	national		
DOH	2017	WMCHDD	Nutrition for women of repro	enabling	PPAN support	policy developm	national	₱288,000.00	
DOH	2017	WMCHDD	Guidelines on the delivery of	sensitive	access to health se	policy developm	national	₱288,000.00	
DOH	2017	WMCHDD	Guidelines on weekly iron fol	enabling	PPAN support	policy developm	national	\$ 96,000.00	
DOH	2017	WMCHDD	Revision of adolescent friend	sensitive	adolescent health	policy developm	national		
DOH	2017	WMCHDD	MNCHN policy update	sensitive	maternal health	policy developm	national	₱177,600.00	

Figure 6. Sample Data structure based on the Department of Health's WFP in Figure 5

This means that program managers will be the only source of PER financial data - allocations and disbursements. To a great extent, this would bypass the administrative challenges described in section C.2. (obtaining granular financial data) and pre-tagging lineitems means PER results can be produced as soon as disbursement data is submitted.

(3) NNC, as the highest policy making and coordinating body on nutrition, should compile and a comprehensive list of agencies and programs judged to have nutrition-related activities.

The current report and the past NNC PER have produced a draft listing of NGAs and their nutrition-related activities. Using the Appendix as a base, the NNC could **continue building**

an electronic database by compiling the WFPs (as in recommendation #2) and reviewing NGA programs annually for interventions outside this list. The comprehensive list would then **guide** *a priori* **what NGAs and interventions should be included in PERs** as well as maintain institutional memory of nutrition activities over.

(4) Work with the Department of Budget and Management (DBM) to institutionalize nutrition budget and expenditure tagging within existing NGA and LGU accounting systems.

In the Philippines, budget tagging for gender and development programs as well as climate change programs have been institutionalized in NGAs through Joint Memorandum Circulars between the lead agency and DBM. These systems should ideally be electronic such that NGAs submit tagged budget line-items to DBM's Online Submission of Budget Proposal (OSBP) System and enter disbursements through the electronic New Government Accounting System (e-NGAS).

References

- Horton S. Opportunities for Investments in Nutrition in Low-income Asia. 1999. https://think-asia.org/handle/11540/5393. Accessed 28 Jan 2020.
- Scaling Up Nutrition. Investigating Nutrition in National Budgets: Budget Analysis for Nutrition by the SUN Movement, for the SUN Movement. 2015. http://scalingupnutrition.org/wp-content/uploads/2015/02/SUN-Budget-Analysis-Short-Synthesis-Report-SUNGG-version-EN.pdf. Accessed 22 Jan 2020.
- Budget Tracking Investing in nutrition in SUN Countries. SUN. https://scalingupnutrition.org/share-learn/planning-and-implementation/tracking-nutrition-investments/. Accessed 27 Jan 2020.
- Department of Budget and Management. Budget of Expenditures and Sources of Financing. DBM. https://www.dbm.gov.ph/index.php/dbm-publications/budget-of-expenditures-and-sources-of-financing-besf. Accessed 11 December 2020
- Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? The Lancet. 2013;382:452–77.
- Herrin AN, Abrigo MRM, Tam ZC, Ortiz DAP. Child Stunting Prevention: The Challenge of Mobilizing Local Governments for National Impact. Philipp Inst Dev Stud. 2018; Discussion Paper Series No. 2018-45. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1845.pdf. Accessed 27 Jan 2020.
- Department of Budget and Management. Calamity and Quick Response Funds. 2018. https://www.dbm.gov.ph/index.php/programs-projects/calamity-and-quick-response-funds#1-what-is-calamity-fund. Accessed 11 Dec 2020.
- UNICEF/EAPRO, UNICEF/ROSA, SUN Movement Secretariat. Workshop on Public Finance for Nutrition in Asia: Report of a Regional Workshop. Bangkok, Thailand; 2016. https://www.unicef.org/Publich_Finance_for_Nutrition_in_Asia.pdf. Accessed 11 Dec 2020.
- Jamison, D.T., H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C.N. Mock, and R. Nugent, editors. 2018. Disease Control Priorities: Improving Health and Reducing Poverty. Volume 9, Disease Control Priorities (third edition). Washington, DC: World Bank
- OECD. 2010/ Query Wizard for International Development Statistics (QWIDS), in Development Co- operation Report 2010, OECD Publishing, Paris.