Memorandum on the Republic of the Philippines COVAX Programme Audit report

The attached Gavi Audit and Investigations report sets out the conclusions of the COVAX programme audit of Gavi's support to Philippines, administered by its Department of Health. The audit was conducted in three phases – beginning with a scoping mission in April 2022, then fieldwork undertaken between mid-July to mid-August 2022, and culminating with a follow-up in March 2023 to validate additional updates.

The audit team reviewed the Department of Health and implementing partners' management of vaccine and cash support received from Gavi's COVAX facility in support of Philippines' COVID-19 emergency operations during the period January 2021 to July 2022.

The objective of the audit was to assess the adequacy and effectiveness of systems, processes, and controls over the approved Covid-19 vaccines and ancillary support. This was done by reviewing: vaccine supply chain management; Covid-19 vaccination data management; programme management; budgeting and financial management; and the deployment and management of cold chain equipment.

The report's executive summary (pages 4 to 6) sets out the key conclusions, the details of which are set out in the body of the report:

1. There is an overall audit rating of **"Needs significant improvement"**, which means, "one or few significant issues noted. Internal controls, governance and risk management practices have some weaknesses in design or operating effectiveness such that, until they are addressed, there is not yet reasonable assurance that the objectives are likely to be met."
2. In total, 12 issues were identified in the following areas: (i) vaccine and supply chain management; (ii) Covid-19 vaccination data management; (iii) programme management; (iv) budgeting and financial management; and (v) cold chain equipment management.
3. To address the risks associated with the issues, the audit team raised 18 recommendations of which 12 were rated as high priority.

4. Key findings were that:
    a. There were irreconciled differences of 8.8 million Covid-19 doses between the national when compared to the subnational level. The audit team concluded that the stock records did not provide adequate visibility over the situation of Covid-19 stocks in the pipeline. Also, the records did not adequately support the deployment and management of COVAX vaccines received by the country.
    b. There were significant expirations of both Covid-19 vaccines as well as elevated wastage rates for COVAX donations. Overall, it was estimated that as at March 2023 a total 56.5 million doses, equivalent to 22% of the overall Covid-19 portfolio received by

Philippines as shelf-expired. Similarly, the approximate wastage level of COVAX dose donations (typically these had a shorter shelf-life) averaged at: 33% for Moderna; 34% for AstraZeneca; and 29% for Johnson & Johnson supplies.

c. The Department of Health contracted a third-party company to manage left-over vials and immunisation waste, however the contract was allowed to lapse throughout 2022. As a consequence, significant supplies of expired Covid-19 doses were stockpiled both at the national stores (12.9 million doses) and across various subnational stores (37 million doses). The expired supplies strained the limited storage space at subnational level and resulted in additional storage costs at the national level.
d. There was a backlog in the recording and reporting of Covid-19 vaccinations, resulting in variances between the actual level of vaccinations recorded and the vaccination coverage reported.
e. The Covid-19 outbreak and the ensuant focus on a public health pandemic response adversely impacted on routine immunisation, resulted in a significant drop in coverage of several childhood vaccines including: measles; PCV; and pentavalent. Backsliding on immunisation increases the likelihood of future outbreaks.
f. The audit team questioned expenditures totaling USD 175,567 (7% of the tested expenditure) due to unsupported and inadequately supported expenditures.

The findings of the programme audit were discussed with the Department of Health and implementing partners. They accepted the audit findings, acknowledged the weaknesses identified, and committed to implement a detailed management action plan.

The Gavi Secretariat continues to work with the Department of Health to ensure that their commitments are met.

Geneva, November 2023

PROGRAMME AUDIT REPORT

Republic of the Philippines
October 2023

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1. Executive Summary

1.1 Audit opinion

Overall audit opinion:

The audit team assessed the Department of Health's management of Gavi COVAX support during the period 1 January 2020 to 31 July 2022 as "**Needs significant improvement**" which means, "Internal controls, governance and risk management processes have some weaknesses in design or operating effectiveness such that, until they are addressed, there is not yet reasonable assurance that the objectives are likely to be met."

Through our audit procedures, we have identified high risk issues relating to: vaccine supply management, programme management, CCE deployment and management. To address the risks associated with the issues, the audit team raised 18 recommendations of which 11 (61%) were rated as high risk. The recommendations need to be addressed by implementing remedial measures according to the agreed management actions.

1.2 Summary of key audit issues

** The audit ratings attributed to each section of this report, the level of risk assigned to each audit issue and the level of priority for each recommendation, are defined in annex 3 of this report.*

1.3 Summary of issues

We identified high risk issues relating to the vaccine and supply chain management, programme management, CCE deployment and management. The significant and high risk issues are summarised below, with detailed issues following in Section 4 of this report. Unless stated otherwise, the observations either relate to the country's Covid-19 consolidated vaccine portfolio or specifically to Gavi's Covid-19 Vaccine Delivery Support (CDS) funding.

Vaccine supply chain management

Gavi through its COVAX programme contributed approximately 30% of the doses managed by the Republic of the Philippines. As at 31 July 2022 COVAX had supplied 74.2 million of the total 251 million doses received by the country, whose receipts were also made up of doses sourced from bilateral donations, and central and local government procurements.

Unexplained differences in vaccine dose reconciliation at national and subnational levels: In August 2022, the audit team completed its initial reconciliation of Covid-19 vaccines stock at the national level, and determined that 51.5 million doses (i.e., 20% of the country's total portfolio) could not be accounted for at that time. The reconciliation was based on comparing and compiling stock records relating to overall country receipts, doses issued to subnational levels, consumption data, recorded expiries, and reported stock levels. In March 2023 the audit team followed up and reperformed its reconciliation using additional data provided and concluded that, while the difference had been partially explained, there was now an unexplained difference of 8.8 million surplus physical doses. Furthermore, some of the recorded expiries at national and subnational levels could not be accounted for.

At the subnational level, the audit team visited a sample of vaccine stores across three regions and undertook stock counts, to check the accuracy of stock records to the physical doses. There were unexplained differences between the stock records and the physical doses at all three regions visited. Based on the volume of Covid-19 vaccines received, managed and consumed, the net physical stock on hand was 3.6 million doses higher than it should have been across two of the regions, and 2.1 million doses lower or physically missing based on the third region's records. Earlier on in March and April 2022, the country's own reconciliation of vaccines also noted overstatements totalling 4 million doses across 501 of 1,539 facilities and understatement of receipts totalling 15.5 million doses across 828 of 1,539 facilities when comparing vaccine records to the physical stocks, highlighting that there was widespread lack of reliable data across the supply chain. The audit therefore concluded that the stock management records were unreliable throughout the period and could not support the management and distribution of COVAX vaccines received by the country. Stock balances used in requests for additional vaccines were not adequately supported by underlying consumption and physical stock records.

Based on the country's records as at 10th March 2023, 56.5 million doses, equivalent to 22% of the overall Covid-19 portfolio received by Philippines, was reported as shelf-expired. The audit team noted that wastage rates for COVAX donations, including donations of Moderna (average wastage rate of 33%), AstraZeneca (34%), and Johnson & Johnson (29%) were a significant cost to the overall Covid-19 vaccination programme.

The Department of Health (DOH) contracted a third-party company to manage the Covid-19 reverse logistics and dispose of empty and closed vial immunisation waste. However, the company's contract lapsed at the end of December 2021 and was not renewed until January 2023. As a consequence, 12.9 million doses of expired vaccines were stockpiled at the national stores, with a further 37 million expired doses accumulating across various stores. This strained the limited storage space at subnational level as well as representing an additional cost to the programme at national level, as storage was provided by a third party logistics company. Stockpiling of used or expired vials was identified across 30 out of 47 stores visited in August 2022. Moreover, on the audit team's return to Philippines in March 2023, there was no evidence that a plan for how to dispose of these used or expired vials had been established.

The supply chain weaknesses identified above were primarily due to a lack of governance, coordination and oversight mechanisms. Responsibilities for vaccine procurement, logistics and data management were segregated across national and the subnational levels, with limited coordination. At national level, there were no governance or oversight processes in place to review and analyse Covid-19 data (vaccines receipt and issues, consumption, expiries) produced by the different DOH departments. Other elements that compromised the supply chain included: the lack of a logistics management system as at August 2022; and an oversupply of Covid-19 vaccines in 2021 and 2022. This was compounded by inadequate human resources, including several vacancies at sub-national levels, resulting in sub-optimal management and reporting of stock levels and expiries. The audit team also noted that the health system's decentralised structure meant that the national logistics management team's ability to influence sub-national level operations and procurement was limited.

Furthermore, the Effective Vaccine Management (EVM) assessments conducted in 2011 and 2017 were not adequately followed-up. The country's overall EVM rating dropped by 15% from 71% (2011) to 56% (2017). Although the 2017 EVM improvement plan identified follow-up actions, these were not implemented and the necessary funding to support implementation was not secured. As a consequence, actions concerning: stock management, a logistics management information system and supportive supervision were not addressed. Also, monitoring and support supervisions were not undertaken or documented by the central level, across the three regional stores or six provincial/city vaccine storage points visited by the audit team. Similarly, there was no supportive supervision evidenced at 37% (14/37) of the provinces' health facilities visited by the team.

Unless addressed, the weaknesses observed in the vaccine supply chain management may continue to be perpetuated, including in relation to vaccines yet to be provided by Gavi, translating into higher transaction costs and ineffective decision making.

Covid-19 vaccination data management

There was a backlog in recording and reporting of Covid-19 vaccinations. Hence, there were variances between the vaccination coverage reported and the actual level of vaccinations recorded. The reported aggregate vaccination coverage was greater by 3.8 million vaccinations when compared with the sum of people recorded as vaccinated. Similar differences were also reflected in the regions' own underlying documentation. As a result, people who were vaccinated but whose information was not entered into the Vaccination Administration System (VAS) were unable to receive their corresponding Covid-19 certification record.

Weaknesses in Covid-19 data management were attributed to insufficient human resources during the pandemic, as the available personnel were unable to keep up with the workload. Additionally, the country did not fully validate the quality of its data inputs for completeness and accuracy.

The gaps noted in the collection or reporting of data and a lack quality assurance over the results reported, may result in unreliable Covid-19 immunisation information, adversely impacting upon future routine programming decisions related to key priority groups, and appropriate targets may not be planned for booster doses.

Programme management

As of 20 July 2022, the country surpassed its overall Covid-19 vaccination targets, having reported vaccinating 91.47% of its target population and 64% of its total population. Nevertheless, it was noted that there remain areas where the target coverage can improve further, including coverage of priority populations as highlighted by SAGE guidance – i.e., the elderly, hard to reach populations and health workers (who are listed as requiring a booster shot).

The Covid-19 outbreak and the resulting focus on the public health pandemic response adversely impacted upon routine immunisation, resulting in a significant drop in coverage of several childhood vaccines including: measles; PCV; and the three-dose DTP schedule. Such backsliding increases the likelihood of future outbreaks, until the necessary immunisation coverage is achieved.

Cold chain equipment management

There were delays in the reception, customs clearance and installation of Gavi-supported Cold Chain Equipment (CCE). The audit team questioned the need for this equipment, since the country was able to reach its Covid-19 target population coverage without using these items. The team observed that more than half of the consignment, primarily walk-in cold rooms and ice-line refrigerators, were not yet installed by August 2022. Furthermore, the country did not reconsider its deployment plan to redirect equipment to where it was most needed, even though the country's equipment request to COVAX was modeled around initial needs which had evolved by the time the equipment had arrived.

1.4 Financial consequences of audit issues

The country applied for and received a USD 10.1 million CDS cash grant, in support of the rapid roll-out and scale-up of Covid-19 immunisations. These COVAX funds were disbursed to UNICEF Philippines who contracted two implementing partners (i.e., Relief International (RI) and Health Organisation of Mindanao (HOM) to conduct activities. The table below summarises amounts questioned by the audit team in relation to sub-grantees' expenditures (not government):

Table 1: Summary of UNICEF implementing partners' expenditures questioned by the audit team, by category in USD.

Category of questioned expenditures	Amount questioned (in PHP)	Amount questioned (in USD)	% of expenditures tested that were questioned	Details (report reference)
Unsupported expenditure	8,614,433	*160,993*	8%	4.4.1
Ineligible expenditure	779,849	*14,574*	4%	4.4.1
Total expenditures questioned	**9,394,282**	***175,567***	**7%**	

1.5 Cash balances as of 31st July 2022

Table 2: Gavi funds disbursed to UNICEF Philippines, remaining unspent at central level as of 31st July 2022

Description	Bank balance (in USD)	Source of information
Balance at UNICEF	*2,893,682*	Indicative –balance to be confirmed by UNICEF
Balance at HOM	*0*	HOM financial records
Balance at RI	*2,054,954*	RI financial records as funds received on 1st July 2022
Total remaining funds as of 31st July 2022	***4,948,636***	

2. Objectives and Scope

2.1 Audit Objective

In line with the respective programme agreements and with Gavi's Transparency and Accountability Policy, all countries that receive Gavi's support are periodically subject to programme audit, for which the primary objective is to provide reasonable assurance that the resources were used for intended purposes in accordance with the Gavi agreed terms and conditions, and that resources were applied to the designated objectives.

As a result, the audit team assessed the various processes and programme management arrangements governing Gavi's support (vaccines and cash grants) for which the respective entities were responsible, so as to assess if: vaccine supply chain management systems are effective, the existing grant oversight mechanisms provide continuous and reliable assurance on Gavi's investments, the financial management processes support the timely utilisation and accountability of Gavi grant funds and the immunisation data systems are effective.

The team also reviewed the relevance and reliability of the internal control systems relative to the accuracy and integrity of the books and records, management and operational information; the effectiveness of operations; the physical security of assets and resources; and compliance with national procedures and regulations.

2.2 Audit Scope and Approach

The team adopted a risk-based audit approach informed by its assessment of the risks in all areas of the national Covid-19 immunisation programme supported by Gavi. This included vaccine and supply chain management, programme and data management, governance and oversight, cold chain equipment management and financial management. The audit period in scope was established as the period from 1 January 2020 until 31 July 2022 (31 months). Over this period, Gavi provided resources totalling USD 11.7 million, consisting of cash grants totalling USD 10.3 million, and cold chain equipment totalling USD 1.4 million (see Table 3 below). The country also received a total of 74,215,730 Covid-19 vaccine doses from COVAX's procurement agent. This vaccine allocation was made up from a range of products including: AstraZeneca, Moderna, Pfizer and Johnson & Johnson (see Table 4 below).

Table 3: Gavi disbursements as of 31 July 2022

		Amounts in audit scope		
Grants	**Fund recipient**	**2021 (in USD)**	**2022 (in USD)**	**Total (in USD)**
COVAX CDS	UNICEF	*5,307,885*	*4,860,000*	*10,167,885*
Technical Assistance (UNICEF)	UNICEF	*75,600*	*0*	*75,600*
Technical Assistance (WHO)	WHO	*25,000*	*0*	*25,000*
Total (Cash)		*5,408,485*	*4,860,000*	*10,268,485*
COVAX cold chain equipment	UNICEF	*1,428,676*	*0*	*1,428,676*
Total (Cash + equipment)		***6,837,161***	***4,860,000***	***11,697,161***

Table 4: Covid-19 vaccines support shipped by Gavi COVAX Facility via UNICEF Supply Division as of 31 July 2022

Vaccine	**Total doses distributed**
AstraZeneca	16,324,000
Pfizer	31,292,820
Moderna	13,873,260
Johnson & Johnson	12,725,650
Grand total	**74,215,730**

2.3 Conduct of audit engagement

An audit scoping mission was completed between 25 and 29 April 2022, followed by fieldwork between 18 July and 12 August 2022. A follow-up was undertaken between 20 and 24 March 2023 to validate additional updates provided, after the initial fieldwork was conducted.

The Gavi audit team reviewed expenditures totalling USD 2,485,827 which were incurred by UNICEF's two implementing partners (Relief International and HOM). These expenditures accounted for 48% of the total reported expenditure or 24% of total CDS funds received by the country, as illustrated in the table below. Funds directly executed by UNICEF were not subject to review and were considered out of scope, in accordance with the United Nations single audit principle.

Table 5: UNICEF implementing partners' Expenditures sampled for testing (not government)

Implementing Partner	CDS Funds received (in USD)	Reported expenditure (in USD)	Amount tested (in USD)	% of partner's expenditures tested
UNICEF	*3,646,859*	*753,177*	*0*	N/A
Relief International	*6,030,766*	*3,959,880*	*2,115,744*	53%
HOM	*490,260*	*490,260*	*370,083*	75%
Total	***10,167,885***	***5,203,317***	***2,485,827***	**48%**

The audit team visited 2 central vaccine stores, 3 regional vaccine stores, 7 provincial/city health office stores and 36 health facilities, a total of 48 vaccine storage sites overall. See Annex 4 for the list of sites visited. During the audit scoping and fieldwork, the team interacted with the Department of Health (DOH), the Department of Information Communication and Technology (DICT) and the Gavi Alliance partners, including WHO and UNICEF.

An additional follow-up audit visit between 20 to 24 March 2023 focused on the reviewing the following updated activities:

- Covid-19 vaccines national reconciliation review – This involved an assessment of the revised Covid-19 vaccines reconciliation which included a comprehensive review of consolidated Covid-19 vaccine portfolio records, receipts at national level, issues/distributions to sub-national level, wastages at national and sub-national level and stock balances at national and sub-national level.
- Covid-19 immunisation data review: This involved an assessment of updated Covid-19 vaccination data by region.
- Review of the electronic logistics management information system (eLMIS) implementation: This involved a walkthrough of the eLMIS being presently rolled out by the country.
- COVAX Cold Chain Equipment (CCE) funding: physical verification visits to identify COVAX-provided CCE units to Caloocan City store, Manila City store and Pampanga Provincial store.
- Clarification of draft management responses to the audit recommendations.

2.4 Exchange rates

Most in-country expenditures were incurred using the Philippine peso (PHP). For clarity and as part of the summary of this report, overall total amounts were also reflected in United States Dollars (USD) equivalent. For the expenditures reviewed, the rate applied was based on the average rate provided in comparison with the prevailing Central Bank of Philippines rate at the time of conversion from USD to PHP. The overall exchange rate equated to PHP 53.5081[1] against USD 1.00 for the period 2021 to 2022.

[1] Central bank of Philippines average exchange rate

3. Background

3.1 Introduction

The Republic of the Philippines (Philippines) is an archipelago of 7,641 islands, of which only about 2,000 are inhabited. It is divided into three main islands/island groups of Luzon, the Visayas islands and Mindanao. The country has 17 administrative regions, 81 provinces, 38 independent and 108 component cities, 1,488 municipalities, and 42,036 barangays, the latter being the smallest administrative unit[2]. The regions are served by subnational or regional offices of different government departments and bureaus. With an estimated population of 109,035,343[3] (2020), the Philippines is among the most populated countries in Southeast Asia. The country has a young population with about a third of its population younger than 15 years of age.

The Philippines is the world's 32nd largest economy by nominal gross domestic product (GDP), the 12th largest economy in Asia, and the 3rd largest economy in the Association of Southeast Asian Nations (ASEAN) after Indonesia and Thailand according to the International Monetary Fund (IMF). In 2020, the Philippine economy produced an estimated gross domestic product (current prices) of USD 361.49 billion[4]. The World Bank lists Philippines as one of the most dynamic economies in the East Asia Pacific region. Average annual growth increased to 6.4% between 2010-2019 from an average of 4.5% between 2000-2009. The economy has made progress in delivering inclusive growth, evidenced by a decline in poverty rates and its Gini coefficient. Poverty declined from 23.3% in 2015 to 16.6% in 2018 while the Gini coefficient declined from 44.9 to 42.7 over the same period. However, the Covid-19 pandemic and community quarantine measures imposed in the country severely impacted upon economic growth and poverty reduction. The economy contracted in 2020, driven by heavy declines in consumption and investment growth, and worsened by the slowdown in tourism and remittances. Nevertheless, since 2021 the economy has started to recover with a 5.6% year-on-year expansion, supported by public investment and a recovery in the external environment. With continued recovery and reform efforts, the country is getting back on track on its progression from a lower middle-income country with a gross national income per capita of USD 3,430 in 2020 to an upper middle-income country (per capita income range of USD 4,096 or higher) in the short term[5].

3.2 Health care delivery system

Health service delivery was devolved to the Local Government Units (LGUs) in 1991, with the enactment of the Local Government Code of 1991, wherein LGUs have full autonomy to finance and operate the local health systems. The Department of Health (DOH) as the national agency develops national policies, technical standards, enforces health regulations and monitors and evaluates tertiary and specialised hospitals. The provincial governments operate the district and provincial hospitals, and municipal governments provide primary care through rural health units, health centres, and barangay health stations. In 1995, the National Health Insurance Program (NHIP) managed by Philippine Health Insurance Corporation (PHIC or PhilHealth) was institutionalised and signalled the movement towards a single-payer premium-based financing or insurance system[6]. However, the current system continues to maintain a dual financing system existing parallel to each other with more than half of total health spending being out-of-pocket in 2018[7]. In February 2019, the Philippines passed the Universal Health Care law to ensure equitable access to quality and affordable health care services for the entire population.

3.3 Immunisation systems and services

The Expanded Programme on Immunisation (EPI) was established in 1976 and covered six vaccine-preventable diseases. This was expanded in 2010 through Republic Act (RA) No. 10152, the Mandatory Infants and Children Health Immunisation Act of 2011, mandating basic immunisation for infants and children up to five years of age, freely given at any government health facility. In the last decade, newer vaccines have been introduced and expanded significantly to target more age groups. Beginning in 2013, school-based immunisation, targeting school-aged children with age-appropriate vaccines and missed doses, started in coordination with the Department of Education. Vaccination of elderly with pneumococcal conjugate vaccine and influenza vaccines was also mandated through RA 9994 – the Expanded Senior Citizens Act of 2010. See immunisation schedule on Annex 5.

The Research Institute for Tropical Medicine in Manila (RITM) serves as the national vaccine store and distribution centre for all routine immunisation vaccines in the Philippines. RITM vaccines distributes directly (through a third-party agreement) to 46 sites (17 Regional Stores and 29 Provincial/City Stores). The 17 Regional Stores are responsible for vaccine distribution to a further 51 Provincial/City

[2] Philippines geographical coverage
[3] Philippines 2020 Census of Population and Housing
[4] International Monetary Fund (IMF) Philippines profile
[5] The World Bank Philippines profile
[6] DOH Philippines Health system overview
[7] The Philippines Health System review-WHO

Stores, bringing the number of Provincial/City Stores receiving vaccines to a total of 80. Thereafter, these 80 Provincial Stores distribute vaccines to approximately 1,600 Rural Health Units (RHU). The RHUs provide vaccines to approximately 15,000 Barangay Health Units (BHU). Immunisation sessions take place at both RHU and BHU[8]. The 2017 EVM noted that distribution plans are generally available according to a quarterly supply interval against which RITM distributes stocks. The lower levels expect that the vaccine stock is collected accordingly by the service delivery points.

3.4 Covid-19 context and country's response

On 30 January 2020, the World Health Organization (WHO) declared Coronavirus Disease 2019 (Covid-19) as a Public Health Emergency of International Concern (PHEIC). Also on that day, Philippines identified its first laboratory-confirmed case of Covid-19. The Inter-Agency Task Force on Emerging Infectious Diseases[9] was convened on 30 January 2020 and an Emergency Operations Center (EOC) formed under DOH.

On 7 March 2020, the Department of Health (DOH) announced the country's first reported local transmission. On 11 March 2020, the WHO characterised Covid-19 as a pandemic. The EOC was expanded on 24 March 2020 to form the National Task Force (NTF) with two clusters (i.e., response and recovery). Philippines' response to mitigate the impact of Covid-19 pandemic was anchored onto the National Action Plan Against Covid-19 (NAP) and the national strategic plan for Covid-19 pandemic response which utilised the Prevent-Detect-Isolate/Quarantine-Treat-Reintegrate (PDITR) strategy. Phase I (March-June 2020) of the response focused on preventing and containing the Covid-19 pandemic while mitigating its socioeconomic impact and phase II (July-September 2020 focused on socioeconomic recovery. Phase III (October 2020-March 2021) focused on managing the health risk while gradually transitioning to full socioeconomic recovery, and inclusion of vaccines as part of the Covid-19 interventions.

A Covid-19 Vaccine Cluster with six task groups (i.e., Scientific Evaluation and Selection, Diplomatic Engagement and Negotiation, Procurement and Finance, Cold Chain and Logistics Management, Immunisation Program, Demand Generation and Communications) was added to the NTF on 29 October 2020 and the National Vaccine Deployment Plan (NVDP) was subsequently developed and approved on 26 January 2021.

The NDVP mandated the formation of the National Vaccines Operations Centre (NVOC) to operationalise the activities of the vaccine cluster. NTF memorandum (circular MC 05s. 2021) also mandated the formation of regional Covid-19 vaccination operations centres (RVOC) to develop regional Covid-19 vaccine deployment and vaccination macro-plans, while local Covid-19 vaccination operations centres (LVOC) were directed to develop local Covid-19 vaccine deployment and vaccination micro-plans. The NDVP also formulated strategies and contingencies to ensure the equitable distribution of vaccine products for all Filipinos.

3.5 Gavi's relationship with the Philippines

Philippines does not qualify for Gavi routine immunisation financial support given its middle-income status i.e., the country's average Gross National Income (GNI) per capita exceeds Gavi's eligibility threshold.

At an early stage during the Covid-19 pandemic, it became apparent that to end the global crisis, access to Covid-19 vaccines was critical. This triggered global leaders to call for a solution that would accelerate the development and manufacture of Covid-19 vaccines, as well as diagnostics and treatments, and guarantee rapid, fair and equitable access to them for people in all countries. COVAX was one of three pillars of the Access to Covid-19 Tools (ACT) Accelerator, which was launched on 24 April 2020 in response to the pandemic.[10] COVAX is co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), Gavi and the World Health Organization (WHO), alongside key delivery partner UNICEF.

At the Global Vaccine Summit on 4 June 2020, Gavi launched the Covid-19 Vaccines Advance Market Commitment (COVAX AMC) as the first building block of the COVAX Facility. The COVAX AMC is the innovative financing instrument that supports the participation of 92 low- and middle-income economies in the COVAX facility – enabling access to donor-funded doses of safe and effective Covid-19 vaccines.[11]

The Philippines, as an eligible lower-middle income country, joined as a COVAX participant by signing the relevant COVAX terms and conditions on 7 December 2020. Subsequently, two decision letters for the provision of Covid-19 vaccines and cold chain equipment

[8] 2017 EVM report
[9] The Inter-Agency Task Force on Emerging Infectious Diseases (IATF-EID, or merely the IATF) is a task force created through Executive Order No. 168 2014 by the Philippine President to respond to affairs concerning emerging infectious diseases in the country
[10] About the COVAX facility
[11] About Gavi COVAX AMC

were issued by Gavi on 22 March 2021 and 25 August 2021 respectively. Philippines received its first delivery of COVAX vaccines on 4 March 2021.

3.6 Covid-19 epidemiology and vaccination in the Philippines

The Philippines had among the highest Covid-19 infection rates in the WHO Western Pacific Region. From 3 January 2020 to 20 July 2022, the Philippines reported 3.7 million Covid-19 cases and 61,000 Covid-19 related deaths[12]. Covid-19 vaccinations began on 1 March 2021, shortly after the delivery of its first batch of Covid-19 vaccines, in accordance with the prioritisation framework for Covid-19 vaccination as set down in its NDVP. There are nine different brands of Covid-19 vaccines[13] circulating in country which are being used for the different priority groups. As of 22 July 2022, more than 244 million doses had been received, 30% provided by the COVAX facility and 70% sourced from the government's bilateral agreements with various vaccine manufacturers (both national and local procurement) or from other countries (i.e., donations). More than 157 million doses had been administered as of 30 July 2022.

3.7 National entities involved in implementation of grant activities

The Philippines Government established the Covid-19 Vaccine Cluster under the National Task Force (NTF) against Covid-19 to oversee the operations of the national response. The Covid-19 Vaccine Cluster organisational structure serves as a unified command, control, coordination, communication, and cooperation mechanism, ensuring the procurement, deployment of Covid-19 vaccine and the vaccination of identified eligible populations. The Covid-19 Vaccine Cluster is complemented by the activation of an Incident Command System (ICS), which is supported by an operations centre, duly named as the Covid-19 Vaccine Operations Center (VOC). The VOC was established and operationalised at all levels including national, regional and local. The VOC oversaw the implementation of CDS funding channelled through UNICEF. UNICEF also contracted two partners (i.e., Relief International and Health Organisation of Mindanao) to implement various activities using COVAX CDS funds.

At the national level, Philippines outsourced the warehousing, haulage and delivery of Covid-19 vaccines and other Covid-19 related commodities to a third party[14]. This third party operated the National Vaccine Store and Distribution Centre for all Covid-19 vaccines received by the Philippines. Nevertheless, some vaccines were immediately delivered directly to the regions and provinces once they were cleared by customs. The 17 Regional Stores distributed vaccines to 51 Provincial/City Stores and the Provincial Stores then distributed the vaccines to Rural Health Units (RHU) and Barangay Health Units (BHU).

3.8 Good Practices

The audit team noted the following good practices:

Strong political commitment to ensure Covid-19 vaccination success – The Philippines Congress approved emergency funds called "Bayanihan budget" totalling PHP 76.7 billion[15] (approximately USD 1.5 billion) which allowed the country to fund and procure 55% of its vaccine needs. The Government also secured funding from the Asia Development Bank (ADB) to support Covid-19 vaccination activities. The original approved loan financing of US$ 100 Million (Loan no. 9105-PH) was increased by US$ 500 Million through the additional financing on 19 March 2021, to cover the procurement of vaccines against Covid-19 and to support the DOH National Deployment and Vaccination Plan (NDVP) (Loan no. 9220-PH)[16].

Appropriate governance structure set up – A governance structure with clear terms of reference (TORs) was established (i.e., IATF, NTF, 3 Clusters, NVOC, RVOC, LVOC) to respond and recover from Covid-19 and ensure the effective roll-out of vaccination. The various structures included different government departments to streamline coordination. The audit team also noted that the Covid-19 vaccination cluster held frequent meetings (31 over last 1.5 years) to guide vaccination operations. The Government developed various legislations and regulations, laws, acts, policies, advisories, and guidelines to enable the Covid-19 response and vaccine roll-out. The audit team noted that 75 policies and 175 advisories were developed to enable the Covid-19 response and vaccine roll-out by providing guidance on vaccine usage, immunisation strategies, management of waste, recording of vaccination data among others.

[12] World Health Organisation
[13] AstraZeneca (Vaxzevria), Gamaleya (Gam-Covid-Vac), Gamaleya (Sputnik Light), Janssen (Ad26.COV2-S), Julphar (Hayat-Vax), Moderna (Spikevax), Pfizer-BioNTech (Comirnaty), Sinopharm (BBIBP-CorV) and Sinovac (Coronavac)
[14] Nonpareil International Freight and Cargo Services Inc
[15] Department of Budget and Management Covid-19 budget utilisation reports
[16] Philippines Covid-19 Emergency Response Project

Covid-19 vaccination coverage targets attained – As of 8 August 2022, the country had administered 157.6 million doses, including 71.9 million fully vaccinated individuals, representing a national average coverage rate of over 90% of the target population of 78.1 million.

Vaccine Information Management System was developed and rolled out – At the beginning of the pandemic in 2020 the Philippines embarked on the rapid development and implementation of digital tools for monitoring the Covid-19 vaccine rollout. Pursuant to IATF Resolution No. 85, section B, item 8, the Government through its Department of Information and Communication Technology (DICT), led and managed the design, development, deployment, monitoring and evaluation of the Vaccine Information Management System (VIMS). This system was created using both government and external funding (i.e., European Union and WHO). VIMS was developed to serve as a confidential, electronic and secure information system to record all vaccination doses administered by participating providers, to people residing within a given geopolitical area. VIMS has four key modules including:

- DICT Vaccination Administration System (DVAS): An online (web based) system used to digitally capture vaccine administration activity in each LGU vaccination site.
- Vaccination Administration System (VAS) Line List: A portal where LGUs submit/upload 31 variables capturing required details of the vaccination conducted at the vaccination sites not using DVAS, i.e., vaccinee category, full vaccinee details, site code, dose administered, adverse effects reported etc. The information can be uploaded onto the portal using an MS Excel worksheet or DVAS mobile which is an offline vaccination administration system which allows each user to encode using a handheld device such as cell phone or tablet the vaccinee records.
- Vaccination Operations Reporting System (VORS): The single source of daily vaccination count for the country that provides systematic reporting on the vaccination performance and inventory from national to city / municipality level. It is used to assess local vaccination coverage levels or to assist during disease outbreaks, public health emergencies, or vaccine shortage situations to identify individuals in need of vaccination.
- Digital Vaccination Certificate Portal (VaxCertPh): A self-service portal that is used to issue an official proof of Covid-19 vaccination status that is trusted, verifiable, and internationally recognized.

3.9 Operational challenges due to the Covid-19 pandemic

As already noted, Philippines had among the highest Covid-19 infection rates in the WHO Western Pacific Region. The Covid-19 pandemic response implemented across the country, was the fastest and most complex campaign in the country's history. Mass vaccination campaigns were used as a main delivery approach. Philippines is also one of the few countries in the region that used nine different vaccines, offering a wide selection and choice, which brought several challenges in managing the different dosing schedules, storage requirements, handling, and delivery across the archipelago. The public health pandemic response came at a cost, as health workers and resources were diverted from providing essential health services including routine immunisation to support the Covid-19 effort. The intensive nature of this response adversely reduced routine immunisation coverage including:

- First dose of measles-containing vaccine (MCV1) from 72% in 2020 to 54.7%;
- Diphtheria, tetanus, pertussis (DTP3) coverage from 75% in 2020 to 56% in 2021; and
- Average Pneumococcal conjugate vaccine (PCV) coverage from 74% in 2020 to 52% in 2021.

Based on WUENIC data (2021), Philippines is among the top ten countries which when taken together accounted for 62% (14 of the 23 million) of the under and unvaccinated children worldwide[17]. It is estimated that there are approximately 621,000 zero dose children in the Philippines.

[17] 2021 WHO/UNICEF estimates of National Immunisation Coverage presentation to Gavi

4. Audit Issues

4.1 Vaccine supply chain management

4.1.1 Stock balances were not reconciled at national level resulting in unexplained differences

Context and Criteria

Section 13 of Gavi's Decision Letter (dated 24 August 2021) to the Philippines states that, "*In order to allow Gavi to make informed decisions related to the Country's health systems, supply chain (including cold chain) and Gavi's activities, Gavi needs to have access to Country related information and data that could be relevant to Gavi's assessment of applications and monitoring of Programme and progress. To facilitate this, the Country* hereby agrees and consents to the sharing by Gavi's partners (including *WHO, UNICEF, PAHO), bilateral donors, the Country's Auditor General, external auditors and other entities that conduct coverage surveys and cold chain assessments (the "Entities") any of the Country's documents, reports, statements, data and information (including confidential information and data), such as evidence related to co-financing payments and vaccine arrival reports, as well as the entities analyses and reports generated from or containing country information and data (including Post Introduction Evaluations and Effective Vaccine Management Assessments, improvement plans and all related documents). The Country also consents to sharing with Gavi any data generated by cold chain equipment funded by Gavi*."

Section 11 of the Decision Letter (dated 22 March 2021) states that, "*The Participant will maintain accurate records documenting how doses of Approved Vaccine, equipment and supplies are managed and disbursed as relevant*."

As of 10th March 2023, the COVAX facility had shipped 74.2 million doses to the country, consisting of Moderna, AstraZeneca, J&J, Pfizer adult or Pfizer paediatric vaccines. This represented 29.5% of all Covid-19 doses received by the country at the time. The majority (42%) of the COVAX doses provided were Pfizer (adult) vaccines.

Condition

Gaps in vaccine dosage reconciliation – The audit team completed its initial reconciliation of Covid-19 vaccines stock, at the national level in August 2022, and determined that 51.5 million doses (i.e., 20% of the country's total portfolio) could not be accounted for. The reconciliation was based on comparing and compiling stock records relating to overall country's receipts, doses issued to subnational levels, consumption data and reported stock levels, including recorded expiries. See Annex 10a.

On 25 November 2022, the country shared a summary of its own subsequent reconciliation exercise, which indicated that the unexplained balance had been reduced from 51.5 million to 3.9 million doses. This exercise also increased dose expirations from 4.1 million to 44 million doses. See Annex 10b. At that time, the government did not provide any additional explanations or underlying documentation in support of its updated reconciliation exercise, nor why it significantly differed from the initial balances provided in August 2022.

The audit team followed up in March 2023 where the reconciliation was reperformed using the additional data provided and concluded that while the difference had been partially explained, there were 8.8 million doses unaccounted for. Furthermore, some of the recorded expiries at national and subnational levels could not be accounted for. See Annex 10c.

Recommendation 1

The DOH should establish an overarching governance mechanism to provide oversight over the separate units dealing with vaccine logistics and vaccination data within the department. This governance structure should have established terms of reference, membership from the various departments and technical experts from partner organisations within immunisation.

Recommendation 2

The DOH and NVOC should:

- Perform periodic reconciliations to ensure that all Covid-19 vaccine doses can be accounted for; and investigate any unexplained differences in a timely manner; and
- Include reconciliation exercises of its vaccine stocks at national and sub-national levels, within its regular vaccine stock counts.

Root causes	Management Comments	
The following root causes were identified: • Absence of an overarching governance and oversight mechanism. Responsibility for management of vaccines and reporting of vaccinations was disaggregated between the DOH Supply Chain Management Service (SCMS) and the Public Health Operations Centre (PHOC) respectively. There was no triangulation of data reported by both entities. • Weaknesses in oversight over vaccine supply chain management processes at sub-national level due to the decentralised nature of vaccine supplies management. The DOH was reliant on reports submitted by the regions and did not verify the reported quantities. • Inadequate vaccine management systems resulting in use of google based excel documents that were not periodically reconciled to manual records and/or stock counts. • Inadequate management of expiries.	We accept the above recommendations. *See detailed management comments on **Annex 11***	
Risks/ Impact/ Implications The unexplained differences in Covid-19 vaccine balances impedes the country from explaining how it used all of the doses received.	**Responsibility** DOH - SCMS	**Deadline** 31 December 2023

4.1.2 Oversupply of Covid-19 vaccines in the country resulted in expiries

Context and Criteria

COVAX aims to accelerate the development and manufacture of Covid-19 vaccines and to guarantee fair and equitable access for every country in the world.[18]

Section 11 of the Decision Letter (dated 22 March 2021) states that, "*The Participant will maintain accurate records documenting how doses of Approved Vaccine, equipment and supplies are managed and disbursed as relevant*."

The following reverse logistics process was documented in Chapter 6 of the National Vaccine Deployment Plan (NDVP) for used vials and closed vial wastages (expiries and broken vials)- "*Empty vials are collected at delivery points and sent to provinces and regions. Vials are separated by product brand, counted, and stored in plastic containers, to be collected by subcontracted company for final transport, auditing, and destruction. Similarly, expired and broken vials are collected from service delivery points and sent to provinces and regions, separated by product brand, counted and stored separately to be collected by a sub-contracted company for final transport, auditing and destruction*."

Condition

The country reported significant Covid-19 vaccines expiries – As of 20 March 2023, the country reported expiries amounting to 56.5 million doses – equivalent to 22% of all Covid-19 vaccine doses received from all sources i.e., COVAX, bilateral donations, central and local government procurements. Vaccine wastage rates for some of the vaccines brands, including COVAX contributions, were relatively high i.e., Moderna (34%), AstraZeneca (33%) and J&J (29%). All J&J vaccines received by the country were supplied by COVAX.

Table 6: Wastage rates per Vaccine antigen

Vaccine type:	Wastage			Total wastage	Total doses received	Wastage rate
	National		Sub-national			
	Expired	Quarantined	Expired			
Sputnik	0	6,403,630	1,865,887	8,269,517	10,000,000	83%
Sputnik (light)	0	0	2,972	2,972	5,000	59%
Pfizer (adult)	0	212,940	4,174,613	4,387,553	77,727,780	6%
Pfizer_ paediatric	0	0	1,277,904	1,277,904	21,000,000	6%
AstraZeneca	5,126,090	338,780	7,186,453	12,651,323	38,846,950	33%
Sinovac	0	0	1,814,458	1,814,458	56,105,400	3%
Moderna	7,005,670	0	4,562,447	11,568,117	33,871,820	34%
Jansen (J&J)	168,000	0	3,504,052	3,672,052	12,725,650	29%
Sinopharm	0	0	3,405	3,405	1,100,000	0.3%
Reported block	0	0	12,855,198	12,855,198	0	
TOTAL	**12,299,760**	**6,955,350**	**37,247,389**	**56,502,499**	**251,382,600**	**22%**

Recommendation 3

The DOH should:

- Ensure that an analysis of vaccine stocks is completed and reviewed before demand forecasts for additional supplies are completed.
- Review the significant expiry balances over the period and document the root causes of the expiries by vaccine type (e.g., short-dated deliveries, handling issues etc.) This root cause analysis when combined with analysis of the high vaccination rates achieved by the country may help balance the messaging when reporting the significant vaccine expiries.
- Document plans for use of future supplies of Covid-19 vaccines to keep the level of expiries under control. This should include vaccines from all sources to ensure that COVAX supplies do not drive significant expiries of vaccines from other sources.
- Document learnings from management of COVID-19 vaccines and how these lessons will be incorporated into the routine immunisation programme.

Recommendation 4

The DOH should ensure that all Covid-19 related waste is adequately managed through a waste management process. Going forward, a suitable process covering all of the programme's immunisation waste needs should be considered, to maximise economy of scale synergies.

[18] Working for global equitable access to Covid-19 vaccines

Suboptimal management of expiries **-** The audit team noted the following weaknesses in the management of expiries.

- *Gaps in quantification of vaccine expiries* – The documentation provided to the audit team on 21 July 2022 indicated that 4.1 million Covid-19 doses expired from all sources (COVAX and others). The audit team was only able to verify that 0.44 million (11%) doses had expired based on its visit to the central-level warehouse in August 2022 where expirations were kept before destruction. The country undertook a supplementary "dose reconciliation exercise" after the audit fieldwork, to amend errors in its records. A summary of these results was shared with Gavi on 25 November 2022, reporting an increase in expiries from 4.1 million to 44.1 million doses. Thereafter in March 2023, the DOH (SCMS) revised this figure upwards and reported expiries of 56.5 million doses. At that time the audit team returned to Manilla to review the exercise's underlying documentation and noted that:
  - There was a difference of 221,020 doses between the SCMS reported wastage and the expired doses verified through physical counts at the national level.
  - 12.9 million (35%) of the sub-national doses reported as expired consisted of an estimate, that was unattributed to any region, vaccine brand, nor was the cause of expiration documented.
- *Inadequate reverse logistics* – The DOH/ government contracted a third-party company to manage Covid-19 reverse logistics and dispose of empty and closed vial Covid-19 immunisation waste. However, the company's contract lapsed at the end of December 2021 and was not renewed until January 2023. Consequently, the audit team noted that expired vaccine doses continued to take up storage space at both the national and sub-national level.
  - As of 20 March 2023, the national level vaccine warehouses were storing 14.9 million doses of expired vaccines (7.9 million expired and 6.9 million doses under quarantine)
  - As of 10 March 2023, sub-national vaccine stores were storing over 24 million doses of expired vaccines.
  - Previously in August 2022, 30 out of 47 vaccine storage points visited by the audit team, where this test was performed, were still storing expired and empty vials, which had not been collected.

Management Comments

We accept the above recommendations.

See detailed management comments on ***Annex 11***

Root causes

The following root causes were identified:

- The country accepted and received many doses and types of Covid-19 vaccines from various sources as it sought to ensure sufficient availability for all Filipinos.
- Given the decentralised nature of the country, the sub-national level also received vaccines from various sources.
- There were instances where vaccines provided by COVAX in December 2021 had a short shelf-life. A case in point are the 1,697,000 doses of the AstraZeneca antigen that were delivered in December 2021 with an expiry date of February 2022 (2 months to expiry), 74% (1,255,800 doses) of these vaccines subsequently expired and form part of the wastage.

Responsibility	Deadline
DOH - SCMS	31 December 2023

• Gaps in oversight over vaccine supply chain management processes as the National government, local and private sectors each managed their own procurement and delivery requirements, without any synchronisation. • Once vaccine supplies stabilised, preference for specific products, resulting in certain vaccines brands being less in demand. • There were instances where vaccines were quarantined awaiting shelf-life extension which was not obtained e.g., 3.7 million doses of the Pfizer adult antigen did not receive shelf-life extension. This also forms part of the wastage. • Inadequate vaccine management systems resulting in use of google based excel documents that were not periodically reconciled to manual records and/or stock counts. • Inadequate analysis of stock available versus consumption • Although there is contract for reverse logistics, expiries have not yet been destroyed.		
Risks/Impact/Implications • Inaccurate demand forecasts resulting in significant expiries and wastage. • Non-compliance with the country's reverse logistics processes		

4.1.3 Stock management practices at sub national level were inadequate

Context and Criteria

Section 11 of the Decision Letter (dated 22 March 2021) to the Philippines for Covid-19 Vaccine Support states that, "...*The Participant will maintain accurate records documenting how doses of Approved Vaccine, equipment and supplies are managed and disbursed as relevant*."

Section 4.4.4 of the Philippines Warehouse Operations Manual, 2021 under the storage and warehousing SOP (i.e., DOH-SCMS-WOM-SOP-04) requires that store managers and supervisors regularly check the consistency of data in monthly inventory, by comparing it with stock cards, stock counts and to conduct random or cyclical physical inventories on a weekly and monthly basis. The Warehouse operations manual provides guiding principles for supply chain management and warehouse management. The manual also provides Standard Operating Procedures (SOPs) for preparation for delivery from supplier, preparation for delivery from upper tiers, commodity reception from suppliers, reception from upper tiers, put-away, storage and warehousing, pick and pack, dispatch, waste management for pharmaceuticals and unserviceable medical equipment, reverse logistics (product recall, receipt and release of items from lower tiers for re-distribution, releasing items for re-distribution, emergency supply chain management and cold chain management).
Section 5.17 requires the store managers to scrutinise any discrepancies occurring between the physical quantities in inventory and stock records, and to correct differences accordingly. If there are missing items, Section 5.18 requires that store managers perform physical inspection of the warehouse to locate products and if products are located, instruct warehouse staff to update the documents accordingly. If the items are still missing, the manual requires the store manager to investigate, review all closed-circuit televisions (CCTVs) if necessary, to produce an incident report and inform the supply officer for proper documentation and corrective actions in accordance with latest issuance/guidelines from Commission on Audit and Accounting Unit.

Condition

Gaps in vaccine dosage reconciliation – The audit team performed a reconciliation by comparing the actual physical balance on hand, to a derived (or theoretical) stock balance consisting of doses delivered/received, less immunisations reported as administered. This analysis did not consider expiries, but we noted inconsistencies as illustrated in the table below:

Table 7: Vaccination vs stock data as of 22 July 2022

Region	Total vaccine receipts (a) (in doses)	Total vaccinations as reported by the region (b) (in doses)	Expected doses remaining (a) – (b) (in doses)	Regional physical stock reported (c) (doses)	Unexplained variance {(a) – (b)} – (c)
NCR	31,293,990	29,769,027	1,524,963	3,194,002	(1,669,039)
Region VI	13,807,190	10,632,998	3,174,192	1,030,967	2,143,225
Region XII	4,025,836	5,584,129	(1,558,293)	440,593	(1,998,886)

- NCR region physical stock balances are higher than the expected implying that the reported vaccinations maybe overstated.
- The difference at Region VI could be attributed to expiries.
- Region XII reported vaccinations higher than vaccine doses received by the region.

Stock reconciliation variances – The audit team performed a vaccine stock reconciliation (i.e., opening stock plus receipts less issuances and wastages) and noted variances at 49% (20/41) of the vaccine storage points where this test was performed. See Annex 6 for details of reconciliation.

Recommendation 5

Significant variances in the stock balances on hand and as derived from the number of vaccinations reported, were highlighted in the March 2022 Wall to Wall stocktake exercise, and further corroborated by the audit team in August 2022. The DOH should document management actions to address the root causes identified.

Management Comments

The Department acknowledges the root causes for the identified gaps in vaccine data reporting.

See detailed management comments on ***Annex 11***

The Wall to Wall (W2W) stocktake commissioned by NVOC in March-April 2022 also noted the significant understatement of 15.5 million doses in 828 facilities and overstatement of 4.0 million doses in 501 of 1,539 facilities.

Incomplete and missing vaccine records – Stock cards were used as the primary system to track vaccine receipts and issuances at each storage point. The audit team that noted stock cards were either missing or were not completed at 32% (14/44) of the storage points where this test was performed.

Post audit fieldwork follow-up (March 2023)
The audit team compared the vaccine balances in the regions visited during fieldwork against the latest reported vaccinations as of 10 March 2023. The expected derived dose balance remaining was compared to the reported stock balances. We noted inconsistencies as illustrated in the table below:

Table 8: Vaccination vs stock data as of 10 March 2023

Region	Total vaccines receipts in doses (a)	Total vaccinations as reported by the region in doses. (b)	Total Wastage as reported by the region in doses (c)	Expected/ derived stock balance in doses (d) = (a) -(b) -(c)	Regional physical stock reported (e)	Unexplained variance (e) – (d)
NCR	38,661,465	36,086,079	3,374,173	-798,787	900,154	-1,698,941
Region VI	14,935,114	12,508,252	3,180,872	-754,010	259,644	-1,013,654
Region XII	9,214,734	5,955,679	624,229	2,634,826	970,365	1,664,461

Crude explanation of the unexplained variance, based on the above data:

- Region XII has 1.6 million unaccounted doses.
- Regions NCR and VI have may have over-reported the number of vaccinations administered by 1.7 million and 1.0 million doses respectively.

Root causes

The following root causes were identified:

- Data entry omissions, incorrect entries on the stock cards and other arithmetic errors that further compounded the variances in stock reconciliation results by 236,344 doses for the sampled vaccine storage points.
- Incomplete vaccination data as reported in issue 4.2.1
- Inaccurate vaccine recording processes.
- Lack of vaccines records at some facilities.
- Stock counts and reconciliations were inadequate during the period.
- Inadequate staffing at vaccine management points due to continuous redeployment of vaccine management civil servants and vacant positions.

Responsibility
DOH - SCMS

Deadline
31 December 2023

Risks/Impact/Implications • Vaccines could not be fully accounted for as noted in issue 4.1.1 • Inaccurate data collected impacted effective decision making e.g., for stock order replenishment and management		

4.1.4 Systems and policies to support vaccine stock management were not fully implemented

Context and Criteria

Section 11 of the Decision Letter (dated 22 March 2021) to the Philippines for Covid-19 Vaccine Support states that, "...*The Participant will maintain accurate records documenting how doses of Approved Vaccine, equipment and supplies are managed and disbursed as relevant*."

Effective vaccine inventory management practices involve robust control over inventory, based on established standard operating procedures (SOPs) for: goods receipts; storage; picking and packing; order verifications; batch control; VVM and expiration tracking; buffer stock management; reorder level management; stock taking procedures; vehicle loading for dispatch; records maintenance; and a stable inventory management system.

Reliable and relevant supply chain and programmatic data is needed to manage immunisation supply chains, including forecasting and stock management as well as the cold chain (including incidence of temperature risk and non-functional CCE). Logistics Management Information Systems (LMIS) improvements coupled with knowledgeable staff to review data in a continuous way, significantly improve countries' ability to ensure that the right quantities of potent vaccines are available wherever they are needed.

In 2021, the national Warehouse Operations manual developed in 2021 was adopted by the central vaccines store which manages routine immunisation stocks. In contrast, Covid-19 vaccines at the central level, were stored separately in warehouses managed by a third-party, using that agent's respective manuals, processes and SOPs.

Condition

The national Warehouse Operations manual (2021) was not rolled out across the subnational level – This manual was not consistently disseminated and implemented by all of the sub-national vaccine storage points. Based on the audit team's visits to sub-national vaccine storage points, half of these did not have essential standard operating procedures (SOPs) in place. Specifically, 23 out of 46 of these (50%) did not have an SOP on stock receipt or issuance; and 28 out of 46 (61%) did not have an SOP on stores management.

VIMS vaccine stock management functionality not fully developed - Pursuant to IATF Resolution No. 85, section B, item 8, the DICT led and managed the design, development, deployment, monitoring and evaluation of the Vaccine Information Management System (VIMS) for Covid-19 vaccines. The audit team reviewed this system's functionality against its design objectives, as follows:

Table 9: Audit team's assessment of the VIMS design objectives

Objective	Achieved
Visibility and control over vaccine stock balances and supplies beyond the central stores (to correct overstocking and understocking)	Partially achieved
Determine the status of our current cold chain capacity in near real-time	Not achieved
Monitor temperatures in storage equipment to help identify underperforming equipment or causes of (persistent) cold chain breaks	Not achieved
Determine vaccine consumption rates daily for purposes of forecasting and distribution planning	Not achieved
Determine, and potentially anticipate, if stockouts at the local government levels are a problem	Partially achieved
Determine how much vaccine ends up being wasted	Not achieved
VIMS was meant to have the following components: 1. Immunisation registry, 2. Logistics management, 3. Stock management, 4. Warehouse management, 5. Supply chain management, 6. Cold chain management	Partially achieved

Recommendation 6

The DOH should expedite the roll out of the Warehouse Operations Manual (WOM) and should train and provide job aids to all staff responsible for managing and handling vaccines to comply with the established SOPs, particularly on:

- Recording of batch numbers, expiry dates and VVM status in the vaccine control books/ledgers.
- Recording the results of each physical stock count, investigating the variances, reconciling with the stock records, and documenting the whole process along with justification for adjustments.

Recommendation 7

The DOH should:

- Prepare and execute a timebound plan to ensure that the objectives of VIMS are fully met;
- Explore the development of a vLMIS for the country;
- Given the advancement of VIMS, the DOH can explore the development of stock management module in VIMS as the DICT hands over the system to DOH.

This will ensure sustainability of systems developed for management of the Covid-19 by incorporating routine vaccine programmes needs as appropriate.

<table>
<tr><td rowspan="2"></td><td colspan="2"></td></tr>
<tr><td colspan="2">Management Comments

We accept the above recommendations.

See detailed management comments on <u>Annex 11</u></td></tr>
<tr><td rowspan="2">Root causes

• The rollout of the warehouse operations manual was delayed due to Covid-19 restrictions, as trainings could not effectively be conducted during segments of the pandemic.
• The VIMS system was primarily used to record Covid-19 vaccinations conducted and supply chain management data was not captured even though this functionality was meant to be included in its design.</td><td>Responsibility

DOH</td><td>Deadline

See <u>Annex 11</u></td></tr>
<tr><td colspan="2">Risks/Impact/Implications

The gaps in systems and policies resulted in compromised or unreliable stock records, including the movement of stock from national to sub-national level, and potentially exacerbating expiries.</td></tr>
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4.1.5 Previous EVM assessment recommendations were not implemented

Context and Criteria

Effective Vaccine Management (EVM) is essential for the EPI planning processes, endorsed and supported by WHO and UNICEF to assess and prioritise improvements in the immunisation supply chain. EVM is an essential component contributing to the Immunisation Supply Chain (ISC) continuous improvement process.

Immunisation Supply Chain (ISC) continuous Improvement Plans (cIP) also help countries to build an evidence-based case for further supply chain investments and to advocate and engage relevant stakeholders in support the improvement plan which can set the immunisation programme on a path for successful implementation.

Condition

Delayed implementation of previous EVM assessment recommendations **-** In September 2017, the Philippines carried out an EVM assessment looking back at its performance during the prior period 1 July 2016 to 30 June 2017. The 2017 assessment demonstrated a marked decline, with eight of the nine EVM indicators reducing between 2011 and 2017. Of these nine, five EVM indicators remained above 50%, with four dropping below 50%. Overall, the EVM rating dropped by 15% from 71% in (2011) to 56% in (2017). WHO's standard benchmark for an acceptable supply chain system components is set at 80%.

Table 10: Philippines EVM assessments summary

Criteria:		Scores	
		2017	2011
E1	Pre–shipment and arrival	**49**	79
E2	Storage temperature	56	65
E3	Capacity	75	63
E4	Building, equipment and transport	73	95
E5	Maintenance	62	70
E6	Stock management	**44**	71
E7	Distribution	**34**	61
E8	Vaccine Management	65	73
E9	MIS and supportive functions	**42**	66
Overall EVM score		**56**	**71**

The EVM criteria on pre–shipment and arrival (E1 – 49%), stock management (E6 – 44%), distribution (E7 – 34%) and MIS and supportive functions (E9 – 42%) all ranked below 50%. The EVM report observed that the vaccine management system was struggling to cope with the rapid expansion of antigens which was beyond the 2011 assessment forecast estimates. Also, the audit team was unable to validate that several action points from the 2017 EVM were consolidated and included into the 2017 EVM comprehensive improvement plan. Overall, it was determined that

Recommendation 8

DOH should:

- review the EVM results, prioritise, cost and budget actions to respond to the recommendations; and
- consider undertaking another EVM assessment using the new EVM2 tool, to provide a more comprehensive update of the current status of vaccine management.

Management Comments

We accept the above recommendations.

*See detailed management comments on **Annex 11***

several recommendations – especially those concerning stock management, MIS and supportive supervision – have not been implemented since the prior assessment.		
Root causes The past EVM improvement plan was not costed to ensure that critical recommendations were prioritised, budgeted and implemented.	Responsibility DOH	Deadline 31 December 2023
Risks/Impact/Implications The delay in following through and implementing past EVM recommendations has been substantiated through risks materialising, as evidenced by the challenges experienced by the vaccine supply chain, including the scale up in response to Covid-19.		

4.1.6 Gaps in oversight, monitoring and support supervision arrangements

Context and Criteria

As described in section 3.4, a Covid-19 Vaccine Cluster with six task groups was set up, based on the direction of the World Health Organization's Vaccine Introduction Readiness Assessment Tool (VIRAT), to serve as sub-technical working groups. Each task group was represented by the designated lead from the Covid-19 Vaccine Cluster Executive Committee (EXECOM). The Committee, in turn, advises and updates the Covid-19 Vaccine Cluster Chair. The six task Groups are: (i) scientific evaluation and selection; (ii) diplomatic engagement and negotiation; (iii) procurement and finance; (iv) cold chain and logistics management; (v) immunisation programme; and (vi) demand generation and communications. The Covid-19 Vaccine Cluster met frequently (i.e., 31 times over 1.5 years) to guide vaccination operations. One key governance principle for the successful management of meetings, is to ensure that the meetings' recommendations and are accomplished and/or action items identified.

Supportive supervision focuses on monitoring performance towards programme goals and using data for decision making, through the regular follow-up with staff, to ensure new tasks are being implemented correctly. Information collected during the supervisions should help supervisors decide what immediate corrective action to take, and what issues need to be followed-up for action in the longer term[19].

Condition

Gaps in monitoring of Vaccine cluster recommendations – There was no action plan or tracker to monitor the status of implementation of Covid-19 Vaccine Cluster recommendations. While recommendations were documented at each meeting, these were not consistently followed up, nor were progress updates provided in subsequent meetings.

As a result, several critical recommendations were not followed up – including:

- At the cluster meeting on 2 February 2021, it was recommended that the Logistics Information system (VIMS) is integrated for efficient cold chain and supply chain management. This recommendation was not implemented and there no documented discussions at subsequent meetings on progress.
- At the cluster meeting on 31 March 2021, it was recommended that DICT explore employing predictive analytics to approximate the vaccination schedule per priority category. This was never discussed at any subsequent meetings, and the recommendation was not implemented.

Gaps in supportive supervision – The audit team noted an absence of documentation or evidencing that support supervisions from the central level were carried out across various sites it visited – namely three regions and six provincial/city vaccine storage points. Similarly, the team also noted a lack supportive supervisions being conducted for 39% (14/36) of the health facilities it visited, where this test was performed. Support supervision is considered a primary opportunity to verify and check data and ensure that the vaccinations reported have supporting, equivalent line data details on file, that supply chain challenges faced by the lower levels are addressed (for example issues on stock reconciliation and the availability of vaccine and logistics management records).

Recommendation 9

The DOH should:

- Implement an action tracker process to follow the implementation of recommendations from various governance bodies overseeing immunisation.
- Ensure that the follow-up of previous recommendations, is included as a standing agenda item in subsequent meetings.

Recommendation 10

The DOH should standardise and update the content of its support supervision tools, by including data and vaccine stock management parameters, and ensuring that appropriate feedback mechanisms are implemented with regards to all support supervision visits.

Management Comments

We accept the above recommendations.

*See detailed management comments on **Annex 11***

[19] WHO on supportive supervision

Root causes	Responsibility	Deadline
The following root causes were identified: • No follow-up mechanism for vaccine cluster recommendations. • Support supervision tools did not provide for or capture feedback and appropriate follow-up.	DOH-SCMS	31 December 2023
Risks/Impact/Implications Key Covid-19 Vaccine Cluster recommendations were not followed-up, resulting in unmet programmatic objectives. Inadequate monitoring and supervision, insufficient feedback and follow-up, could result in missing the opportunity to promptly address any operational issues, and ultimately failing to deliver or achieve value for money from carrying out monitoring and supervision activities.		

4.2 Covid-19 vaccination data management

4.2.1 Challenges with the recording, accuracy and completeness of Covid-19 immunisation data

Context and Criteria

Chapter 7 of the Philippines' NDVP describes that a Covid-19 vaccine monitoring system was put in place that enables the country to:

a) measure equitable uptake and coverage over time by geography, population, and risk groups;
b) monitor to what extent national policies prioritizing such risk groups are effectively implemented;
c) provide a personal vaccination record or certificate for health, occupational, educational and travel purposes; and
d) provide the necessary records and documentation for use in surveys, disease surveillance and vaccine effectiveness studies; and ensure that individuals can be monitored for the entire vaccination course to minimize drop-out.

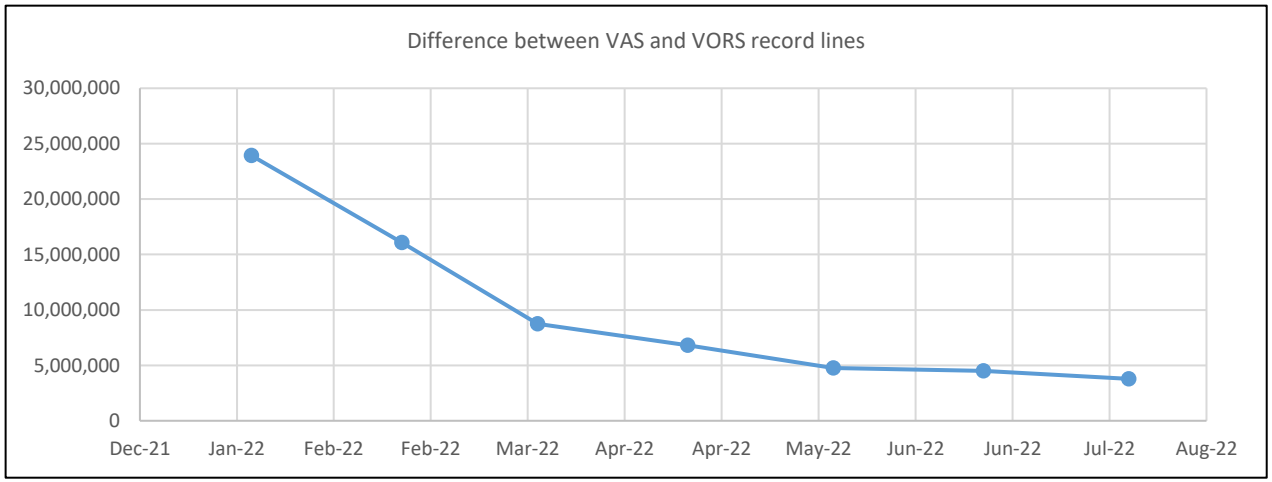
The NDVP requires that a robust and comprehensive data management system, using information and communications technologies, is established and utilised to monitor progress of vaccination activity, including monitoring of vaccine safety and effectiveness. The NDVP further requires that, "*LGUs shall ensure that data provided in submission platforms are unique through deduplication of line lists across facilities within their catchment. The DOH shall likewise conduct deduplication checks on the final endorsed master lists*."

The principle that Data Quality Assessments (DQA) conducted by immunisation programmes provide a self-assessment opportunity to identify their data challenges and develop improvement plans, refers.

Condition

Data backlog leading to variances between reported aggregate vaccination and actual vaccinations – While the DOH and DICT worked to reduce the variances between aggregate reported vaccinations and actual vaccinations, some differences remain. We noted a variance in 3.8 million records when we compared the reported data in the Vaccination Operations Reporting System (VORS) (i.e., aggregate data) and the Vaccination Administration System (VAS) line (detailed actual vaccinations) at a national level as at August 2022.

At a sub-national level - Western Visayas (region VI) – one of the regions that the audit team visited, reported a variance of 7% (totalling 668,845 records) between its Line List Entries and the number of vaccinations it reported. This test was not done for the other two regions.



Gaps in accuracy of VORS reported data - The audit team compared VORS data for three months (July 2021, December 2021 and June 2022) and noted variances with the manual detailed VAS line list data for all 16 of the health facilities that it reviewed (all these facilities belonged to either Region XII or NCR). See details on Annex 7.

VAS and VORS portals were not linked which limited the tracking of vaccine recipients – Data for both the VAS (vaccine recipient) and VORS (aggregate vaccination reports and dose consumption) platforms was not linked. It was not practicable to triangulate the data between both systems, hence, it was not possible to leverage the VAS and VORS data to track vaccine recipients, or to identify possible defaulters or missed target groups.

Data quality validation was not undertaken – The audit team noted that for five out six PHO/CHOs visited, there was no evidence on file demonstrating that these operations/offices carried out the necessary data quality reviews to compare the accuracy of their VAS line entries to the aggregate VORS entries reported.

Recommendation 11

The DOH should:

- Perform a Data Quality Audit to routinely triangulate available data, including an assessment of Covid-19 coverage data and vaccine availability/ utilisation to check the accuracy of data reported. Such analyses should be undertaken at national and sub-national levels and any data inconsistencies noted should be validated and explained.
- Ensure that all primary data collection tools are completed correctly and correlate/ or are consistent with each other.
- Ensure adequate supervision is conducted at sub-national level covering data collection and data management elements, including a follow-up of recommendations addressing data management gaps, as identified from routine supervision visits.

<table>
<tr><td>Root cause
• Data validation at vaccination sites was not done due to limited staffing and to the velocity of Covid-19 vaccination campaign activities.
• Multiple systems were established to capture data – e.g., manual tools, spreadsheets, VAS line, PHO/CHO bespoke systems, were widely in use at CHO/PHO level. The proliferation of these systems stressed the limited human resources available.
• Delays entering data into VIMS.</td><td colspan="2">Management comments
We accept the recommendation.

See detailed management comments on <u>Annex 11</u></td></tr>
<tr><td>Risk / Impact / Implications
• The backlog in data capture implies that VIMS cannot be used to accurately assess local Covid-19 vaccination coverage levels or coverage of key populations as defined by the NDVP.
• Vaccinated people will not be able to obtain vaccination certificates from the designated system until their data is input as required.
• Inaccurate and incomplete data recorded at facility, sub-national and national level may impact on the overall results reported.</td><td>Responsibility
DOH - Epidemiology Bureau</td><td>Deadline
31 December 2023</td></tr>
</table>

4.3 Programme Management

4.3.1 There are variations between what each region achieved, including priority group booster coverage

Context and Criteria

WHO published its Global Covid-19 Vaccination Strategy in a Changing World[20] updated (July 2022) which aims to use primary and booster doses to reduce deaths and severe disease, in order to protect health systems, societies and economies. This Strategy sets a target of reaching the 70% of the total global population and recommends that while doing this, that countries should prioritise and progress towards achieving aspirational targets of vaccinating:

- 100% of health care workers; and
- 100% of the most vulnerable groups (highest and high-priority use groups), including older populations (over 60s) and those who are immunocompromised or have underlying conditions.

"…In the face of an evolving and increasingly transmissible virus, high population immunity is essential to achieve this goal, which means vaccinating broadly. Based on current knowledge, this requires fully vaccinating at least 70% of the world's population, accounting for most adults and adolescents and for the vast majority of those at risk of serious disease."

[20] WHO Global Covid-19 Vaccination Strategy in a Changing World

Condition

Philippines' Covid-19 vaccination programme started in March 2021. As at 20 July 2022, it has reported fully vaccinating 91.47% of its target population and 64% of its total population. The following opportunities for improvement exist within the Covid-19 programme:

- Variations exist across regions. Some well-performing regions such as NCR and Region 1, have fully vaccinated 88% and 70% of the regional population. In contrast other regions such as BARMM, Region XII and Region 4B, have full vaccinated 34%, 52% and 55% of the regional population.
- Coverage of first and second booster doses coverage was still below 50% across all regions as illustrated in Table 11 below. The audit team also reviewed available booster doses statistics for key priority groups across the country and noted coverage was below 50%. See Table 12 below for details.

Table 11: Vaccination Status disaggregated by region as of 20 July 2022

Region	Total Population	*Total Target Population	Unvaccinated	Partially vaccinated	Fully vaccinated	% Coverage (Fully)	1st Booster	% 1st Booster	2nd Booster	% 2nd Booster
(B)	(C)	(D)	(E=D-F-G)	F	G	(H=G/D)	(I)	(J=I/D)	(K)	(L=K/D)
NCR	14,118,673	10,100,140	(3,012,249)	569,287	12,543,102	124.19%	4,474,166	44.30%	463,391	4.59%
CAR	1,836,857	1,286,637	9,759	59,631	1,217,247	94.61%	331,878	25.79%	17,924	1.39%
1	5,353,139	3,777,439	(213,423)	240,538	3,750,324	99.28%	900,747	23.85%	56,990	1.51%
2	3,727,548	2,623,673	(102,142)	181,788	2,544,027	96.96%	510,441	19.46%	25,026	0.95%
3	12,706,460	9,024,169	26,254	440,220	8,557,695	94.83%	2,248,096	24.91%	169,820	1.88%
4A	16,654,975	11,772,544	751,380	548,992	10,472,172	88.95%	2,674,998	22.72%	194,478	1.65%
4B	3,247,680	2,218,347	281,413	137,050	1,799,884	81.14%	244,100	11.00%	12,255	0.55%
5	6,248,843	4,264,048	437,718	334,691	3,491,639	81.89%	437,591	10.26%	20,490	0.48%
6	8,033,041	5,658,712	303,091	170,240	5,185,381	91.64%	785,034	13.87%	31,323	0.55%
7	8,147,078	5,705,757	719,201	216,726	4,769,830	83.60%	763,284	13.38%	31,477	0.55%
8	4,865,157	3,343,025	328,348	240,899	2,773,778	82.97%	332,773	9.95%	16,643	0.50%
9	3,834,801	2,651,380	226,796	162,022	2,262,562	85.34%	360,251	13.59%	10,267	0.39%
10	5,128,964	3,572,853	150,974	268,323	3,153,556	88.26%	514,193	14.39%	23,103	0.65%
11	5,451,448	3,796,830	311,646	264,546	3,220,638	84.82%	519,220	13.68%	51,691	1.36%
12	4,735,406	3,274,479	544,099	288,829	2,441,551	74.56%	302,800	9.25%	10,066	0.31%
CARAGA	2,810,426	1,927,752	105,000	150,503	1,672,249	86.75%	234,505	12.16%	8,322	0.43%
BARMM	4,671,758	3,102,794	1,171,101	347,569	1,584,124	51.05%	163,308	5.26%	3,469	0.11%
Total	**111,572,254**	**78,100,579**	**2,038,966**	**4,621,854**	**71,439,759**	**91.47%**	**15,797,385**	**20.23%**	**1,146,735**	**1.47%**

**Computation of target population per region is based on the age group multiplier*

Recommendation 12

The DOH should clearly articulate its national strategy and all related interventions, for moving forward with a focus on boosters, reaching "last mile", integration with primary healthcare activities, and ensuring national targets for Covid-19 vaccination are aligned with the WHO updated roadmap. This should include a plan for routinization of the Covid 19 vaccination programme.

Table 12: Vaccination Status disaggregated by priority group as at 20 Jul 2022

*Priority group	Total Target Population	%Coverage (Fully)	%1st Booster	%2nd Booster
	D	(H=G/D)	(J=I/D)	(L=K/D)
A1-Frontline Health Workers	2,121,284	96.55%	56.13%	13.73%
A2-Indigent Senior Citizens	10,260,342	66.16%	22.42%	4.37%
A3-Remaining Senior Citizens	9,552,337	94.40%	27.06%	2.54%
A4-Remaining Indigent Population	28,300,410	69.64%	19.67%	0.35%
A5-Uniformed Personnel	12,911,193	72.62%	11.28%	0.11%

Root cause

- Hard to reach populations – including for example those located in the BARMM island region. This is similar to the routine immunisation programme's past track record.
- The DOH commissioned a survey undertaken by The Task Force for Global Health (TFGH) which noted that the main barriers preventing individuals who had not yet received their boosters, but were willing to do so are:
  - Concerns about side effects and support for treatment of side effects;
  - No vaccination schedule was available; and
  - The preferred vaccine brand not being available.

Management comments

We accept the recommendation.

*See detailed management comments on **Annex 11***

Risk / Impact / Implications

The inability to deliver immunisations to priority individuals may detract from the country's stated vaccination goals and ambitions.

Responsibility	Deadline
DOH - Public Health Operations Division	31 December 2023

4.3.2 The pandemic adversely impacted routine immunisation services

Context and Criteria

Under Gavi 5.0, Gavi initiated a global call to bring an end to immunisation inequity, making reaching zero-dose children –" defined *as children who don't receive a single dose of diphtheria, tetanus and pertussis-containing vaccine"* – a key priority for the next five years. The stated goal is to reduce the number of zero-dose children by 25% by 2025, and by 50% by 2030, coinciding with the Sustainable Development Goals.[21]

In December 2020, the Gavi Board approved a new approach to engage with middle-income countries during the Gavi 5.0 strategic period (the "MICs Approach"). Serving as a key tool for addressing threats to the equity and sustainability of routine immunisation programmes, the MICs approach contributes to Gavi's overall vision of leaving no one behind with immunisation. Whilst most countries maintain programme performance following transition from Gavi support, some have gaps in programmatic capacities which can create a risk of backsliding in vaccine coverage. This risk has increasingly become a reality in the context of the pandemic, presenting a significant threat to intra-country equity, as backsliding disproportionately impacts the most vulnerable populations.[22]

Condition

The focus on the Covid-19 public health response has impacted on routine immunisation coverage, resulting in a significant drop over two consecutive years for the period 2020 and 2021. Examples of declines in coverage include measles-containing vaccine (MCV1) from 76.73% to 54.7%; pentavalent third dose (DTP3) from 75% to 56%; and PCV 1 from 76% to 53%[23]. This is illustrated as per the data tabulated below:

Table 13: Philippines administrative coverage

	Percentage coverage			
Event	**2018**	**2019**	**2020**	**2021**
Penta 3	64.90	76.76	74.80	55.90
PCV 1	61.70	59.13	76.42	53.28
PCV 2	61.70	54.18	74.73	51.73
PCV 3	60.26	51.43	70.97	49.56
MCV 1	66.93	74.67	76.73	55.96
MCV 2	58.62	69.21	73.20	54.23
Fully immunised children	66.15	69.08	65.18	51.02

WHO and UNICEF publishing of WUENIC data indicated that globally, the largest sustained decline in childhood vaccinations during the last 30 years of records was experienced as a result of the pandemic. Globally, the percentage of children who received three doses of the vaccine against diphtheria, tetanus and pertussis (DTP3), the marker for immunisation coverage, fell

Recommendation 13

The DOH should develop a plan to catch up on missed routine immunisations.

Recommendation 14

WHO and UNICEF have published guidance on considerations for integrating Covid-19 vaccination into immunisation programmes and primary health care for 2022 and beyond. The DOH should review, document and develop a national strategy for transitioning its Covid-19 vaccination response and integrating this into its routine immunisation, highlighting the: relevant delivery strategies, resources required and timeframe to complete this transition.

Management Comments

We accept the recommendations.

*See detailed management comments on **Annex 11***

[21] The Zero-Dose Child: Explained
[22] Gavi's approach to engaging with middle-income countries
[23] Philippines: WHO and UNICEF estimates of immunisation coverage: 2021 revision

<table>
<tr><td colspan="2">5% between 2019 and 2021 to 81%. Philippines can be considered to be among the top ten countries, which when taken together accounted for 62% of the under and unvaccinated children worldwide. It is estimated that there are approximately 621,000 of zero dose children in the Philippines. The country has yet to introduce the Rotavirus and Measles Rubella (MMR) vaccines, and the Human papillomavirus vaccine (HPV) is not yet accessible across the whole of the country.</td><td></td></tr>
<tr><td>Root causes
The EPI programme’s attention has been focused on prioritising the Covid-19 response;
Some of the DOH’s scarce financial resources had to be diverted to financing the pandemic effort;
Movement restrictions during lockdowns limited individuals’ ability to access routine immunisation services.</td><td>Responsibility
DOH - Public Health Operations Division and DOH-Disease Prevention and Control Bureau.</td><td>Deadline
31 December 2023</td></tr>
<tr><td>Risks/Impact/Implications
The country’s low immunisation coverage could hinder its goal of saving lives from vaccine-preventable diseases;
The immunisation agenda 2030 and the Gavi’s objectives will be impacted if there is an increase in under and unvaccinated children.</td><td></td><td></td></tr>
</table>

4.4 Budgeting and Financial Management

4.4.1 Internal controls weaknesses resulted in questioned expenditures

Context and Criteria

Section 8 Appendix 1 of the COVAX Facility "Terms and Conditions for the AMC Group Participants" on Reporting and accountability states that, "*As part of the commitment, participants must ensure that all support received from the Facility is managed in a transparent and accountable manner through systems that include appropriate oversight mechanisms and that the support is used according with the purposes for which it is provided.*"

Condition

The country applied for and received a CDS cash grant totalling USD 10,167,885, in support of the rapid roll-out and scale-up of Covid-19 immunisations. These COVAX funds were disbursed to UNICEF Philippines who contracted two implementing partners (i.e., Relief International (RI) and Health Organisation of Mindanao (HOM) to implement activities including:

- Hiring additional vaccinators who could focus on Covid-19 vaccination so that other health facility staff can provide other essential health services to the community;
- Funding for volunteers and outreach activities to bring vaccination services nearer to the target population, especially those living in urban poor, geographically isolated and insecure communities;
- Transportation/mobilization support to vaccination teams given the inadequate funds from the LGUs;
- Monitoring and supervision at all levels (national, regional and LGU) to ensure mentoring is done and issues and concerns are addressed to improve vaccination outcomes; and
- Cold chain maintenance.

As at 31st July 2022 UNICEF had disbursed USD 6 million to Relief International and USD 0.5 million to Health Organisation of Mindanao. The audit team reviewed samples of expenditures for both these implementing agencies and noted the following gaps:

Internal control gaps

a) *Errors in programmatic reports*: The team noted an error in the terminal report submitted by Relief International to UNICEF for the target of number of existing vaccination teams provided mobilisation funds. A revision of the calculations revealed that the performance indicator for the number of existing vaccination teams receiving mobilisation funds was 13% less than target.

b) *HOM delivered cash directly to PHOs and CHOs*. The cash mechanism employed was non-compliant, as it constrained the Government and/or the Commission on Audit in their ability to obtain adequate visibility over disbursements and use of monies.

Table 14: UNICEF implementing partners' CDS expenditures questioned by the audit team

Implementing agency	Reported expenditures (PHP)	Sampled expenditures (PHP)	Questioned expenditures (PHP)	Questioned expenditures USD*	Questioned expenditures as % of sample
Relief International (RI)	202,034,548	107,946,010	8,614,432	*160,993*	8%
Health Organization Mindanao (HOM)	24,691,450	18,638,863	779,853	*14,574*	4%

**PHP converted to USD at a rate of 1 USD to 53.5081 PHP*

a) RI – the team questioned expenditures relating to Journal entries made to the General Ledger without appropriate supporting documentation and identified transactions which were not supported. See Annex 8b

Recommendation 15

The government as a recipient of Covid-19 delivery support from Gavi through UNICEF – and due to its involvement within immunisation governance mechanisms – should ensure that UNICEF follows up with its implementing partners, in order to assure that in future, these operate with an appropriate internal control environment.

b) HOM – the team questioned expenditures which recipients signed on behalf of others, or where the appropriate signature was missing. It was observed that the frequent usage of cash advance modality undermined the validity of the accountabilities provided. See Annex 8a		
Root cause • Weaknesses upon reviewing implementing partners' supporting documentation. • Sub-grantees internal control environment not sufficiently robust.	Management comments *See detailed management comments on **Annex 11***	
Risk / Impact / Implications Failure to ensure that Gavi's cash support was used for the intended purpose, in accordance with the funding decision letters.	Responsibility As relevant, in accordance with governance members' oversight.	Deadline 31 December 2023

4.4.2 Human resources costs incurred non-aligned with COVAX CDS guidelines

Context and Criteria

COVAX developed Covid-19 vaccine Delivery Support (CDS) programme funding guidelines for immunisation programme managers, Alliance partners including civil society organisations (CSOs), the Gavi secretariat, and other stakeholders, in relation to COVAX participants receiving CDS funding and managing COVAX-provided vaccines. AMC 37 countries received CDS funding via UNICEF under a separate grant agreement. In effect, the Gavi CDS programme guidelines functioned as guidance to UNICEF when managing CDS funds.

Annex 2 of the Covid-19 vaccine Delivery Support (CDS) programme funding guidelines (amended) dated 18 August 2021 required that the human resources component should not exceed 40% of the overall grant – including salaries, wages and allowances (both programme management/admin staff and health, technical and outreach staff) and performance-based supplements, incentives, top-ups – unless a justified waiver was exceptionally granted by Gavi.

Condition

The audit team performed an analysis of the expenditures reported by UNICEF's implementing partners as at 31st July 2022. The total CDS funding was USD 10.2 million of which USD 6.5 million was disbursed to implementing partners at the time of the audit. Total expenditure for the implementing partners was USD 4.5 million and the audit team noted that 96% of their reported expenditures related to HR costs, as follows.

Table 15: HR costs incurred by UNICEF/ implementing agents/ partners

Implementing agents/ partners	Reported expenditure (in USD)	Share of expenditures with an HR component (in USD)	Relative share of HR
Relief International	*3,959,880*	*3,824,102*	97%
HOM	*490,260*	*464,464*	95%
Sub-total	***4,450,140***	***4,288,566***	**96%**
UNICEF	*2,893,683*	Figure not reported	
Total	***7,343,823***		

These HR expenditures mainly consisted of:

- Support to new human resources recruited for Covid-19 vaccination (salary, per diem and accommodation);
- Per diems for new volunteers (accommodation, meals, traveling expenses);
- Mobilisation funds for vaccination team (transportation and food allowance); and
- Salaries for programme management staff.

A further analysis for the budgets shared for the period after July 2022 revealed that the percentage of HR expenses remained greater than 90% for the remaining CDS funds.

Recommendation 16

In future, the government in consultation with Gavi, should take into consideration the relevant programme funding guidelines in support of all subsequent grant proposals.

Recommendation 17

Given the split for how CDS 1 and 2 funding was deployed and utilised in support of the Covid-19 activities, the DOH should:

- Document learnings from using CDS funds in the Philippines. This learning should involve a review of how the higher-than-normal HR costs contributed to the pandemic response, including what benefits and/or shortcomings this approach had; and
- Share a sustainability plan for how in future, such costs could be absorbed or secured from the government's own health staff budget, in order to sustain gains in the routine immunisation programme.

<table>
<tr><td>Root cause
• While the guidelines for the Covid-19 vaccine Delivery Support (CDS) Programme Funding Guidelines were developed for a broad range of stakeholders including the Alliance partners, these guidelines were not consistently disseminated in order to support grant applications and programming.
• Gavi programming guidance was not consistently disseminated to all COVAX stakeholders, resulting in a divergence of approaches for how funds were used.</td><td colspan="2">Management comments
See detailed management comments on Annex 11</td></tr>
<tr><td>Risk / Impact / Implications
• Does not align with Gavi programming guidance
• Inequitable usage of CDS funds when compared to other Gavi supported countries.</td><td>Responsibility

Collaboration between Government, Gavi and UNICEF for future funding</td><td>Deadline

31 December 2023</td></tr>
</table>

4.5 CCE deployment and management

4.5.1 COVAX-provided CCE units – not installed or not used

Context

COVAX provided Cold Chain Equipment (CCE) to help the country reach its Covid-19 vaccination target, based on an estimate of the additional surge capacity cold chain requirements needed to reach at least 20% of the target population with vaccines. Gavi's Decision Letter dated 24 August 2021 states that, "*In accordance with Gavi's Transparency and Accountability Policy, participants must ensure that all support received from the COVAX Facility is managed in a transparent and accountable manner through systems that include appropriate oversight mechanisms and that the support is used according with the* ***purposes for which it is provided****.*"

Condition

Delays in installation of COVAX CCE – The country used the "WHO Supply Chain Sizing Tool" to estimate its Cold Chain Equipment needs, in order to vaccinate at least 20% of the target population against Covid-19. The identified levels were based on the designated Covid-19 delivery sites as follows:

- Regional level – 3 walk-in cold rooms; and at the
- Provincial/city level – 6 walk-in cold rooms and 145 ice-lined refrigerators.

The country subsequently signed its COVAX CCE Decision Letter on 24 August 2021 for the procurement of nine walk-in cold rooms (WICRs) and 145 ice-lined refrigerators (ILRs) with the objective to install and use the equipment within the first year based on the country's application form for COVAX CCE support dated 29th April 2021. UNICEF supply division provided the country with a cost estimate on 17 September 2021 and the country responded with approval to proceed with procurement on 27 September 2021. The CCE items were received by the Philippines Bureau of Customs in March 2022.

The audit team noted that by mid-August 2022:

- 55% (5/9) of the WICRs were not yet installed and put into service; and
- 53% (77/145) of the ILRs were not yet delivered to their designated vaccine storage points.

Based on the country's Covid-19 vaccination coverage results and having reached its overall target population, the audit team questioned whether this equipment was needed, as the country was able to reach a high level of vaccination without using many of these items.

Up until March 2023, the installation and commissioning of the CCE units continued to follow the original Covid-19 vaccination deployment plan, i.e., to highly populated areas in support of a surge in vaccine volumes associated with reaching the target population. Even though the ongoing distribution of this equipment took longer than expected, the CCE deployment plan was not revalidated to determine whether the initial plan, based on a Covid-19 CCE needs assessment was still pertinent. Nor was the plan revisited to consider whether other locations associated with transitioning Covid-19 vaccines into routine immunisation, were more appropriate.

Recommendation 18

The DOH should:

- Verify that all CCE reported as "installed" are connected to a power supply and have been put into service, given that some locations did not have the funds to complete the installation.
- Perform periodic CCE physical verifications to confirm the existence and use of the units provided and available.
- Ensure a complete list of CCE items is incorporated into the national CCE register including their location. In addition, each location should have a its own asset register including details on the CCE items, their date when put into service, etc., as well as regularly review and update their status indicating whether items are still operational.
- Ensure a preventative and curative maintenance plan is developed and executed to maintain the useful life of these assets. SOPs should be updated to include manufacturer's instructions on the maintenance of specific equipment brands.
- Prepare and submit a plan to Gavi explaining how the COVAX-funded CCE is to be incorporated into the routine immunisation programme.

Management Comments

We accept the above recommendations.

See detailed management comments on ***Annex 11***

Post audit fieldwork follow-up (March 2023)
The audit team noted that two of three sites visited included COVAX CCE that was not yet in service.

- Pampanga PHO received 1 WICR and 4 ILRs (TCW 4000 AC) and all the 4 COVAX ILRs were not in use. The WICR was being utilised for routine immunisation vaccines. The PHO had 3 other ILRs that were not in use at the time of the visit.
- Caloocan CHO received 1 WICR and 4 ILRs (TCW 4000 AC). None of these CCE items were in use.
- Manila CHO received 4 ILRs (TCW 4000 AC). All four of these units were in use, however, there were some operational challenges with their temperature monitoring system.

Root Cause

- Delays in customs clearance, once the CCE first arrived in-country.
- Delays in coordinating with regions and provincial/city authorities to agree on locations where the walk-in cold rooms could be installed or ILRs delivered. As a consequence, regions and provincial/city locations were not ready to receive procured CCE.

Responsibility

DOH

Deadline

31 December 2023

Risk / Impact / Implications

Critical CCE infrastructure may not be located in areas where it is needed to support routine immunisation, including for example hard-to-reach areas. By not promptly revisiting the CCE deployment plan, an opportunity was potentially missed for the programme to fully capitalise on this equipment consignment and redeploy items where there were most needed or useful.

5.0 Annexes

Annex 1 – Acronyms

AMC	Advance Market Commitment
ASEAN	Association of Southeast Asian Nations
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
CCE	Cold Chain Equipment
CDS	Covid-19 Vaccine Delivery Support
CEPI	Coalition for Epidemic Preparedness Innovations
CHO	City Health Office
COVAX	Vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator
DICT	Department of Information Communication Technology
DOH	Department of Health
DVS	District Vaccine Stores
eLMIS	Electronic Logistics Management Systems
EPI	Expanded Programme on Immunisation
EVM cIP	Effective Vaccine Management Costed Improvement Plan
GDP	Gross Domestic Product
HF	Health Facility
HOM	Health Organisation of Mindanao
IATF	Inter-Agency Task Force
IMF	International Monetary Fund
LGU	Local Government Unit
LVOC	Local Vaccination Operations Center
LMIS	Logistics Management Information System
NCR	National Capital Region
NDVP	National Vaccine Deployment Plan
NHIP	National Health Insurance Program
NTF	National Task Force
NVOC	National Vaccination Operations Centre
PCV	Pneumococcal conjugate vaccine
PHIC	Philippine Health Insurance Corporation
PHO	Provincial Health Office
PHOC	Public Health Operation Center
PHP	Philippine peso
RI	Relief International Philippines
RITM	Research Institute for Tropical Medicine in Manila
RVOC	Regional Vaccination Operations Centre
SAGE	Strategic Advisory Group of Experts on Immunization
UNICEF	United Nations Children's Fund
USD	United States Dollars
VAS	Vaccination administration system
vLMIS	Vaccine Logistics Management Information System
VORS	Vaccination operations reporting system
WHO	World Health Organization
WUENIC	WHO UNICEF Estimates of National Immunisation Coverage

Annex 2 – Methodology

Gavi's Audit and Investigations (A&I) audits are conducted in accordance with the Institute of Internal Auditors' ("the Institute") mandatory guidance which includes the definition of Internal Auditing, the Code of Ethics, and the International Standards for the Professional Practice of Internal Auditing (Standards). This mandatory guidance constitutes principles of the fundamental requirements for the professional practice of internal auditing and for evaluating the effectiveness of the audit activity's performance. The Institute of Internal Auditors' Practice Advisories, Practice Guides, and Position Papers are also be adhered to as applicable to guide operations. In addition, A&I staff will adhere to A&I's standard operating procedures manual.

The principles and details of the A&I's audit approach are described in its Board-approved Terms of Reference and Audit Manual and specific terms of reference for each engagement. These documents help our auditors to provide high quality professional work, and to operate efficiently and effectively. They help safeguard the independence of the A&I's auditors and the integrity of their work. The A&I's Audit Manual contains detailed instructions for carrying out its audits, in line with the appropriate standards and expected quality.

In general, the scope of A&I's work extends not only to the Secretariat but also to the programmes and activities carried out by Gavi's grant recipients and partners. More specifically, its scope encompasses the examination and evaluation of the adequacy and effectiveness of Gavi's governance, risk management processes, system of internal control, and the quality of performance in carrying out assigned responsibilities to achieve stated goals and objectives.

Annex 3 – Definitions: opinion and audit issue rating

A. Overall Audit Opinion

The audit team ascribes an audit rating for each area/section reviewed, and the summation of these audit ratings underpins the overall audit opinion. The audit ratings and overall opinion are ranked according to the following scale:

Effective	**No issues or few minor issues noted**. Internal controls, governance and risk management processes are adequately designed, consistently well implemented, and effective to provide reasonable assurance that the objectives will be met.
Partially Effective	**Moderate issues noted.** Internal controls, governance and risk management processes are adequately designed, generally well implemented, but one or a limited number of issues were identified that may present a moderate risk to the achievement of the objectives.
Needs significant improvement	**One or few significant issues noted.** Internal controls, governance and risk management practices have some weaknesses in design or operating effectiveness such that, until they are addressed, there is not yet reasonable assurance that the objectives are likely to be met.
Ineffective	**Multiple significant and/or (a) material issue(s) noted.** Internal controls, governance and risk management processes are not adequately designed and/or are not generally effective. The nature of these issues is such that the achievement of objectives is seriously compromised**.**

B. Issue Rating

For ease of follow up and to enable management to focus effectively in addressing the issues in our report, we have classified the issues arising from our review in order of significance: High, Medium and Low. In ranking the issues between 'High', 'Medium' and 'Low', we have considered the relative importance of each matter, taken in the context of both quantitative and qualitative factors, such as the relative magnitude and the nature and effect on the subject matter. This is in accordance with the Committee of Sponsoring Organisations of the Treadway Committee (COSO) guidance and the Institute of Internal Auditors standards.

Rating	Implication
High	At least one instance of the criteria described below is applicable to the issue raised: • Controls mitigating high inherent risks or strategic business risks are either inadequate or ineffective. • The issues identified may result in a risk materialising that could either have: a major impact on delivery of organisational objectives; major reputation damage; or major financial consequences. • The risk has either materialised or the probability of it occurring is very likely and the mitigations put in place do not mitigate the risk. • Management attention is required as a matter of priority. • Fraud and unethical behaviour including management override of key controls.
Medium	At least one instance of the criteria described below is applicable to the issue raised: • Controls mitigating medium inherent risks are either inadequate or ineffective. • The issues identified may result in a risk materialising that could either have: a moderate impact on delivery of organisational objectives; moderate reputation damage; or moderate financial consequences • The probability of the risk occurring is possible and the mitigations put in place moderately reduce the risk. • Management action is required within a reasonable time period.
Low	At least one instance of the criteria described below is applicable to the issue raised: • Controls mitigating low inherent risks are either inadequate or ineffective. • The Issues identified could have a minor negative impact on the risk and control environment. • The probability of the risk occurring is unlikely to happen. • Corrective action is required as appropriate.

Annex 4: Sample Regions/Districts/Health Facilities

Region	Provinces/City health offices	Health Facilities
Central Vaccines Stores • Nonpareil International Freight and Cargo Services Inc • Zuellig Pharma		
Region XII-SOCCKSARGEN	South Cotabato Health Office	Santo Niño Rural Health Unit
		Norala RHU
		Tupi Municipal Health Office
		Tampakan RHU
		Zone Ii (Pob.) Barangay Health Station
		Zone Iii A (Pob.) Barangay Health Station
		Koronadal City Health Office
	General Santos City Health Office	Lagao Main Health Center
		Fatima Rural Health Unit
		Calumpang Rural Health Unit
		Labangal Rural Health Unit
		Conel Rural Health Unit
National Capital Region (NCR)	Manila City and City Warehouse at Sta. Ana Hospital	Smokey Mountain Health Center
		Bo. Obrero Health Center
		Bo. Fugoso Health Center
		Bo. Magsaysay Health Center
		Earnshaw Health Center
		F. Legarda Health Center
		M. Icasiano Health Center
	Quezon City & City Warehouse	Cubao Health Center
		Pinyahan Health Center
		Bagong Pag-Asa Health Center
		Bagong Silangan Health Center
		Holy Spirit Health Center
Region VI-Western Visayas	1. Negros Occidental Provincial Health Office 2. Iloilo Province	Pavia Rural Health Unit
		Oton Rural Health Unit
		Dueñas Rural Health Unit
		Bingawan Rural Health Unit
	Iloilo CHO	Molo District Health Office
		Jaro I District Health Center
		Mandurriao District Health Center
		Pulupandan Rural Health Unit
		Valladolid Rural Health Unit
		Binalbagan Rural Health Unit
		Victorias City Health Office
		Cadiz City Health Office and Emergency Clinic

Annex 5: The Philippines immunisation schedule

No.	Vaccine	Route of Administration	Injection Site	Schedule
1	BCG	Intradermal	Upper right arm	At birth
2	HepB	Intramuscular	Outer mid-thigh	At birth
3	OPV	Oral	Mouth	6-10-14 weeks
4	IPV	Intramuscular	Outer left upper thigh	14 weeks
5	DTP3	Intramuscular	Outer right upper thigh	6-10-14 weeks
6	PCV	Intramuscular	Outer left upper thigh	6-10-14 weeks
7	PPV	Intramuscular	Upper right arm	Adults 60 and 65 years old
8	Rotavirus Vaccine	Oral	Mouth	6-10 weeks
9	MMR	Subcutaneous	Upper right arm	9 months and 12 months
10	MR	Subcutaneous	Upper right arm	Grade 1 and 7
11	Td	Intramuscular	Outer, left upper arm	Grade 1 and 7 for children For child-bearing woman: Td1: As early as possible in pregnancy Td2: 4 weeks after Td1 Td3: 6 months after Td2 Td4: 1 year after Td3 Td5: 1 year after Td4
12	JE	Subcutaneous	Upper arm	9 months
13	HPV	Intramuscular	Outer, upper arm	Female: 9 – 10 years old
14	Influenza Vaccine	Intramuscular	Outer, upper arm	60 years old and above, annually
Intradermal = into the skin; Intramuscular = into a muscle; subcutaneous = under the skin				

Annex 6: Gaps in Vaccine Supply Chain Management

Stock reconciliation variances

Region	Store Facility	Covid - 19 Vaccines (whichever is stocked)	Opening balance on 1 Jan 2021 or Earliest Date the COVAX vaccines were received	TOTAL RECEIPTS (Inspection & Acceptance report at the store)	TOTAL ISSUES (Stock card)	Expiries (as captured on stock card)	Damages / wastage as captured on the stock card)	EXPECTED BALANCE (A)	STOCK CARD BALANCE as of 30th June 2022 (B)	VARIANCE (A-B)	Remarks
Region XII	General Santos	AstraZeneca	0	56,860	41,900			14,960	11,200	(3,760)	
Region XII	General Santos	Janssen	0	67,800	45,385			22,415	14,600	(7,815)	
Region XII	General Santos	Moderna	0	43,200	12,970			30,230	3,200	(27,030)	
Region XII	IPHO	AstraZeneca	0	52,260	51,540			720	0	(720)	Closing balance not traceable on the stock card
Region XII	IPHO	Janssen	0	119,500	83,950			35,550		(35,550)	Did not have soft copy Stock card, hence used the hard copy
Region XII	IPHO	Moderna	0	42,700	39,800	250		2,650	3,100	450	In May IPHO received 10,000 doses stored at CHD, 4300 doses were released by CHD to IPHO (Batch 000108A; Jul 23rd 2022) , 2500 doses reported expired as per Incident report; the rest cannot be traced
Region XII	IPHO	Pfizer	0	78,390	28,980			49,410	8,075	(41,335)	Stock cards not comprehensive for all stock available; Pfizer had no stock card, but an external summary sheet exists indicating 8075 vials remained at the end of June
Region XII	Tupi	0.3ml syringes		8,064	0		0	8,064	0	(8,064)	no stock card available
Region XII	Lagao	AstraZeneca	0	1,360				1,360		(1,360)	Stock cards do not capture issues data or receipts but only receipts from CHO
Region XII	Lagao	Janssen	0	3,090				3,090		(3,090)	Stock cards do not capture issues data or receipts but only receipts from CHO
Region XII	Lagao	Moderna	0	500				500		(500)	Stock cards do not capture issues data or receipts but only receipts from CHO

Region	Store Facility	Covid - 19 Vaccines (whichever is stocked)	Opening balance on 1 Jan 2021 or Earliest Date the COVAX vaccines were received	TOTAL RECEIPTS (Inspection & Acceptance report at the store)	TOTAL ISSUES (Stock card)	Expiries (as captured on stock card)	Damages / wastage as captured on the stock card)	EXPECTED BALANCE (A)	STOCK CARD BALANCE as of 30th June 2022 (B)	VARIANCE (A-B)	Remarks
Region XII	Lagao	Pfizer	0	7,200				7,200		(7,200)	Stock cards do not capture issues data or receipts but only receipts from CHO
Region XII	Tampakan	AstraZeneca	0	2,860	1,500			1,360		(1,360)	IPHO had a comprehensive stock card for only AZ and facility has also maintained stock cards from March 2022 only
Region XII	Tampakan	AstraZeneca	0	1,150	760	130		260	20	(240)	Reconciliation done for the Period the facility has kept stock card only (since March 2022) using their records only
Region XII	Fatima	AstraZeneca	0	5,078	2,582			2,496	704	(1,792)	not complete but only vaccine that has stock cards up to 2022
Region XII	Fatima	Janssen	0	5,920				5,920		(5,920)	Stock cards incomplete and not tracking issues, some stock cards are missing especially for 2021
Region XII	Fatima	Moderna	0	1,000				1,000		(1,000)	Stock cards incomplete and not tracking issues, some stock cards are missing especially for 2021
Region XII	Fatima	Pfizer	0	8,304				8,304		(8,304)	Stock cards incomplete and not tracking issues, some stock cards are missing especially for 2021
NCR	NCR - Pasig Warehouse	Pfizer	0	862,920	785,700	0	0	77,220	5,328	(71,892)	
NCR	Smokey Mountain Health Center	Astrazeneca	0	363	325	0	0	38	0	(38)	
NCR	Bo. Obrero Health Center	Pfizer Kids	0	2,300	2,280	0	198	(178)	90	268	
NCR	Bo. Obrero Health Center	Pfizer Adults	0	1,332	1,272	0	35	25	378	353	
NCR	Bo. Fugoso Health Center	AstraZeneca	0	670		0	0	670	0	(670)	
NCR	Bo. Fugoso Health Center	Janssen	0	165		0	0	165	0	(165)	
NCR	Bo. Fugoso Health Center	Moderna	0	120		0	0	120	0	(120)	

Region	Store Facility	Covid - 19 Vaccines (whichever is stocked)	Opening balance on 1 Jan 2021 or Earliest Date the COVAX vaccines were received	TOTAL RECEIPTS (Inspection & Acceptance report at the store)	TOTAL ISSUES (Stock card)	Expiries (as captured on stock card)	Damages / wastage as captured on the stock card)	EXPECTED BALANCE (A)	STOCK CARD BALANCE as of 30th June 2022 (B)	VARIANCE (A-B)	Remarks
NCR	Bo. Fugoso Health Center	Pfizer	0	2,896		0	0	2,896	0	(2,896)	
NCR	Bo. Magsaysay Health Center	AstraZeneca	0	160		0	35	125	0	(125)	
NCR	Bo. Magsaysay Health Center	Janssen	0	100		0	0	100	0	(100)	
NCR	Bo. Magsaysay Health Center	Moderna	0	28		0	23	5	0	(5)	
NCR	Bo. Magsaysay Health Center	Pfizer	0	816		0	27	789	0	(789)	
NCR	Earnshaw Health Center	Sinovac	0	1,700	1,593	0	0	107	12	(95)	
NCR	Earnshaw Health Center	AstraZeneca	0	4,430	3,830	0	0	600		(600)	
NCR	Earnshaw Health Center	Janssen	0	250	30	0	0	220		(220)	
NCR	Earnshaw Health Center	Moderna	0	200	43	0	0	157		(157)	
NCR	Legarda Health Center	Sinovac	0	2,661	2,523			138		(138)	
NCR	Legarda Health Center	AstraZeneca	0	724				724		(724)	
NCR	Legarda Health Center	Pfizer	0	217				217		(217)	
NCR	M. Icasiano Health Center	AstraZeneca	0	5,170	4,823		107	240		(240)	
NCR	M. Icasiano Health Center	Pfizer Orange	0	2,040	1,538		312	190		(190)	
NCR	M. Icasiano Health Center	Pfizer Purple	0	1,668	1,508		16	144		(144)	
NCR-Quezon	Bagong Pag-asa Health Center	Sinovac		169	147			22		(22)	
NCR-Quezon	Bagong Pag-asa Health Center	AstraZeneca		127	121			6		(6)	
NCR-Quezon	Bagong Pag-asa Health Center	Pfizer Purple Cap		249	236			13		(13)	
NCR-Quezon	Bagong Pag-asa Health Center	Pfizer Orange Cap		65	60			5		(5)	
NCR-Quezon	Bagong Pag-asa Health Center	0.3ml syringes		1,244	877			367		(367)	
Region VI	Duenas RHU	Astrazeneca	0	1,782	2,030	0		(248)	0	248	
Region VI	Binalbagan RHU	AstraZeneca	0	2,970	3,106	64	79	(279)	0	279	
Region VI		Janssen		6,250	4,720	2,045	72	(587)	0	587	
Region VI		Moderna		1,322	839	240	273	(30)	0	30	

Region	Store Facility	Covid - 19 Vaccines (whichever is stocked)	Opening balance on 1 Jan 2021 or Earliest Date the COVAX vaccines were received	TOTAL RECEIPTS (Inspection & Acceptance report at the store)	TOTAL ISSUES (Stock card)	Expiries (as captured on stock card)	Damages / wastage as captured on the stock card)	EXPECTED BALANCE (A)	STOCK CARD BALANCE as of 30th June 2022 (B)	VARIANCE (A-B)	Remarks
Region VI		Pfizer		4,398	4,888	0	0	(490)	0	490	
Region VI	Cadiz city	AstraZeneca	0	10,294	7,910	0		2,384	0	(2,384)	
Region VI		Janssen		14,890	6,727			8,163	0	(8,163)	
Region VI		Moderna		1,210	766		346	98	0	(98)	
Region VI		Pfizer		17,418	24,476		10	(7,068)	0	7,068	
Region VI	Negros Occidental	AstraZeneca	0	373,760	259,350	126,998	0	(12,588)	0	12,588	
Region VI		Janssen		379,000	273,570	104,330	0	1,100	0	(1,100)	
Region VI		Moderna		197,680	61,158	131,350	0	5,172	0	(5,172)	
Region VI		Pfizer		245,700	239,028			6,672	0	(6,672)	
Region VI	Victorias City Health Office	AstraZeneca	0	6,026	7,910	0		(1,884)	0	1,884	
Region VI		Janssen		26,962	24,476	6		2,480	0	(2,480)	
Region VI		Moderna		6,550	6,727	230		(407)	0	407	
Region VI		Pfizer		1,106	766	391		(51)	0	51	
									Total	**(236,344)**	

Annex 7: Gaps in Immunisation Data Management

a) Data Reconciliation (Comparing VORS reported data against VAS or facility data)

Facility Name	Month	VAS line / Facility data	VORS	Variance (VAS - VORS)
Bagong Pag-asa Health Center	Jun-23	206	834	(628)
Bagong Pag-asa Health Center	Jul-23	1,461	1,661	(200)
Bagong Silangan Health Center	Jun-23	1,227	1,445	(218)
Bagong Silangan Health Center	Jul-23	1,241	1,209	32
BO. Magsaysay Health Centre	Jun-23	361	423	(62)
CHO- Koronadal	Jun-23	3,565	4,685	(1,120)
CHO- Koronadal	Dec-23	27,338	69,004	(41,666)
Conel	Dec-23	8,048	8,063	(15)
Conel	Jul-23	954	890	64
Conel	Jun-23	107	139	(32)
Holy Spirit Health Center	Jun-23	876	916	(40)
Icasiano Health Center	Dec-23	890	900	(10)
Icasiano Health Center	Jun-23	736	775	(39)
Labangal	Dec-23	5,723	12,051	(6,328)
Labangal	Jul-23	2,393	1,224	1,169
Legarda Health Center	Dec-23	637	320	317
Legarda Health Center	Jun-23	165	25	140
M. Earnshaw Health Centre	Jul-23	30	48	(18)
M. Earnshaw Health Centre	Dec-23	887	3,497	(2,610)
M. Earnshaw Health Centre	Jun-23	172	3,211	(3,039)
Norala	Jun-23	1,048	1,085	(37)
Norala	Dec-23	3,955	16,613	(12,658)
Pinyahan Health Center	Jun-23	2,845	0	2,845
Smokey Mountain Health Center	Dec-23	542	565	(23)
Smokey Mountain Health Center	Jun-23	441	552	(111)
Sto. Nino	Jun-23	1,112	889	223
Sto. Nino	Dec-23	27,932	19,118	8,814
Tampakan	Jun-23	929	2,918	(1,989)
Tampakan	Dec-23	385	15,545	(15,160)
Tupi	Jun-23	784	1,597	(813)
Tupi	Dec-23	25,541	39,164	(13,623)

Annex 8: Financial Management

a) Details of Questioned Expenditure at HOM

KEY: "FOR" means that the recipient signed for funds on behalf of another

No	JV Number	Barangay/Province	Amount received	Remarks
1	JV-GV-001	LANGGONG	2,500	"FOR"
2	JV-GV-001	Calugusan	800	"FOR"
3	JV-GV-001	Paniogan	800	"FOR" "Double Signature"
4	JV-GV-001		1,200	"FOR"
5	JV-GV-001	Sumisip	2,000	"No sign"
6	JV-GV-001	Sumisip	2,000	"Double Signature"
7	JV-GV-001	Sumisip	2,000	"Double Signature"
8	JV-GV-001	Sumisip	2,000	"FOR"
9	JV-GV-009	BOHE IBU	2,500	"Double Signature"
10	JV-GV-009	BOHE NANGE	2,500	"Double Signature"
11	JV-GV-009	Matibay	1,500	"Double Signature"
12	JV-GV-009		2,500	"FOR"
13	JV-GV-009	Maloong Canal	2,500	"FOR"
14	JV-GV-009	Matatag	2,500	"FOR"
15	JV-GV-009	Cabobo	2,500	"FOR"
16	JV-GV-009	Calugusan	2,500	"FOR"
17	JV-GV-009		2,500	"FOR"
18	JV-GV-009	Matatag	2,500	"FOR"
19	JV-GV-009	Parangbasok	2,500	"FOR"
20	JV-GV-009	Sabong	2,500	"FOR"
21	JV-GV-009	Ubit	2,500	"FOR"
22	JV-GV-009	Ulame	2,500	"FOR"
23	JV-GV-009	Baas	2,500	"FOR"
24	JV-GV-009	Bato	2,500	"FOR"
25	JV-GV-009	Baungus	2,500	"FOR"

No	JV Number	Barangay/Province	Amount received	Remarks
26	JV-GV-009		1,000	"FOR"
27	JV-GV-009	Matibay	1,000	"Double Signature"
28	JV-GV-009	Parangbasok	1,000	"Double Signature"
29	JV-GV-009	Sabong	1,000	"Double Signature"
30	JV-GV-009	Sta. Clara	1,000	"Double Signature"
31	JV-GV-009	Sengal	1,000	"Double Signature"
32	JV-GV-009	Simbangon	1,000	"Double Signature"
33	JV-GV-009	Baas	1,000	"Double Signature"
34	JV-GV-009	Balagtasan	1,000	"Double Signature"
35	JV-GV-009	Bohesapa	1,000	"FOR"
36	JV-GV-009	Calugusan	1,600	"FOR"
37	JV-GV-009	Luuk bait	2,000	"FOR"
38	JV-GV-009	Mangal(POB)	2,000	"FOR"
39	JV-GV-009	Tumahubong	2,000	"FOR"
40	JV-GV-009	Tipo Tipo	3,000	"FOR"
41	JV-GV-011	Northern Kabanatuan	10,000	"FOR"
42	JV-GV-011	Datu Odin Sinsuat	3,300	"FOR"
43	JV-GV-018	Mapun	20,000	"FOR"
44	JV-GV-018	Turtle Island	20,000	"FOR"
45	JV-GV-019		3,500	"FOR"
46	JV-GV-019		3,500	"FOR"
47	JV-GV-019	Indanan	1,000	"Double Signature"
48	JV-GV-019	Indanan	1,000	"Double Signature"
49	JV-GV-019	Omav	500	"FOR"
50	JV-GV-019	Omav	500	"FOR"
51	JV-GV-019	Panglima Estino	6,000	"Double Signature"
52	JV-GV-019	Panglima Estino	6,000	"Double Signature"
53	JV-GV-019	Panglima Estino	6,000	"Double Signature"
54	JV-GV-019	Panglima Estino	6,000	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
55	JV-GV-019	Pata	1,000	"FOR" "Double Signature"
56	JV-GV-019	Pata	1,000	"FOR" "Double Signature"
57	JV-GV-019	Pata	1,000	"FOR" "Double Signature"
58	JV-GV-019	Pata	1,000	"FOR" "Double Signature"
59	JV-GV-019	Pandami	500	"Double Signature"
60	JV-GV-019	Pandami	500	"Double Signature"
61	JV-GV-019	Pandami	500	"FOR"
62	JV-GV-019	Pandami	500	"FOR"
63	JV-GV-016	Gunibon	600	"Double Signature"
64	JV-GV-016	Gunibon	600	"Double Signature"
65	JV-GV-016	Maranding	600	"Double Signature"
66	JV-GV-016	Maranding	600	"Double Signature"
67	JV-GV-016	Old Maganov	600	"Double Signature"
68	JV-GV-016	Sugadol	600	"Double Signature"
69	JV-GV-016	Sugadol	600	"Double Signature"
70	JV-GV-016	Sugadol	600	"Double Signature"
71	JV-GV-016	Tukanalugong	600	"Double Signature"
72	JV-GV-016	Maranding	600	"Double Signature"
73	JV-GV-016	Old Maganov	600	"Double Signature"
74	JV-GV-016	Sugadol	600	"Double Signature"
75	JV-GV-016	Tukanalugong	600	"Double Signature"
76	JV-GV-016	Poblacion/Main	3,000	"Double Signature"
77	JV-GV-016	Kakal	3,000	"Double Signature"
78	JV-GV-016	Kauran	3,000	"Double Signature"
79	JV-GV-016	Kauran	3,000	"Double Signature"
80	JV-GV-016	MAO	1,200	"Double Signature"
81	JV-GV-016	MAO	1,200	"Double Signature"
82	JV-GV-016		1,000	"FOR"
83	JV-GV-016	Tulunan	1,300	"FOR"

No	JV Number	Barangay/Province	Amount received	Remarks
84	JV-GV-016	Brar	1,500	"FOR"
85	JV-GV-016	Mapayag	1,200	"FOR"
86	JV-GV-016	Datu Hoffer	500	"FOR"
87	JV-GV-016	Datu Hoffer	500	"FOR"
88	JV-GV-016	Datu Hoffer	500	"FOR"
89	JV-GV-016	Datu Hoffer	500	"FOR"
90	JV-GV-016	Datu Hoffer	200	"Double Signature"
91	JV-GV-016	Datu Hoffer	5,000	"Double Signature"
92	JV-GV-016		3,000	"FOR"
93	JV-GV-016		3,000	"FOR"
94	JV-GV-016		3,000	"FOR"
95	JV-GV-016		3,000	"FOR"
96	JV-GV-016		1,000	"Double Signature"
97	JV-GV-016		1,000	"Double Signature"
98	JV-GV-016		1,000	"Double Signature"
99	JV-GV-016		1,000	"Double Signature"
100	JV-GV-016		1,000	"Double Signature"
101	JV-GV-016		1,000	"Double Signature"
102	JV-GV-016		2,000	"Double Signature"
103	JV-GV-016		6,316	"FOR"
104	JV-GV-016	Sifaran	3,718	"Double Signature"
105	JV-GV-016	Labungan	3,718	"Double Signature"
106	JV-GV-016	Baka	3,718	"Double Signature"
107	JV-GV-016	Tawiran	3,718	"Double Signature"
108	JV-GV-016	Maguindanao	500	"FOR"
109	JV-GV-016	Maguindanao	500	"FOR"
110	JV-GV-016	Maguindanao	300	"FOR"
111	JV-GV-016		1,910	"FOR"
112	JV-GV-016	Paglat	646	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
113	JV-GV-016	Paglat	882	"Double Signature"
114	JV-GV-016	Datu Saudi Ampatuan	2,300	"FOR"
115	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
116	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
117	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
118	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
119	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
120	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
121	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
122	JV-GV-016	Datu Saudi Ampatuan	1,033	"FOR"
123	JV-GV-016		2,700	"Double Signature"
124	JV-GV-016		2,700	"Double Signature"
125	JV-GV-016		1,250	"FOR"
126	JV-GV-016		800	"FOR"
127	JV-GV-016		800	"Double Signature"
128	JV-GV-016		800	"Double Signature"
129	JV-GV-016	Pagalungan	2,500	"Double Signature"
130	JV-GV-016	Pagalungan	2,500	"Double Signature"
131	JV-GV-016	Pagalungan	1,500	"Double Signature"
132	JV-GV-016	Pagalungan	300	"Double Signature"
133	JV-GV-016	Pagalungan	1,500	"Double Signature"
134	JV-GV-016	Pagalungan	1,500	"Double Signature"
135	JV-GV-016	Pagalungan	1,500	"Double Signature"
136	JV-GV-016	Pagalungan	500	"Double Signature"
137	JV-GV-016	Pagalungan	500	"Double Signature"
138	JV-GV-016	Pagalungan	1,500	"Double Signature"
139	JV-GV-016	Pagalungan	500	"Double Signature"
140	JV-GV-016	Pagalungan	500	"Double Signature"
141	JV-GV-016	Pagalungan	500	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
142	JV-GV-016	Pagalungan	300	"Double Signature"
143	JV-GV-016	Pagalungan	300	"Double Signature"
144	JV-GV-016	Pagalungan	1,500	"Double Signature"
145	JV-GV-016	Pagalungan	1,500	"Double Signature"
146	JV-GV-016	Pagalungan	1,500	"Double Signature"
147	JV-GV-016	Pagalungan	1,500	"Double Signature"
148	JV-GV-016	Parang	6,964	"FOR"
149	JV-GV-016	Parang	6,964	"FOR"
150	JV-GV-016	Parang	6,964	"FOR"
151	JV-GV-016	SSB	700	"FOR"
152	JV-GV-016	SSB	1,300	"Double Signature"
153	JV-GV-016	SSB	1,300	"Double Signature"
154	JV-GV-016	SSB	900	"FOR"
155	JV-GV-016	SSB	900	"FOR"
156	JV-GV-016	SSB	1,100	"FOR"
157	JV-GV-016	SSB	1,100	"FOR"
158	JV-GV-016	SSB	700	"FOR"
159	JV-GV-016	SSB	700	"FOR"
160	JV-GV-016	SSB	700	"FOR"
161	JV-GV-016	Talayan	3,676	"Double Signature"
162	JV-GV-016	Talayan	3,676	"Double Signature"
163	JV-GV-016	Talayan	3,676	"Double Signature"
164	JV-GV-016	Talayan	3,676	"Double Signature"
165	JV-GV-016	South Upi	4,500	"FOR"
166	JV-GV-016	South Upi	3,500	"FOR"
167	JV-GV-016	Blensong	1,125	"FOR"
168	JV-GV-016	Kaba kaba	800	"FOR"
169	JV-GV-016	Rempes	200	"Double Signature"
170	JV-GV-016	Rempes	200	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
171	JV-GV-016	Rempes	200	"Double Signature"
172	JV-GV-016	Rempes	200	"Double Signature"
173	JV-GV-016	Rempes	200	"Double Signature"
174	JV-GV-016	Rempes	200	"Double Signature"
175	JV-GV-016	Kinitaan	200	"Double Signature"
176	JV-GV-016	Kinitaan	200	"Double Signature"
177	JV-GV-016	Kinitaan	200	"Double Signature"
178	JV-GV-016	Bugabungan	200	"Double Signature"
179	JV-GV-016	Bugabungan	200	"Double Signature"
180	JV-GV-016	Bugabungan	200	"Double Signature"
181	JV-GV-016		3,300	"Double Signature"
182	JV-GV-016		3,300	"Double Signature"
183	JV-GV-016		4,400	"FOR"
184	JV-GV-016		4,400	"FOR"
185	JV-GV-016	BHW	400	"FOR"
186	JV-GV-016	UPI	1,225	"Double Signature"
187	JV-GV-016	UPI	1,225	"Double Signature"
188	JV-GV-016	Nangi	200	"FOR"
189	JV-GV-016	Nangi	200	"FOR"
190	JV-GV-016	Nangi	200	"FOR"
191	JV-GV-016	Nangi	200	"FOR"
192	JV-GV-016	Nangi	200	"FOR"
193	JV-GV-016	Kibucay	200	"FOR"
194	JV-GV-016	Kibucay	200	"FOR"
195	JV-GV-016	Mirab	200	"Double Signature"
196	JV-GV-016	Mirab	200	"Double Signature"
197	JV-GV-016	Sultan Kudarat	3,229	"FOR"
198	JV-GV-016	Sultan Kudarat	3,229	"FOR"
199	JV-GV-016	Sultan Kudarat	3,229	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
200	JV-GV-016	Sultan Kudarat	3,229	"Double Signature"
201	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
202	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
203	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
204	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
205	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
206	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
207	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
208	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
209	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
210	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
211	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
212	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
213	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
214	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
215	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
216	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
217	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
218	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
219	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
220	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
221	JV-GV-016	Sultan Kudarat	1,000	"FOR"
222	JV-GV-016	Sultan Kudarat	1,000	"FOR"
223	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
224	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
225	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
226	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
227	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
228	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
229	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
230	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
231	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
232	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
233	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
234	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
235	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
236	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
237	JV-GV-016	Sultan Kudarat	1,000	"Double Signature"
238	JV-GV-016		3,300	"FOR"
239	JV-GV-016		3,300	"FOR"
240	JV-GV-016		3,300	"FOR"
241	JV-GV-016		3,300	"FOR"
242	JV-GV-016		3,300	"FOR"
243	JV-GV-016		3,300	"FOR"
244	JV-GV-016		3,300	"FOR"
245	JV-GV-016		3,300	"FOR"
246	JV-GV-016		3,300	"FOR"
247	JV-GV-016		3,300	"FOR"
248	JV-GV-016		3,300	"FOR"
249	JV-GV-016		3,300	"FOR"
250	JV-GV-016		3,300	"FOR"
251	JV-GV-016		3,300	"FOR"
252	JV-GV-016		3,300	"FOR"
253	JV-GV-016		3,300	"FOR"
254	JV-GV-016		3,300	"FOR"
255	JV-GV-016		10,500	"FOR"
256	JV-GV-016		10,500	"FOR"
257	JV-GV-016		10,500	"FOR"

No	JV Number	Barangay/Province	Amount received	Remarks
258	JV-GV-016		10,500	"FOR"
259	JV-GV-016		10,500	"FOR"
260	JV-GV-016		10,500	"FOR"
261	JV-GV-016		10,500	"FOR"
262	JV-GV-020	Sulu	10,000	"Double Signature"
263	JV-GV-020	Sulu	10,000	"FOR"
264	JV-GV-020	Sulu	10,000	"Double Signature"
265	JV-GV-020	Sulu	8,500	"Double Signature"
266	JV-GV-020	Sulu	8,500	"Double Signature"
267	JV-GV-020	Sulu	8,500	"Double Signature"
268	JV-GV-020	Jolo	3,000	"Double Signature"
269	JV-GV-020	Jolo	3,000	"Double Signature"
270	JV-GV-020	Indanan	3,000	"FOR"
271	JV-GV-020	Talipao	3,050	"Double Signature"
272	JV-GV-020	Talipao	3,050	"Double Signature"
273	JV-GV-020	Talipao	3,050	"Double Signature"
274	JV-GV-020	Talipao	1,700	"Double Signature"
275	JV-GV-020	Sulu	1,200	"FOR"
276	JV-GV-020	Sulu	1,200	"FOR"
277	JV-GV-020	Sulu	1,200	"FOR"
278	JV-GV-020	Sulu	1,200	"FOR"
279	JV-GV-020	Sulu	1,200	"FOR"
280	JV-GV-020	Sulu	3,000	"FOR"
281	JV-GV-020	Sulu	2,700	"FOR"
282	JV-GV-020	Sulu	2,700	"FOR"
283	JV-GV-020	Pandami	1,900	"FOR"
284	JV-GV-020	Pandami	1,800	"FOR"
285	JV-GV-020	Pandami	1,000	"FOR"
286	JV-GV-020	Tapul	1,500	"FOR"

No	JV Number	Barangay/Province	Amount received	Remarks
287	JV-GV-020	Sulu	3,000	"FOR"
288	JV-GV-021	Sulu	5,000	"FOR"
289	JV-GV-021	Sulu	5,000	"FOR"
290	JV-GV-021	Sulu	5,000	"FOR"
291	JV-GV-021	Sulu	5,000	"FOR"
292	JV-GV-021	Sulu	2,000	"Double Signature"
293	JV-GV-021	Sulu	2,000	"Double Signature"
294	JV-GV-021	Sulu	1,000	"FOR"
295	JV-GV-021	Sulu	1,600	"FOR"
296	JV-GV-021	Sulu	1,600	"FOR"
297	JV-GV-021	Sulu	1,600	"FOR"
298	JV-GV-021	Sulu	1,600	"FOR"
299	JV-GV-021	Pata	1,850	"FOR"
300	JV-GV-021	Pata	1,850	"FOR"
301	JV-GV-021	Sulu	1,200	"FOR"
302	JV-GV-021	Sulu	1,100	"FOR"
303	JV-GV-021	Sulu	1,100	"FOR"
304	JV-GV-021	Sulu	1,100	"FOR"
305	JV-GV-021	Sulu	800	"FOR"
306	JV-GV-021	Sulu	800	"FOR"
307	JV-GV-023	Akbar	1,500	"FOR"
308	JV-GV-023	Al-Barka	2,500	"FOR"
309	JV-GV-023	Subaan &Calugusan	2,000	"FOR"
310	JV-GV-023	Lawi-lawi	2,500	"FOR"
311	JV-GV-023	Maluso	2,200	"FOR"
312	JV-GV-023	Maluso	2,200	"FOR"
313	JV-GV-023	Maluso	2,200	"FOR"
314	JV-GV-023	Maluso	3,500	"FOR"
315	JV-GV-023	Sumisip	2,300	"FOR"

No	JV Number	Barangay/Province	Amount received	Remarks
316	JV-GV-023	Sumisip	2,300	"FOR"
317	JV-GV-023	Akbar	1,050	"FOR"
318	JV-GV-023	Al-Barka	2,000	"FOR"
319	JV-GV-023	Subaan &Calugusan	1,880	"FOR"
320	JV-GV-023	Lawi-lawi	1,880	"FOR"
321	JV-GV-023	Maluso	1,400	"FOR"
322	JV-GV-023	Maluso	1,400	"FOR"
323	JV-GV-023	Basilan	1,500	"FOR"
324	JV-GV-023	Basilan	3,500	"FOR"
325	JV-GV-023	Basilan	2,000	"FOR"
326	JV-GV-023	Basilan	2,000	"FOR"
327	JV-GV-023	Basilan	2,000	"FOR"
328	JV-GV-023	Basilan	2,000	"FOR"
329	JV-GV-023	Basilan	2,000	"FOR"
330	JV-GV-025	Panglima Sugala	1,500	"FOR"
331	JV-GV-025	Panglima Sugala	2,000	"FOR"
332	JV-GV-025	Panglima Sugala	5,000	"FOR"
333	JV-GV-025	Simunul	5,000	"No sign"
334	JV-GV-028	Wao	200	"FOR"
335	JV-GV-028	Wao	200	"FOR"
336	JV-GV-028	Wao	200	"Double Signature"
337	JV-GV-028	Wao	200	"FOR"
338	JV-GV-028	Wao	200	"FOR"
339	JV-GV-028	Wao	200	"FOR"
340	JV-GV-028	Wao	200	"FOR"
341	JV-GV-028	Wao	200	"FOR"
342	JV-GV-028	Wao	200	"FOR"
343	JV-GV-028	Wao	200	"FOR"
344	JV-GV-028	Wao	200	"Double Signature"

No	JV Number	Barangay/Province	Amount received	Remarks
345	JV-GV-028	Wao	200	"No sign"
346	JV-GV-028	Wao	200	"FOR"
347	JV-GV-028	Wao	200	"FOR"
348	JV-GV-028	Wao	300	"Double Signature"
349	JV-GV-028	Wao	300	"Double Signature"
350	JV-GV-028	Binidayan	622	"Double Signature"
351	JV-GV-028	Binidayan	622	"Double Signature"
352	JV-GV-028	Binidayan	622	"Double Signature"
353	JV-GV-028	Butig	1,000	"E-signature"
354	JV-GV-028	Butig	1,350	"E-signature"
355	JV-GV-028	Butig	1,350	"E-signature"
356	JV-GV-028	Butig	600	"E-signature"
357	JV-GV-028	Butig	600	"E-signature"
358	JV-GV-028	Butig	600	"E-signature"
359	JV-GV-028	Maguing	1,000	"FOR"
360	JV-GV-028	Maguing	1,000	"FOR"
361	JV-GV-028	Maguing	500	"FOR"
362	JV-GV-028	Maguing	1,000	"FOR"
363	JV-GV-028	Poona Bayabao	500	"No sign"
364	JV-GV-028	Poona Bayabao	500	"FOR"
365	JV-GV-028	Bubong	350	"Double Signature"
366	JV-GV-028	Bubong	350	"Double Signature"
367	JV-GV-028	Bubong	350	"Double Signature"
368	JV-GV-028	Bubong	350	"Double Signature"
369	JV-GV-028	Bubong	350	"Double Signature"
370	JV-GV-028	Bubong	350	"Double Signature"
371	JV-GV-028	Kapai	400	"No sign"
372	JV-GV-028	Piagapo	1,000	"FOR"
373	JV-GV-028	Piagapo	1,000	"FOR"

No	JV Number	Barangay/Province	Amount received	Remarks
374	JV-GV-028	Piagapo	600	"Double Signature"
375	JV-GV-028	Piagapo	600	"Double Signature"
376	JV-GV-028	Piagapo	1,000	"FOR"
377	JV-GV-028	Piagapo	1,000	"FOR"
378	JV-GV-028	Piagapo	1,000	"FOR"
379	JV-GV-028	Piagapo	1,000	"FOR"
380	JV-GV-028	Piagapo	500	"FOR"
381	JV-GV-028	Piagapo	500	"FOR"
382	JV-GV-028	Piagapo	500	"FOR"
383	JV-GV-028	Piagapo	500	"FOR"
384	JV-GV-028	Tubaran	500	"Double Signature"
385	JV-GV-028	Tubaran	500	"Double Signature"
386	JV-GV-028	Tubaran	500	"Double Signature"
387	JV-GV-028	Tubaran	500	"Double Signature"
388	JV-GV-028	Paulas	1,000	"Double Signature"
389	JV-GV-028	Paulas	1,000	"Double Signature"
		TOTAL	**779,853**	

b) Details of Questioned Expenditure at Relief International

Month	Description	Project Task	Amount (PHP_
Feb 2022	FEB22 INDIRECT	7512-899 PSC Amount	3,089,911.91
Apr 2022	Engagement of Financial Service Provider for the Transfer of CDS MLhuillier payment for release of CHD staff (HRH) and Volunteers Incentives (Region 4A) Batch 68	7512-107 Per diem for new volunteers (accommodation, meals, traveling expenses) 446 volunteers for 3.5 months	2,235,000.00
Apr 2022	Region 7 (Volunteers) Mar 16-31, 2022	7512-107 Per diem for new volunteers (accommodation, meals, traveling expenses) 446 volunteers for 3.5 months	1,063,000.00
Apr 2022	Region 4A (Mobilization) Mar 2022	7512-108 Mobilization fund for vaccination team (transportation and food allowance),	1,369,800.00
		Adjustment for reversals made to account	(2,432,800.00)
		TOTAL	**5,324,911.91**

Month	Description	Project Task	Amount (PHP)
Dec 2021	Salary paid to CDS STAFF for Dec 1-31, 2021/N. Gagarin	7512-102 Health Coordinator (National) 100%	1,800,870.54
May 2022	Reversal Entry of reallocation: Full payment of the Vehicle Rental used by the CDS Region 9 Staff (50% DP REF: 1221/PHLPV?99)	7512-112 Monitoring and evaluation of vaccination activities (per region, 2 per month x 4 months)	232,795.78
May 2022	Reversal Entry of reallocation: Full payment of the Vehicle Rental used by the CDS Region 12 Staff (50% DP REF: 1221/PHLPV?99)	7512-112 Monitoring and evaluation of vaccination activities (per region, 2 per month x 4 months)	226,391.69
May 2022	Reversal Entry of reallocation: Full payment of the Vehicle Rental used by the CDS Region 11 Staff (50% DP REF: 1221/PHLPV?99)	7512-112 Monitoring and evaluation of vaccination activities (per region, 2 per month x 4 months)	226,391.69
May 2022	Reversal Entry of reallocation: Full payment for the Vehicle Rental in Region 5/CDS (50% Downpayment REF: 1221_PHLPV?119)	7512-112 Monitoring and evaluation of vaccination activities (per region, 2 per month x 4 months)	220,543.37
May 2022	Reversal Entry of reallocation: 346 Jimbo Dayao	7512-112 Monitoring and evaluation of vaccination activities (per region, 2 per month x 4 months)	345,027.86
Jun 2022	Reallocation: Payment for Alcohol including hauling and delivery for Region 4A as per Approved PO/RI/PHL/CDS/22/0197 (1250xPhp190)	7512-121 Alcohol (procurement and hauling fees)	237,500.00
		TOTAL	**3,289,520.93**

Annex 9: Disbursements to UNICEF's implementing partners

Partner	Disbursement Date	Amount PHP	Equivalent amount in USD	Expenditures PHP	Balance PHP
RI	30-Nov-2021	134,564,988.68	*2,654,141.79*	**202,420,457.56**	
RI	08-Mar-2022	72,200,638.27	*1,406,303.30*		4,345,169.39
RI	07-Jul-2022	107,815,935.29	*1,970,320.45*		107,815,935.29
Total		**314,581,562.24**	***6,030,765.54***		**112,161,104.68**
Partner	**Disbursement Date**	**Amount PHP**	**Equivalent amount in USD**	**Expenditures PHP**	**Balance PHP**
HOM	07-Dec-2021	24,691,450.00	*490,259.91*	**24,691,450.00**	0.00

Annex 10: Post audit information

a) Global vaccine reconciliation by audit team as at 22nd July 2022

Description	*Amount (in doses)*	*Source of information*
COVAX deliveries	*74,215,730*	*DOH, Supply Chain Management Service*
Add: Other COVID 19 Vaccines deliveries	*170,042,770*	*DOH, Supply Chain Management Service*
Sub-total doses physically received by Philippines	***244,258,500***	
Less: Doses administered	*157,265,177*	*NVOC*
Less: Reported expired doses	*4,123,030*	*Expired doses physically verified at the third-party warehouses by audit team were 436,170. See section 4.1.2*
Derived balance of expected physical doses remaining (a)	***82,870,293***	
Current balance of actual physical doses remaining		
Actual physical doses – at national level	*11,652,820*	*Physical stock count by audit team on 22nd July 2022*
Actual physical doses – at sub-national level	*19,681,195*	*Daily Covid-19 vaccines stock balances tracker from NVOC*
Actual physical doses remaining on hand (b)	***31,334,015***	
Unexplained difference in doses as of 22 July 2022 = [(a) – (b)]	***51,536,278***	

b) Post audit vaccine dosage reconciliation provided by DOH as at 11th November 2022

Total doses delivered to Philippines	Total doses Administered	Doses Wastage	Balance at central storage	Balances at regional level	Remaining gap
250,384,200	171,204,794	44,074,988	18,822,420	12,349,407	3,932,591

SUMMARY OF COVID-19 VACCINES IN THE PHILIPPINES

VACCINE BRAND	DONATION		PROCUREMENT					TOTAL
	COVAX	BILATERAL	GOP	ADB	WB	LGU	PRIVATE	
SINOVAC		4,075,000	5,500,000	45,630,400		400,000	500,000	56,105,400
PFIZER ADULT	31,292,820	1,432,080		40,001,130	5,001,750			77,727,780
PFIZER PEDIA		5,001,600			15,000,000			20,001,600
SPUTNIK COMP I			5,000,000					5,000,000
SPUTNIK COMP II			5,000,000					5,000,000
SPUTNIK LIGHT		5,000						5,000
ASTRAZENECA	16,324,000	6,003,750				13,340,300	3,178,900	38,846,950
MODERNA	13,873,260				13,019,830		6,978,730	33,871,820
JANSSEN	12,725,650							12,725,650
SINOPHARM		1,100,000						1,100,000
	74,215,730	17,617,430	15,500,000	85,631,530	33,021,580	13,740,300	10,657,630	250,384,200

TABLE 1: COVID-19 DATA RECONCILIATION AS OF NOVEMBER 11, 20222

Total doses delivered to PHL	Total doses administered	Doses Wastage	Balance at Central Storage	Balance at Regional level	Gap
250,384,200	171,204,794	44,074,988	18,822,420	12,349,407	3,932,591

ongoing validation of CHDs & LGUs to account for jabs, inventory, and wastage

Reasons for variance:

> UNDERREPORTING on:

- vaccine administered
- Vaccine wastage
- Inventory of LGUs and private

Table 2: Inventory of COVID-19 Vaccines at the National Cold Chain Facility as of November 11, 2022

Month Received	Current Stock: COVAX Supplied COVID-19 Vaccines Doses				Current Stock: NON-COVAX Supplied Covid-19 Vaccine Doses						TOTAL
	Pfizer	AstraZeneca	Moderna	Janssen	Pfizer Adult	Pfizer Pedia	Sputnik Comp I	Sputnik Comp II	Sinovac	AstraZeneca	
Jun-21									13,040		13,040
Nov-21							2,897,030	3,506,600	211,120		6,614,750
Dec-21		124,300							2,139,160	214,480	2,477,940
Jan-22	1,269,450										1,269,450
Feb-22	3,071,250										3,071,250
Mar-22	2,423,070										2,423,070
Apr-22									50,000		50,000
Jul-22	299,520										299,520
Sep-22						601,800					601,800
Oct-22						2,001,600					2,001,600
total	7,063,290	124,300				2,603,400			2,413,320	214,480	18,822,420

Annex C

REGION	WASTAGES: BREAKDOWN PER VACCINE BRAND (IN DOSES)										
	SINOVAC	PFIZER ADULT	PFIZER PEDIA	SPUTNIK COMPONENT I	SPUTNIK COMPONENT II	SPUTNIK LIGHT	ASTRAZENECA	MODERNA	JANSSEN	SINOPHARM	TOTAL
NATIONAL LEVEL							5,347,120	7,005,670	168,000		12,520,790
NCR	87,089	76,072	9,960	2,875	735	650	2,578,550	356,905	1,963	9	3,114,808
CAR	43,762	64719	25,020	89,724	122,437	0	262,765	65,165	21,266	0	694,858
I	277,487	364,358	247,753	56,386	37,382	1,500	389,880	302,444	184,577	0	1,861,767
II	102,263	214,223	43,830	89,561	124,022	0	269,093	226,457	64,497	0	1,133,946
III	414,909	529,455	188,806	56,934	61,202	0	769,680	747,010	615,306	427	3,383,729
IV-A	76,257	195,117	7,070	156,933	118,772	0	625,404	457,173	355,390	1,286	1,993,402
IV-B	95,056	415,400	60,700	36,301	37,941	0	299,584	306,196	280,017	1	1,531,196
V	259,214	584,712	151,361	60,730	57,382	0	419,613	606,016	306,656	0	2,445,684
VI	315,991	347,483	172,830	54,877	26,526	0	706,504	846,021	363,293	0	2,833,525
VII	88,421	204,649	5,784	65,207	37,915	0	929,874	573,854	759,787	4	2,665,495
VIII	229,870	86,616	42,913	223,298	50,584	0	400,237	397,762	322,740	0	1,754,020
IX	72,482	251,017	71,759	128,587	13,919	0	263,114	250,813	173,232	0	1,224,923
X	21,579	93,372	72,183	246,049	234,281	0	282,006	283,914	188,486	156	1,422,026
XI	131,593	636,611	144,991	17,041	17,909	0	153,463	236,837	421,420	1,997	1,761,862
XII	265,591	278,783	64,770	105,206	3,095	0	399,405	423,397	426,107	553	1,966,907
CARAGA	25,559	226,318	37,836	70,000	70,000	0	494,872	214,918	128,274	0	1,267,777
BARMM	0	4,169	2,727	0	0	0	37,994	77,050	375,445	888	498,273
TOTAL	2,499,167	4,391,719	1,346,728	1,459,709	1,014,102	2,150	9,260,870	6,352,101	4,969,983	5,777	44,074,988

c) Global vaccine reconciliation by audit team as of 10 March 2023

Description	*Amount (doses)*	*Source of information*
COVAX deliveries (including donations shipped by COVAX)	*74,215,730*	*DOH, Supply Chain Management Service*
Add: Other deliveries from other sources	*177,166,870*	*DOH, Supply Chain Management Service*
Sub-total doses physically received by Philippines	***251,382,600***	
Less: Doses administered (vaccines consumed)	*185,508,164*	*PHOC data on 10 March 2023*
Less: Reported expired doses	*56,502,499*	*See section 4.1.2 of the report for further analysis of expiries*
Derived balance of expected physical doses remaining (a)	***9,371,937***	
Current balance of actual physical doses remaining:		
Actual physical doses – at national level	*8,318,500*	*Physical stock count by audit team on 20 March 2023**
Actual physical doses – at sub-national level	*9,896,096*	*PHOC data as of 10 March 2023 (not verified by audit team)*
Actual physical doses remaining on hand (b)	***18,214,596***	
Unexplained difference in doses as of 10 March 2023 = [(a) – (b)]	**(8,842,659)**	

* *Although central level stock balances are as at 20 March 2023 when the audit team visited the central warehouse, no issues or receipts had been made between 10-20 March 2023*

Annex 11: Management responses to recommendations

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 1 The DOH should establish an overarching governance mechanism to provide oversight over the separate units dealing with vaccine logistics and vaccination data within the department. This governance structure should have established terms of reference, membership from the various departments and technical experts from partner organisations within immunisation	**Action 1:** The DOH will establish a committee to oversee vaccine logistics and vaccination data	DOH	31 December 2023
Recommendation 2 The DOH and NVOC should: • Perform periodic reconciliations to ensure that all Covid-19 vaccine doses can be accounted for; and investigate any unexplained differences in a timely manner; and • Include reconciliation exercises of its vaccine stocks at national and sub-national levels, within its regular vaccine stock counts	**Action 2** • Performing the periodic reconciliations for all Covid-19 vaccines doses at the national and subnational level was continued and updates are provided at every consultative meeting with the supply officers on quarterly basis. • The DOH has also issued a Department Memorandum No. 2022-0279 entitled "*Reiteration on the conduct of Semi-Annual Physical Count of Inventory and Submission of Reports to the Accounting Units Necessary for Audit Purposes*" to reconcile the supply and accounting records and compliance with the audit rules and regulations. • The DOH through the SCMS will continue to monitor the CHDs in the implementation of the semi-annual physical counts in 2023.	DOH	31 December 2023
Recommendation 3 The DOH should: • Ensure that an analysis of vaccine stocks is completed and reviewed before demand forecasts for additional supplies are completed. • Review the significant expiry balances over the period and document the root causes of the expiries by vaccine type e.g., short-dated deliveries, handling issues etc. to balance the messaging between expiries and high vaccination rates achieved by the country. • Document plans for use of future supplies of Covid-19 vaccines to keep the level of expiries under control. This should include vaccines from all sources to ensure that COVAX supplies do not drive significant expiries of vaccines from other sources. • Document learnings from management of COVID-19 vaccines and how these lessons will be	**Action 3** • To ensure that analyses of vaccine stocks are completed and reviewed, before demand forecasts, the SCMS will provide weekly reports including: ○ Status Report of Covid-19 Vaccine and Ancillaries Inventory at the National Cold Chain facility ○ Remaining Regional Allocation of Covid-19 Vaccines ○ Weekly Regional Distribution Plan ○ National and Regional Vaccine Wastage ○ Near Expiry and Quarantined Covid-19 Vaccines requesting for possible shelf-life extension. These reports will be submitted to the Executive committee / responsible offices to ensure that vaccine stocks are analysed before demand forecasts for additional supplies and • The DOH will review significant expiry balances over the period and document rationale to balance the message between expiries and vaccination rates. • The DOH in collaboration with the implementing units and partners will develop the overall policy and technical/operational plans for the integration of Covid-19 vaccination and immunisation programs/primary health care.	DOH	31 December 2023

Audit recommendation	Management response and action	Responsibility	Timeline
incorporated into the routine immunisation programme.			
Recommendation 4 The DOH should ensure that all Covid-19 related waste is adequately managed through a waste management process. Going forwards, a suitable process covering all of the programme's immunisation waste needs should be considered, to maximise economy of scale synergies.	• To ensure all Covid-19 related waste is adequately managed through a waste management process. The DOH Health Care Waste Management Manual, 4th Edition (2020) contains a comprehensive set of guidelines on the safe management of waste generated from healthcare activities in the country. • To this end, the Department of Health entered a contract with Waste Management Incorporated (IWMI) as the 3rd party service provider as per Department Memorandum No. 2021-0330 entitled "*Reverse Logistics Commissioned to Integrated Waste Management Incorporated*" to ensure efficient hauling, treatment, and disposal of vaccination wastes, generated from the COVID-19 vaccination. • The CY. 2021 Contract Agreement with IWMI only covered Covid-19 vaccination as indicated in the Contract Agreement i.e.," Procurement *of Service Provider for the Reverse Logistics and Proper Disposal of Covid-19 Vaccination Wastes.*" • To incorporate routine immunisation waste. The CY. 2022 Contract Agreement with IWMI included Covid-19 vaccination and routine immunisation. **Action 4** There is an ongoing procurement process for a reverse logistics service provider for the CY 2023. This service provider will incorporate Covid-19 and routine immunisation waste as was the case in 2022.	DOH	31 December 2023

Audit recommendation	Management response and action	Responsibility	Timeline

Recommendation 5
Significant variances in the stock balances on hand and as derived from the number of vaccinations reported, were highlighted in the March 2022 Wall to Wall stocktake exercise, and further corroborated by the audit team in August 2022. The DOH should document management actions to address the root causes identified.
	The DOH issued a Department Memorandum No. 2021-0444 dated 8 October 2021 entitled "*Adoption of the Warehouse Operations Manual*" (WOM) to provide the Centers for Health Development (CHD) standard processes for logistics management and inventory stock-keeping records at all levels. To ensure Good Storage Practice at Regional warehouses, the DOH issued a Department Memorandum 2022-0435 entitled "*Conduct of Self-assessment of the CHD Storage Facilities in accordance with the Good Storage Practices*" which guides on observing proper management of health commodities including the Covid-19 vaccines that the government procured, and donations received from various stakeholders vital to maintaining the quality and potency during its storage and distribution.
	
	Action 5
	• To resolve the root cause identified by the Gavi audit at the subnational level, the DOH Supply Chain Management Service (SCMS) will:
	  ○ Conduct training to the Regional Supply Officers and Pharmacists to strengthen them on Warehouse Operations Manual (WOM) including the forms used for various processes.
	  ○ Reiterate to CHDs the policies and developed standardised forms incorporated in WOM that was already issued in a policy.
	  ○ Develop and roll out the electronic Logistics Management Information System (e-LMIS). The eLMIS will optimise supply chain operations and ensure efficiency and business process integration for effective management of supply chain which enables visibility and access to timely and reliable supply chain information.
		DOH	31 December 2023

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 6 The DOH should expedite the roll out of the Warehouse Operations Manual and should train and provide job aids to all staff responsible for managing and handling vaccines to comply with the established SOPs, particularly on: • Recording of batch numbers, expiry dates and VVM status in the vaccine control books/ledgers. • Recording the results of each physical stock count, investigating the variances, reconciling with the stock records, and documenting the whole process along with justification for adjustments.	The DOH in partnership with USAID-MTAPS, rolled out WOM and cascaded it to the regions to implement in their areas of jurisdiction. The manual standardises the recording of supply records and assists in the proper handling of logistics operations. However, some CHDs were not able to complete the orientation due to various constraints i.e., human resources, sudden change of personnel and the Covid-19 pandemic. **Action 6** • To expedite the roll out of WOM, the DOH will develop a standardised PowerPoint presentation of WOM and share with CHDs to be used as their training tool. • The DOH (SCMS) has an existing module in the e Learning DOH Academy on Supply Chain Management for Covid-19 and Supply Chain Management for Covid-19 Vaccine. SCMS in collaboration with USAID MTAPS will now include other courses including Procurement and Supply Chain Management (PSCM) Overview, Warehouse Management, Pharmaceutical Systems Strengthening.	DOH	31 December 2023
Recommendation 7 The DOH should: • Prepare and execute a timebound plan to ensure that the objectives of VIMS are fully met. • Explore the development of a vLMIS for the country. • Given the advancement of VIMS, the DOH can explore synergies through development of stock management module in VIMS as the DICT hands over the system to DOH. This will ensure sustainability of systems developed for management of the Covid-19 by incorporating routine vaccine programmes needs as appropriate	As noted by the Gavi audit team, the software supporting the VIMS has lapsed. However, the department procured the VIMS software for an additional 10 months in 2023 to ensure the proper migration of data from VIMS towards the Synchronized Electronic Immunisation Repository (SEIR). The Synchronized Electronic Immunisation Repository (SEIR) is a database which receives and stores immunisation data. It was developed to establish a centralized processing of vaccination data from collection to analysis, and to serve as an official source of vaccine verification. Its design includes capturing multiple types of submissions from different end-user levels that are verified by the DOH. Dashboards for visualization of key metrics are also being generated to measure actual vaccination progress and provide operational planning for equitable costing and allocation of resources. **Action 7** The rollout of the SEIR shall be concurrent with the VIMS contract execution to ensure the retrofitting of VIMS data towards the SEIR. It shall have a phased approach wherein: • Phase 1: Technology development Q1 of 2023 • Phase 2: Policy issuances - Q2 to Q3 2023 • Phase 3: Regional support – 2023 • Phase 4: Conformance testing – 2023 • Final implementation - 2024	DOH	31 December 2024

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 8 DOH should • Review the EVM results, prioritise, cost and budget actions to respond to the recommendations; and • Consider undertaking another EVM assessment using the new EVM2 tool, to provide a more comprehensive update on the current status of vaccine management.	One (1) Technical Staff from PHOD together with WHO and UNICEF Philippines attended and participated in the Regional Effective Vaccine Management 2.0 Workshop in 2022. The team from the Philippines came up with the Country EVM 2.0 Roll-out and continuous Improvement Plan (cIP) Implementation for CY 2023. Initially, EVM assessment was scheduled for April 2023, however, due to unforeseen events, all EVM planned activities were rescheduled to July 2023 until the end of December 2023. **Action 8** Below are the EVM proposed activities with technical and funding support from WHO and UNICEF Philippines: • Preparation – October 2022 to February 2023 • EVM assessment – July 2023 • Development of cIP – August 2023 • Implementation of cIP activities – 2024	DOH	31 December 2024
Recommendation 9 The DoH should: • Implement an action tracker process to follow the implementation of recommendations from various governance bodies overseeing immunisation. • Ensure that the follow-up of previous recommendations, is included as a standing agenda item in subsequent meetings.	**Action 9** As the department gradually integrates the Covid-19 vaccination into its national immunisation program, regional vaccination meetings shall be incorporated into the conduct of Task Group Resource Operations (TGRO), which includes the review of other health delivery services. The DOH will: • Implement an action tracker for recommendations of the various governance bodies for the vaccination programmes. • Include a standing agenda item for follow up of previous recommendations in subsequent meetings.	DOH	31 December 2023

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 10 The DOH should standardise the available support supervision tools, to ensure data and vaccine stock management parameters are included, and feedback mechanisms are provided across all support supervision visits.	**Action 10** To standardise the available support supervision tools, and to ensure data and vaccine stock management parameters are provided across all support supervision visits, the DOH conducted the Wall-to-wall Inventory for all regions and visited selected provinces and cities. The supervision tool used to evaluate the facilities on proper handling, storage, and recording of stocks is available on Annex 15 of the WOM – *Warehouse Assessment Checklist*. ***Audit note*** The DOH should ensure that the supervision tool is consistently utilised, and feedback mechanisms are established after every visit.	DOH	31 December 2023
Recommendation 11 The DOH should: • Perform a Data Quality Audit to routinely triangulate available data, including an assessment of Covid-19 coverage data and vaccine availability / utilisation to check for accuracy of data reported. Such analyses should be undertaken at national and subnational levels and any data inconsistencies noted should be validated and explained. • Ensure that all primary data collection tools are completed correctly and correlate/ support each other. • Ensure adequate supervision at subnational level over data collection and data management, including a follow up of recommendations addressing data management gaps, as identified from routine supervision visits.	**Action 11** The Department of Health (DOH) will coordinate with the Department of Information and Communications Technology (DICT) to execute a data quality audit.	DOH	31 December 2023

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 12 The DOH should clearly articulate its national strategy and all related interventions, for moving forward with a focus on boosters, reaching "last mile", integration with primary healthcare activities, and ensuring national targets for Covid-19 vaccination are aligned with the WHO updated roadmap. This should include a plan for routinization of the Covid 19 vaccination programme	**Action 12** In the months following the Gavi audit, the department endeavoured to increase the booster coverage of the country as health protocols were being relaxed. The following strategies were implemented during the conduct of special vaccination days, which saw a significant increase in jab rates and subsequent booster coverage: • Hand holding sessions with implementers prior to roll out. • Provision of incentives to vaccinees and/or parent/s • Use of social media to reach wider audience/community. • Involvement of Local Chief Executives and other stakeholders for support • Presence of high-level officials during vaccination rollout (Visits of Executive Committee Members) The DOH will now revise the NDVP to aid achievement of mid-to long term objectives of institutionalising and integrating the Covid-19 vaccination program into the routine immunisation.	DOH	31 December 2023

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 13 The DOH should develop a plan to catch up on missed routine immunisations.	**Action 13** For 2023, the Department of Health (DOH) plans to utilize Supplemental Immunisation Activities (SIA) to address the increasing number of cases of measles and avert an outbreak. For the 1st quarter of 2023, planning of resources and training for the activities are being held in preparation for the MR-SIA campaign in 2023.	DOH	31 December 2023
Recommendation 14 WHO and UNICEF have published guidance on considerations for integrating Covid-19 vaccination into immunisation programmes and primary health care for 2022 and beyond. The DOH should review, document and develop a national strategy for transitioning Covid-19 vaccination efforts and integrating these into routine immunisation, highlighting delivery strategies, resources required and the timeframe for this transition.	**Action 14** The DOH is currently reviewing the possible integration of COVID-19 vaccination as part of a life course immunisation approach and other health interventions.	DOH	31 December 2023
Recommendation 15 The government as a recipient of Covid-19 delivery support from Gavi through UNICEF – and due to its involvement within immunisation governance mechanisms – should ensure that UNICEF follows up with its implementing partners, in order to assure that in future, these operate with an appropriate internal control environment.	**Action 15** Re – improving internal controls, UNICEF conducted a follow-up audit and Relief International (RI) has instituted additional internal control measures to address the weaknesses identified in the initial audit. As an interim mitigating measure, UNICEF requested RI to provide relevant support documentation evidence that these measures are being observed and institutionalized as part of their liquidation reporting requirements. UNICEF will request RI to refund the remaining expenditures that were under question. UNICEF has also planned to do a follow-up audit for the Health Organization of Mindanao (HOM). However, to date, and despite several communications, we have not received a confirmation from the partner in terms of the schedule.	DOH	31 December 2023
Recommendation 16 In future, the government in consultation with Gavi, should take into consideration the relevant programme funding guidelines in support of all subsequent grant proposals.	Justification for the use of CDS grant for HR: In reference to the CDS1 guideline, the countries could use 40% of the overall allocated budget for the human resources costs. Reference to the government's gap analysis, the major area of support under CDS was to fill critical human resources gaps to ensure both COVID-19 and routine immunization services are provided for the target population. This is justified in both the description of funding needs part of the Philippines CDS application (Table A of the application and worksheet 5- CDS Early Access request of excel). The UNICEF HQ and CDS panel acknowledged and approved this request. It is worth mention that the HR costs were not under the unplanned or last-minute changes in the budget expenditure but rather a well thought out strategy based on the actual needs. The fact that the country achieved its coverage targets is further proof of the strategy having been context appropriate.	N/A	N/A

Audit recommendation	Management response and action	Responsibility	Timeline
Recommendation 17 Given the split for how CDS 1 and 2 funding was deployed and utilised in support of the Covid-19 activities, the DOH should: • Document learnings from using CDS funds in the Philippines. This learning should involve a review of how the higher-than-normal HR costs contributed to the pandemic response, including what benefits and/or shortcomings this approach had; and • Share a sustainability plan for how in future, such costs could be absorbed or secured from the government's own health staff budget, in order to sustain gains in the routine immunisation programme.	**Action 16** The DOH will document the overall lessons learned from the Covid-19 vaccine roll-out which will include learning from the use of the funds form key donors and how these funds ensured timely and structured response. UNICEF will advocate with the DOH to document the overall lessons learned from the COVID-19 vaccine roll-out which will include learning from the use of the funds from key donors and how these funds ensured timely and structured response. As part of strengthening the Primary Health Care (PHC), UNICEF is advocating with DOH to absorb the contracted staff/vaccinators in the government structure and also have a critical review of the current structure of the PHC to assess if this structure meets the future requirements of the service delivery after COVID-19 vaccine is added to the routine programme. As an initial step, UNICEF is supporting the operational guideline on the integration of the COVID-19 and routine immunization services	DOH	31 December 2023
Recommendation 18 The DOH should ensure that: • Verify that all CCE reported as "installed" are connected to a power supply and have been put into service, given that some locations did not have the funds to complete the installation. • Perform periodic CCE physical verifications to confirm the existence and use of the units provided and available. • Ensure a complete list of CCE items is incorporated into the national CCE register including their location. In addition, each location should have a its own asset register including details on the CCE items, their date when put into service, etc., as well as regularly review and update their status indicating whether items are still operational. • Ensure a preventative and curative maintenance plan is developed and executed to maintain the useful life of these assets. SOPs should be updated to include manufacturer's instructions on the maintenance of specific equipment brands. • Prepare and submit a plan to Gavi explaining how the COVAX-funded CCE is to be incorporated into the routine immunisation programme.	In November 2022, WHO conducted the Administrative and User's Training in the CCE Inventory Gap Analysis (IGA). This was attended by the 17 Regional Cold Chain Managers. The output of the training is the comprehensive inventory of the cold chain equipment including temperature monitoring devices, mechanical ventilators, generators and vehicles from the national, provinces, cities, municipalities, health stations with cold chain equipment. **Action 17** • SCMS will periodically determine the status of the CCEs either functional or non-functional. • The preventive and corrective maintenance of the cold chain equipment is incorporated in the Cold chain manual version 2018. SCMS shall continue to coordinate with the UNICEF commissioned consultant for the repair and maintenance of the CCE. • DOH will prepare a plan to demonstrate how all CCEs provided through COVAX will be used for the storage of all the EPI routine vaccines and Covid-19 vaccines.	DOH	31 December 2023