Yemen Joint Appraisal (JA) Report

June 2022

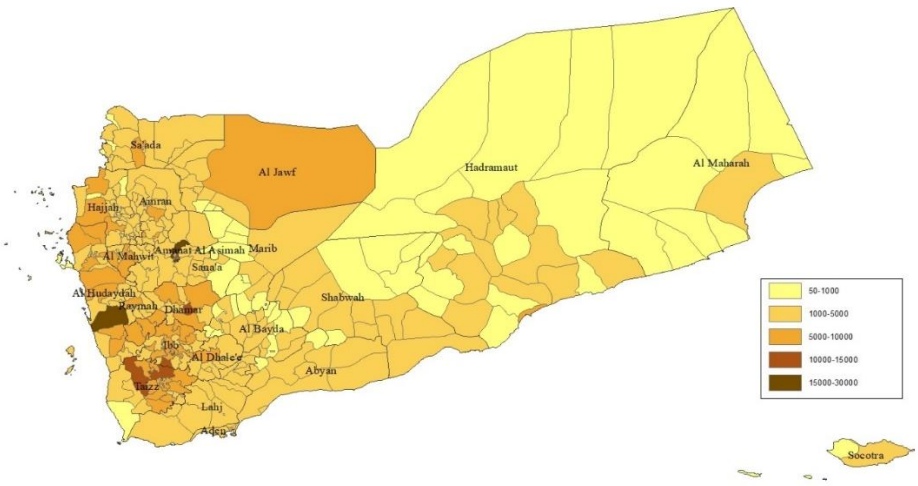
1. Country situation: overview of performance of support & discussion on progress, challenges faced, and future needs/priorities

[Part of this section is pre-filled by the Gavi Secretariat.] Please note that drivers of performance or under performance should be included in all answers.

Country Situation: contextual factors

The immunization program in Yemen operates under a constrained health system to deliver lifesaving vaccines against 11 vaccine preventable diseases to children. The program aims to reach an estimated one million birth cohorts annually. The immunization program with support from Gavi and technical support of WHO and UNICEF, strived to sustain coverage above 70% amidst of crisis. Delivery of standalone vaccination program is a challenge in the context of Yemen and integrated service delivery are implemented where possible. The figure below shows distribution of population using surviving infants.

Figure 1: Surviving Infant population density by district, 2021



The main challenges facing the health system including immunization in Yemen include:

- Continuation of the siege and security challenges since 2015 resulting in the Decimation of almost half of the health facilities;
- Overload on the Ministry of Health to respond to curative care requirements with a shortage in medicines, equipment, fuel, and staff;
- Inaccessibility of health services with more than 2/3rd of the population living in rural areas;
- Insufficient collaboration and coordination within and across the different departments of the Ministry of health and between facility-based and community-based interventions.
- Unclarity about the different roles and responsibilities in the different health programs;
- Lack of funding to cover critical operating costs for maternal and newborn health services including staff salaries;
- Inadequacy of the quality of services provided across the three levels of care; and
- Absence of sufficient integration of different services at different care levels.
- Rising number of zero dose due to low uptake of vaccine requiring support to expand the reach of immunization services among other interventions

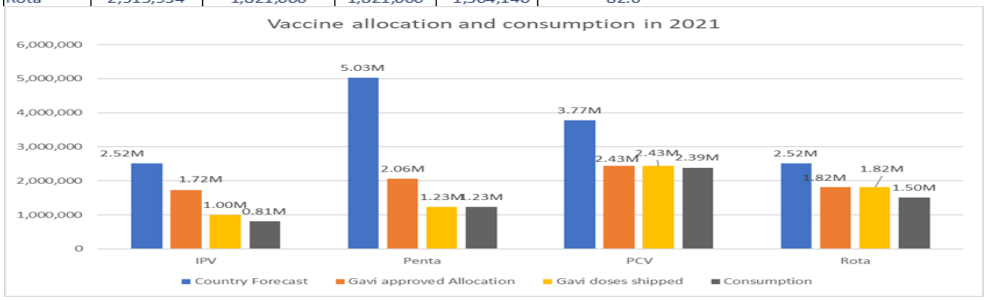
A. Implementation of the immunisation programme (end of 2021/early 2022)

1. Question: Are vaccines being consumed at rates that are in-line with approved forecasts? What are the key drivers of consumption?

Indicator: Percentage of forecasted Annual Vaccine Requirement (AVR) consumed in prior period by antigen)

Figure 2: % of forecasted AVR consumed in 2021

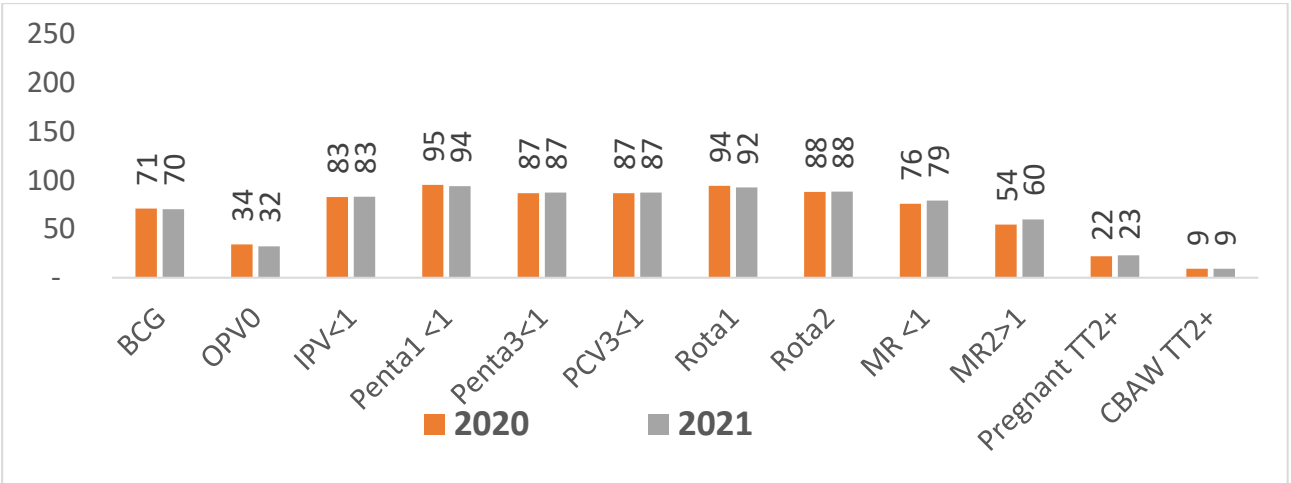
Vaccines	Country Forecast	Gavi approved Allocation	Gavi doses shipped	Consumed doses	% Consumption
IPV	2,515,934	1,722,150	1,000,050	808,480	46.9
Penta	5,031,867	2,056,400	1,233,174	1,233,174	60.0
PCV	3,773,901	2,434,800	2,434,800	2,387,100	98.0
Rota	2,515,934	1,821,000	1,821,000	1,504,140	82.6



Comments:

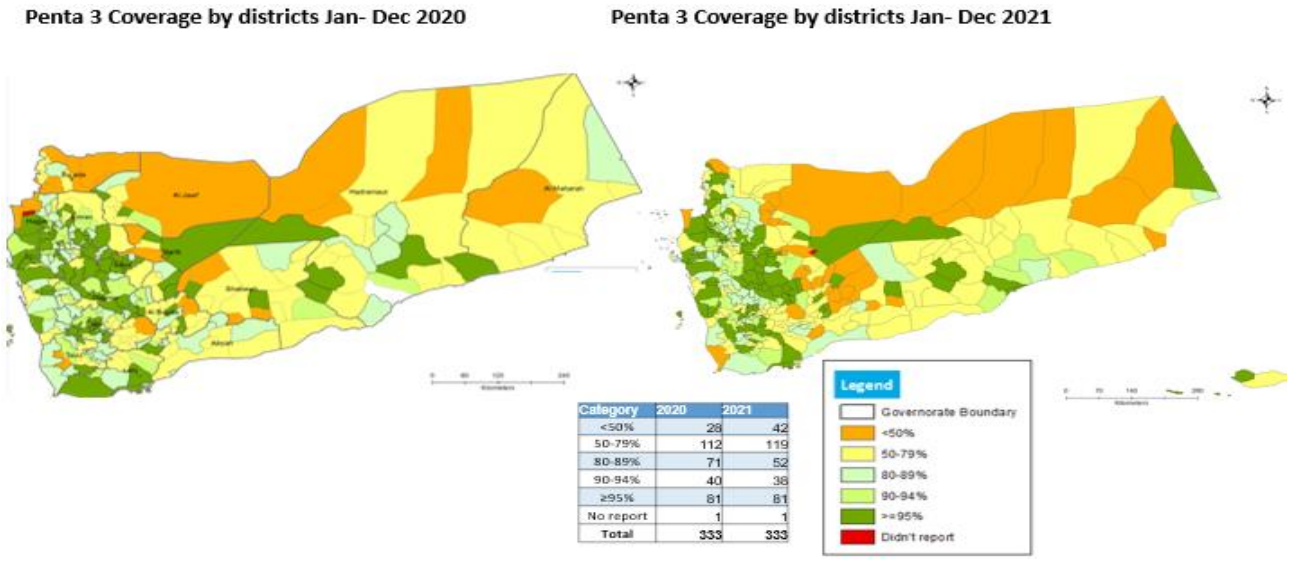
In 2021 98% of the allocated PCV was consumed while 83% of the allocated Rota vaccine was consumed for routine immunization services. 60% of the allocated Penta and about 47% of the allocated IPV were consumed in 2021. For both Rota and PCV the Gavi approved quantities for both vaccine were shipped into the country but the consumption have varied based on the availability in country supplies before the arrival. From the consumption rate it is obvious that some quantities of Rota vaccine were still available that were complemented by new shipment of Gavi approved quantities for distribution for services compared to PCV with almost all the Gavi quantity shipped utilized. The delayed commencement of the IPV second dose contributed to the low consumption of the IPV allocation which included the second dose. Additionally, in 2021 s 534,300 doses of IPV and 709,200 doses of Penta vaccine were shipped from other funding sources The balance of the Gavi allocations were shipped to take care service delivery during the early part of 2022.

Figure 3: National immunization coverage for key antigens, 2020-2021



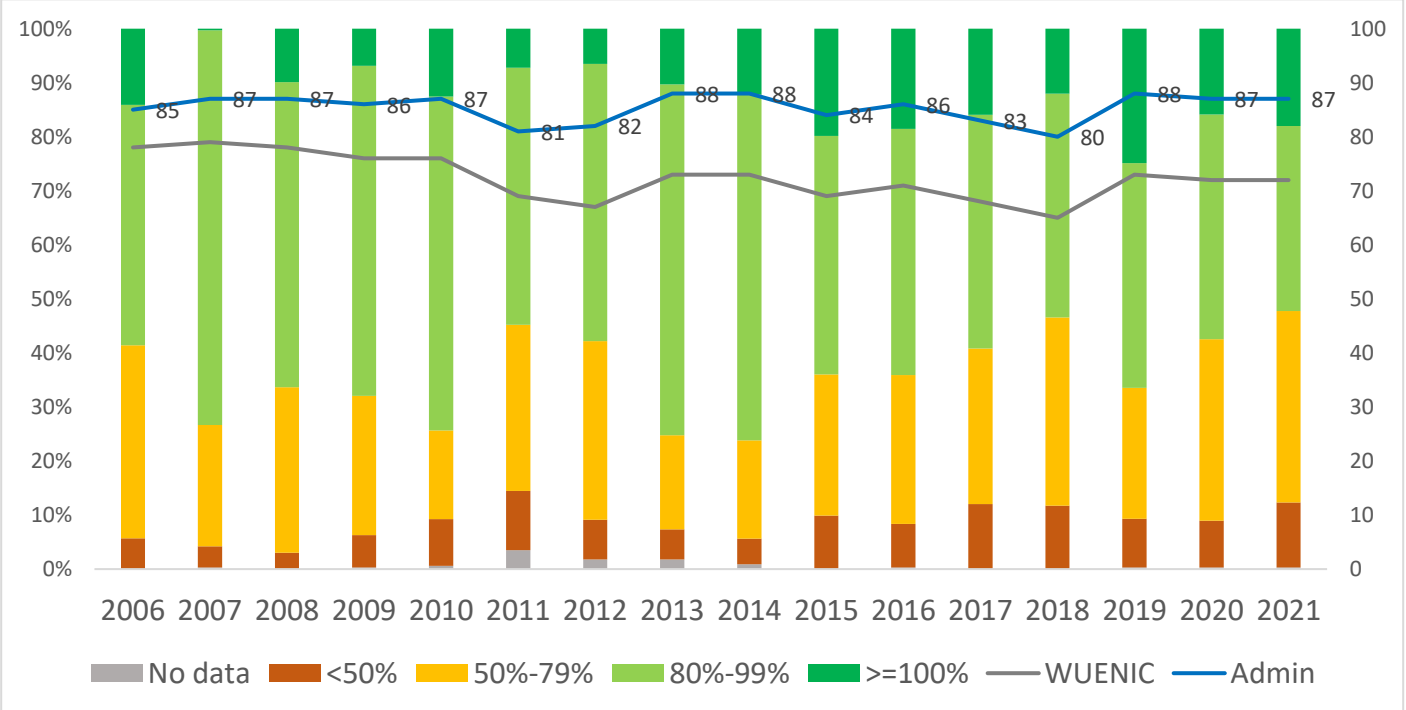
The above figure shows that the coverage remains the same between 2020 and 2021 for almost all antigens. However, disaggregation of the coverage by governorate and district levels revealed discrepancy among the levels as shown in the figure below. Moreover, it is observed from the administrative report that the number of districts achieving <50% coverage increased from 28 in 2020 to 42 in 2021. In 2021, there were measles outbreak, as well as a shift in focus towards COVID19. Additionally, the delay in availability of funding to support operational activities including incentives to support routine immunization services. These could be potential reasons contributing to stagnated coverage.

Figure 4: Penta3 coverage by district Jan-Dec, 2020-2021



Category	2020	2021
<50%	28	42
50-79%	112	119
80-89%	71	52
90-94%	40	38
≥95%	81	81
No report	1	1
Total	333	333

Figure 5: % of Districts by DPT3 coverage category, 2006-2021 – Yemen



The above figure also shows trends of immunization coverage using DPT3 as a proxy indicator and depicts an increasing trend in number of districts achieving less than 80% coverage from 2015 up to 2021 which could be due to the impact of the crisis.

Figure 6: Trend of national DPT3 coverage by different data sources, 2006-2021

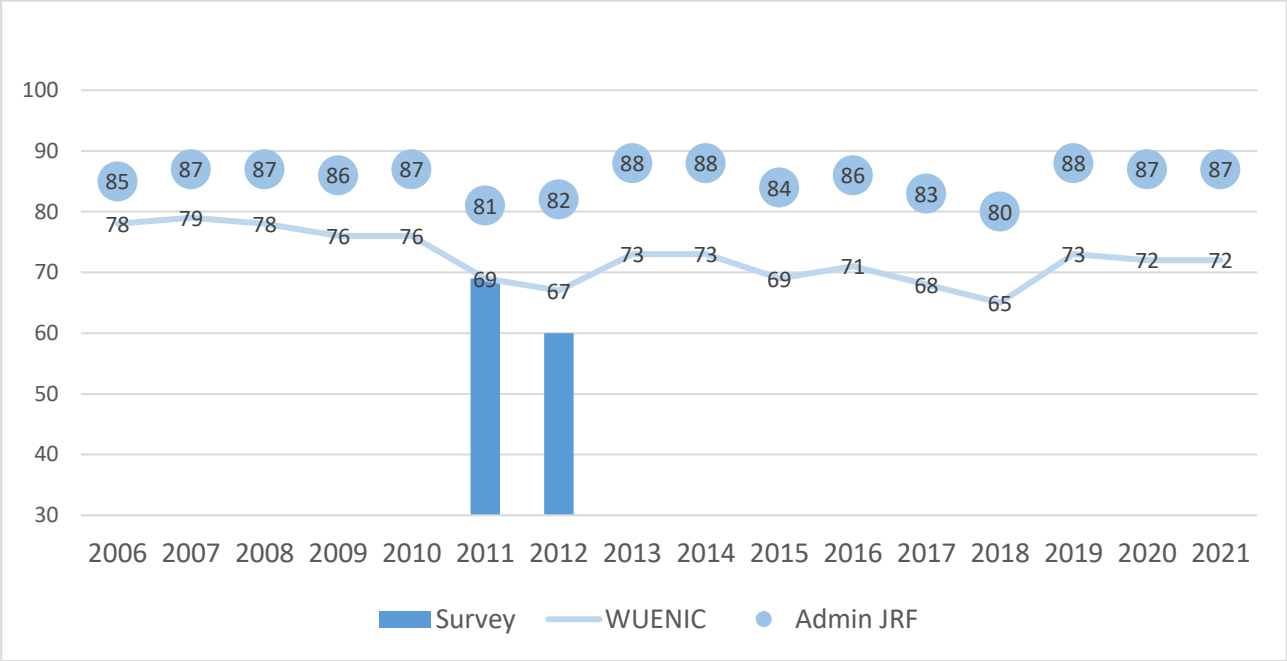
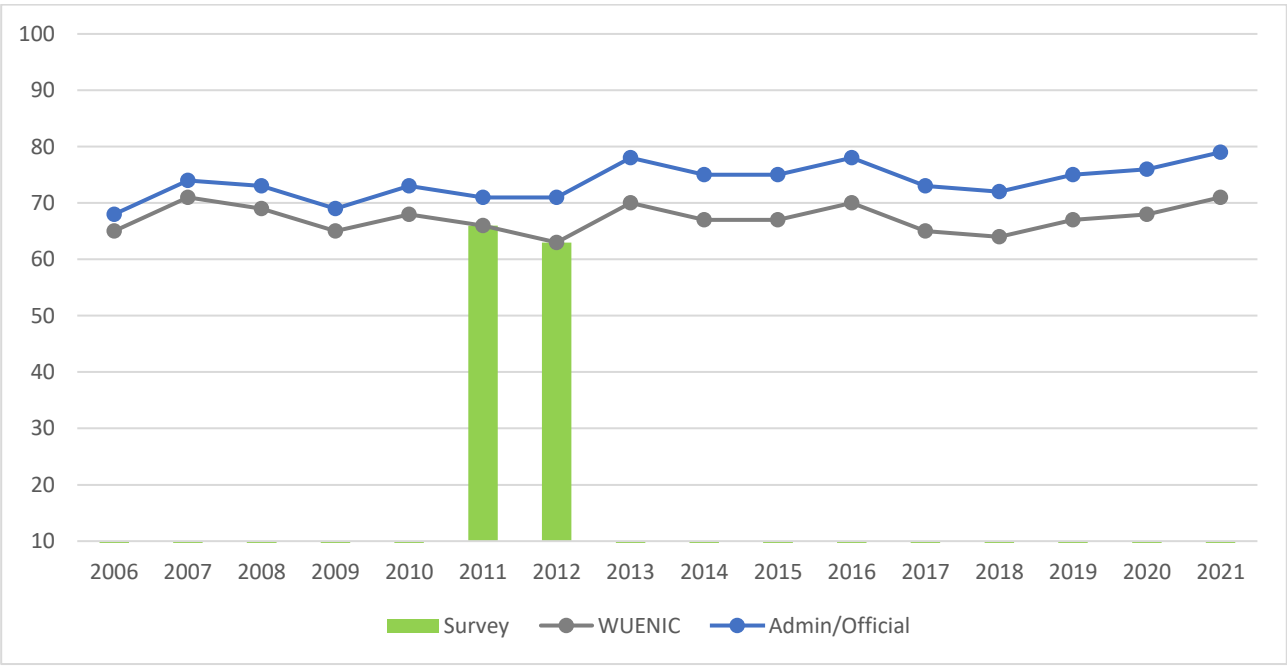


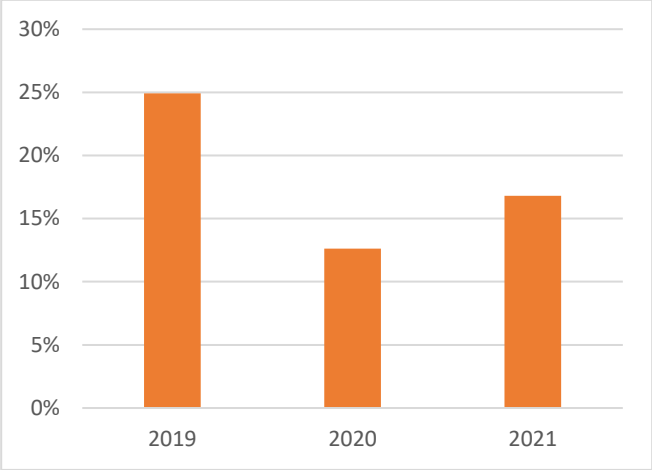
Figure 7: Trend of national MCV1 coverage by different data sources, 2006-2021

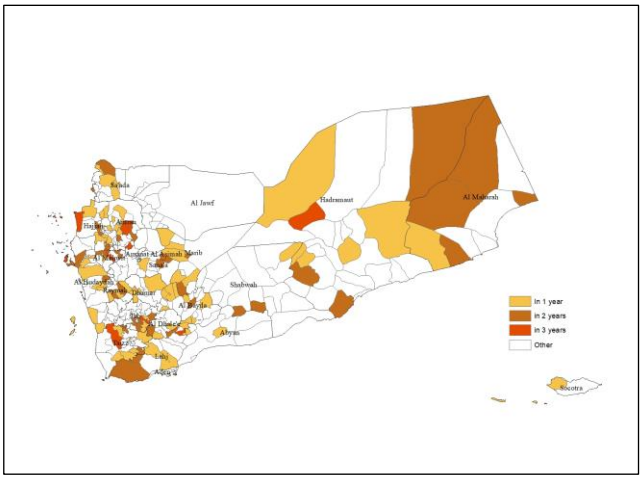


Analysis of immunization coverage using various data sources (Figures 6 & 7) show similar trends of plateaued performance around 80% DPT3 coverage by administrative reports and around 70% using WHO-UNICEF estimate. The last EPI coverage survey was conducted in 2013 which estimated coverage for 2012 cohorts where 60% of the children are verified as vaccinated as opposed to 82% administrative coverage report. Similar trends are also observed for MCV1. The administrative report will continue to be challenged till new coverage survey is conducted. the feasibility of conducting a national EPI coverage survey will be explored or perhaps other national surveys such as MICS can be adapted to provide additional information on immunization coverage.

Figure 8: % of districts with negative DPT1-DPT3 dropout rates

Figure 9: Districts showing negative dropouts in 2019-2021





Comments:
The above two figures show data quality issues revealed in terms of negative DP1-DPT3 dropout rates. The negative dropout rate could be due to not only data quality issues but also a) population movement; b) accessibility to HFs; c) functionality of the HFs, and d) irregular of outreach activities. another challenge is the increased reliance on outreach, which generate laziness in the community to search of EPI-service in fixed health facilities and thus affects the increase in the zero dose and under-immunised children, when not conduct regularly. In general, the number of districts reporting negative dropout reduced compared to 2019 although 2021 showed higher districts than 2020.

Ministry of health team already developed the vaccine stock model inside the DHIS2 which includes the vaccine movement, syringes, vaccine disbursed, consumption, and wastage, and all the data officers at the Gov and district levels in the north are already trained and started collecting data from the beginning of the year. These are planned to be rolled out as well in the South with the support of both WHO and UNICEF to ensure DHIS2 is functional and utilized in the country. The challenges includes Governorates and districts Data officers' allowances, Capacity of the health programmes managers cadre and technological challenges (infrastructure and internet).

2. Question: What progress has been made to reach zero-dose and under-immunised children with vaccinations?

Indicator:

- Reduction in the number of zero-dose children
- Percentage change in number of zero-dose children (disaggregated by previous year, baseline year)
-

Figure 10: % ZD and Drop. of children by governorates, 2018- 2021

Year	2018		2019		2020		2021	
Gov	Drop	ZD	Drop	ZD	Drop	ZD	Drop	ZD
Abyen	8%	5%	9%	10%	9%	17%	10%	23%
Aden	20%	-4%	16%	-6%	16%	5%	23%	8%
Al_ Mahweet	-1%	20%	1%	11%	1%	10%	1%	18%
Al_byada'a	17%	15%	17%	13%	17%	2%	13%	0%
Al_Dhale'a	11%	7%	13%	20%	13%	24%	10%	28%
Al_Hodydah	7%	20%	9%	11%	9%	5%	7%	4%
AL_jawf	31%	53%	20%	26%	20%	21%	17%	42%
AL_Mahrah	14%	21%	16%	9%	16%	22%	14%	24%
Amaran	4%	13%	5%	9%	5%	7%	5%	9%
Damar	9%	-4%	13%	-4%	13%	-5%	7%	-6%
Hajah	4%	9%	6%	6%	6%	8%	1%	10%
Ibb	4%	7%	6%	2%	6%	1%	6%	7%
Lahj	9%	0%	8%	1%	8%	5%	4%	17%
Ma'areb	18%	-48%	-1%	-59%	-1%	-98%	2%	-150%
Moklla	10%	3%	9%	-4%	9%	2%	6%	5%
Raymah	-1%	21%	4%	22%	4%	12%	4%	17%
Sa'adah	63%	34%	38%	17%	38%	22%	19%	-2%

Figure 11: # PENTA dropout children by months, 2021

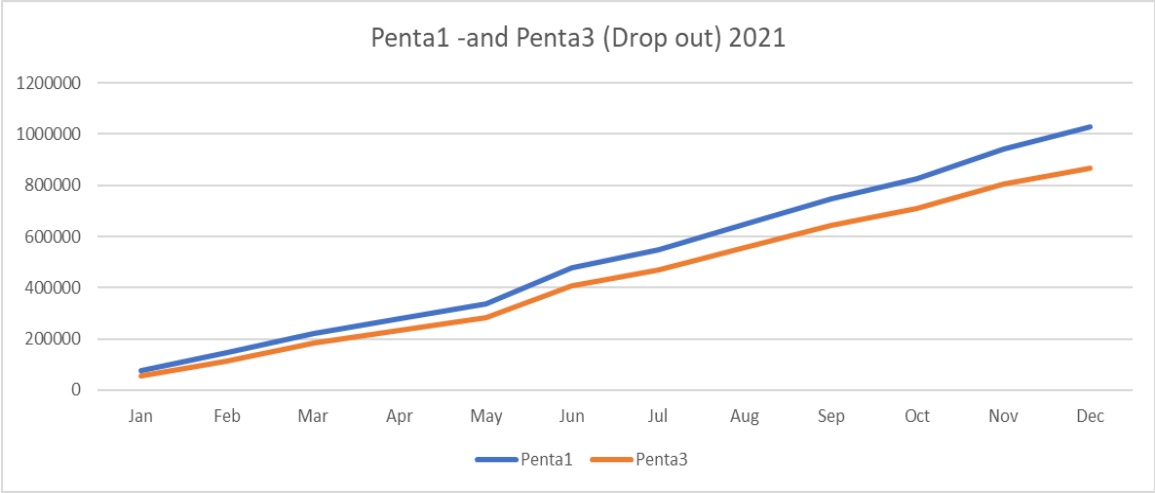


Figure 1212: # Zero dose children by governorates, 2020- 2021

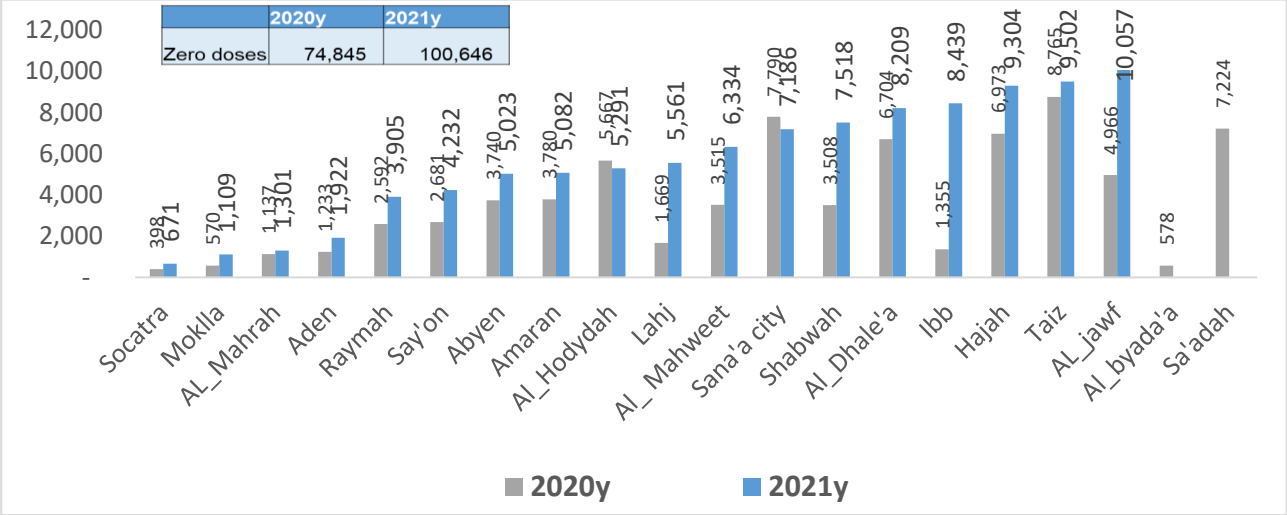
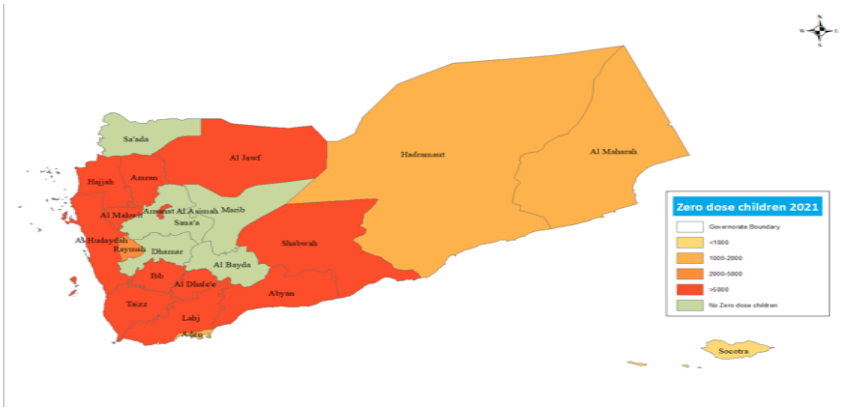


Figure 1313: distribution of zero dose children by governorates, 2021



Governorate	Target children under 1y	Penta 1 under 1y	Zero dose children without minus
Socatra	2,598	1,927	671
Moklla	24,361	23,252	1,109
AL_Mahrah	5,368	4,067	1,301
Aden	25,498	23,576	1,922
Raymah	22,512	18,607	3,905
Say'on	21,289	17,057	4,232
Abyen	21,940	16,917	5,023
Amaran	57,117	52,035	5,082
Al_Hodydah	129,702	124,411	5,291
Lahi	33,076	27,515	5,561
Al_ Mahweet	35,365	29,031	6,334
Sana'a city	108,480	101,294	7,186
Shabwah	24,485	16,967	7,518
Al_Dhale'a	29,011	20,802	8,209
Ibb	118,773	110,334	8,439
Hajah	91,590	82,286	9,304
Taiz	131,743	122,241	9,502
AL_jawf	24,202	14,145	10,057
Al_byada'a	26,295	26,396	
Damar	77,423	82,129	
Ma'areb	11,215	28,001	
Sa'adah	34,395	35,034	
Sana'a Govt.	40,245	50,117	

Figure 1414: Geographical coverage of cold chain support

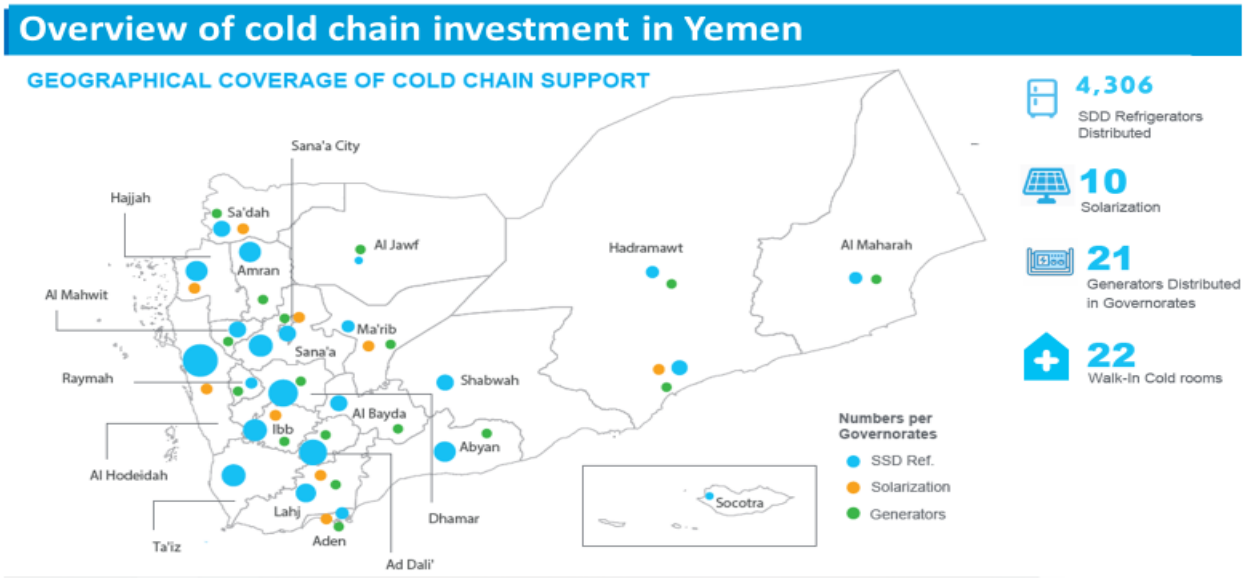


Figure 1515: Solar direct drive refrigerator distribution by governorates

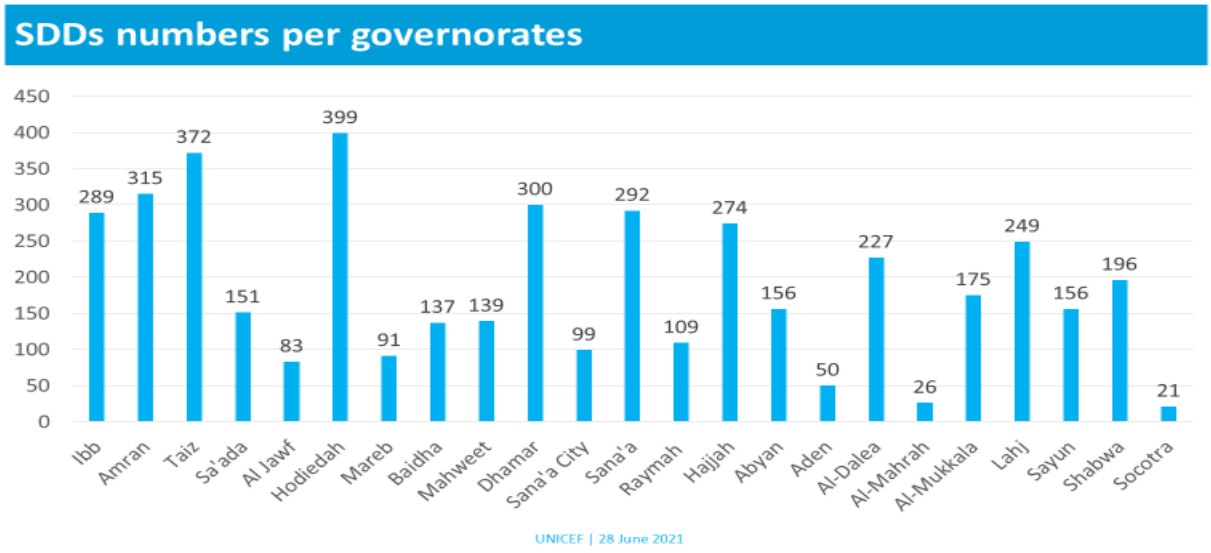


Figure 1616: Other cold chain equipment

Other CCE					
Donor	Cold box	TMDs	Icepacks	Vaccine carriers	RTMDs
UNICEF	2,200	15,700	25,000	8,420	20
Gavi	147	6,000	-	6,000	-
Total	2,347	21,700	25,000	14,420	20

Comments:

The above two graphs (figures 12 and 13) show distribution of zero dose children by governorates in 2020 and 2021. It is revealed that in 2021 the number of zero dose children increased to 100,646 from 74,845 reported in 2020. Some of the governorates have negative zero dose children which may be explained by one or more of the following: denominator issue, population movement, or data quality issue. In 2021, three rounds of integrated outreach activities were implemented which contributed to reach children in remote areas and prevented deterioration of number of zero dose children.

Health education will be one of the factors that will promote health services in health facilities, which will raise the percentage of their use by the citizen, including immunization and reducing children with zero doses and under-immunized. Promoting health awareness requires strength other health programs and intervention including, training broadcasters on how to investigate accurate medical information to ensure that rumors are refuted and the right impact on listeners, in addition to designing media programs specialized in the field of health awareness and education to find specialized educators, broadcasters and media professionals. A comprehensive EPI review is planned in 2023 to identify supply and demand related issues of the immunization program

To ensure equity and coverage in immunization cold chain equipment for vaccine storage for availability for service delivery is central MoPHP with support from UNICEF & WHO applied for the Gavi funded CCEOP and secured approval to fund procurement and installation of a total of 617 units of SDDs and 717 unit of RTMDs. In Sept. 2021 the first 100s unit of SDD for the year1&2 of the project were delivered and installation completed in Feb 2022.

A total of 401 units remaining for the year 1&2 of the project were delivered in May 2022 and distribution arrangements are ongoing for subsequent installation targeted to be completed by end of Oct 2022. Remaining 116 units of SDDs for year 3 of the project is being discussed to initiate procurement for early delivery in late 2022 for installation in 2023. Post Installation Inspection (PII) of 20% the first 100 SDDs by a TPM company with the support of UNIEF SD is completed and data being analysed

COVAX support for Covid-19 vaccine deployment ensured part of the gaps identified by the WHO/UNICEF supply chain sizing tool were filled. COVAX in 2021 approved support for 86 SDDs and 2 WICRs based on the SC sizing tool to support Covid-19 deployment.

A total of 86 SDDs on COVAX CCE support delivered and 75 installed and 11 being installed at the district cold store. The two WICRs and two RTMDs on the COVAX CCE support are in the pipeline to the country for installation

Figures 14,15 ad\nd 16 above gives pictures of the number of walk in cold rooms in the country, SDDs and other cold chain equipment as well as the number of governorates currently being solarized.

To ensure equity and improvement of immunization coverage in areas with high numbers of zero dose children, demand generation needs to be strengthened in these areas. There has

been limited investment and sustained interventions related to routine immunization demand overall in Yemen.
Utilizing community volunteers/social mobilizers, demand generation interventions should focus on supporting the identification and verification of zero dose children and defaulters within community groups through door-to-door engagement, supporting referral for available services, and supporting mobilizing communities through their influencers to identify and co-create solutions to their issues impacting vaccination uptake. An action plan addressing the solutions identified by the communities needs to be integrated in local microplans as the social mobilization plan. On service delivery side, through the Gavi HSS3 support and other funding stream, Yemen would operationalize the non-supported health facilities in priority districts to provide PHC services including immunization. This would enable availability of service in more communities to reach the zero dose and under vaccinated children

3. Question: Have new vaccines been introduced as planned and if not, why?

Indicator:

- Number of routine introductions completed over number of targets set for the calendar year

Comments:
During the reporting period, there was no new vaccine introduced in the country. However, the second dose of inactivated Polio vaccine (IPV2) was introduced towards the end of 2021 targeting children at 9 months who have taken IPV1 dose at 4 months. The Ministry of Health sent out circular to all the governorates for districts and health facilities to commence the administration of second dose of IPV and this has started in the country. This will be continued to target all targeted children (1,096,683 yearly targeted infantes) to roll out in all fixed health facilities provided EPI services and outreach activities.
The EPI tools with support from Gavi for the IPV second dose introduction printed and distributed to the lower levels. As at April 2022, a total of 11% of the target have been administered with the second dose of IPV in the country

4. Question: If relevant, how effective have Gavi supported vaccination campaigns been (conducted since the last JA), highlighting lessons learned applicable for routine immunisation and upcoming campaigns

Indicator:

- Number of vaccination campaigns conducted (stratified by type of campaigns, (including preventive, reactive, catch-up, follow-up, sub-national and national) Percentage of Gavi supported campaigns that achieved target coverage rate (quality)
- Number of reported outbreaks of vaccine-preventable diseases (for which GAVI supports with reactive campaigns)

Comments:

The last multi stakeholders Dialogue was in March 2021 and since then there has been several campaign conducted in the country including sub national Polio outbreak Response campaign in the 14 governorates in the North in May 2021, Tetanus toxoid campaign as part of the MNTE program in 47 selected high districts in 6 governorates in the South in March 2022, measles outbreak response campaign in Dec 2021 in the North and May 2022 in the South and two rounds of Polio outbreak response campaign in the southern governorates in February and March 2022 respectively. Below table show the target population for each of the campaign and the coverage achieved

Campaign type	Target group	Target pop	Number vaccinated	Percentage coverage
Polio SNIDs (North)	Under 5 years	4,104,630	3,800,313	93
Measles outbreak campaign (North)	6 months -10 years	2,037,449	1,444,747	71
MNTE Campaign (South)	15-49 years	385342	269488	70
Measles outbreak campaign	6 months -10 years	1,371,169	1,239,129	90
Polio outbreak response campaign R1 (South)	0-10 years	2456114	2213831	90
Polio outbreak response campaign R2 (South)	0-10 years	2357414	2254810	96

There was no direct support from Gavi for any of the campaigns including the outbreaks response, however the measles outbreak response campaign in both North and South were supported by Measles and Rubella Initiative (M&RI) with Gavi support through the initiative for operational cost and vaccines and supplies.

Some lessons learnt from the measles outbreak response included effective and strong coordination between partners and MoPHP and among partners which was key for resource mobilization and the success of outbreak response activities. Early disbursement of funds for operational cost and social mobilization activities enabled the implementation of activities as scheduled. Availability of adequate vaccine and supplies and timely distribution for the campaign

The strong coordination will continue to benefit immunization strengthening system in Yemen with UNICEF, WHO and other partners working with the MoPHP. There has not been any challenge with availability of vaccines in the country for routine immunization services, as funding from other donor sources has been used to bridge the gap. Effort will continue to be made to ensure no child in missed out of vaccination due to unavailability of vaccines at any level. Early release of resources for other routine immunization related activities including integrated outreach would continue as an ongoing efforts to avoid delayed implementation.

Forecasted routine/campaigns dates to be validated during the JA discussion

Vaccine Name	Type	Sub-Type	Status	CP Date ↑	Phase
MR	Campaign	Follow-up	Forecasted	2023-02-28	
MR	Campaign	Follow-up	Forecasted	2025-12-31	NA
MR	Campaign	Follow-up	Forecasted	2028-12-31	NA

Comments:

The planned MR nationwide follow- up campaign application during the JA period was being finalized for submission to the IRC for review. The campaign is planned to vaccinate at least 95% of total of 11,477,965 children 6 month -10 years in the country in the first quarter of 2023

5. Question: Is the country addressing gender related barriers in their immunisation programmes?

Indicator:

- Has the country implemented initiatives that remove or reduce gender related barriers?
- Qualitative information

Comments:

Immunization service delivery is Yemen targets both boys and girls equally with strategies that ensure no gender related barriers to accessing services. The Vaccines are available in the HFs for all children regardless of the gender and all children coming to the HFs are egible to take all vaccines according to the vaccination cards, from other side and by any opportunities all well or sick children regardless of the gender reach HFs are cheeked for their immunization status to determine their need of any vaccines. Efforts are made to take services to hard-to-reach communities from the health facilities through the integrated outreach activities to ensure both boys and girls irrespective of their location are reached with vaccination. Efforts through Communication and Community engagement by the available community networks including community Health workers, Community health Volunteers are being made to underscore the importance of immunization in the communities to generate demand for services for both boys and girls

Women may generally be faced with the challenge of travelling long distance to access health services especially those living in hard to reach communities far away from the health centres which constitute barrier to access. The MoPHP is addressing this barrier with the conduct of integrated outreach round to take services to the hard to reach communities. The MoPHP is also making efforts to operationalize health centres that have been closed for some time to ensure services are available and close to beneficiaries

6. Question: How has COVID-19 and efforts on MRS impacted your routine immunisation programme (please include reference to trends in DTP3 and MCV1 coverage)? If there are other factors (e.g., government transitions, natural disasters, etc.) which have led to disruptions in your immunisation programme over the last year, please also reflect on those.

Indicator:

- Qualitative information

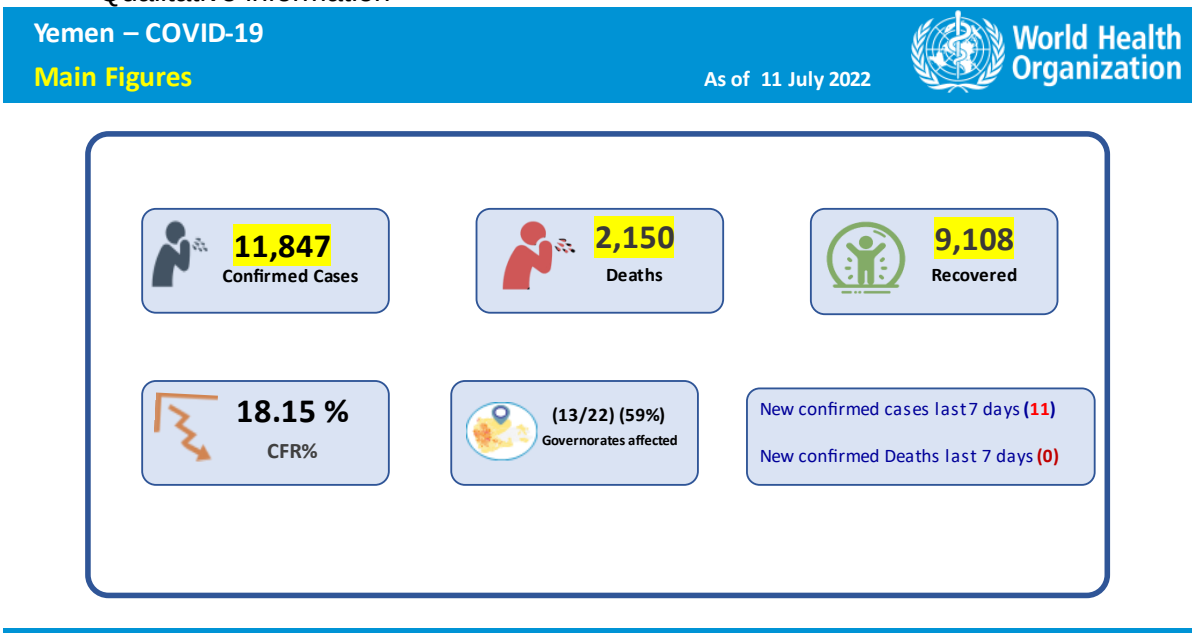


Figure 17: trend of Vaccines coverage, 2018-2021

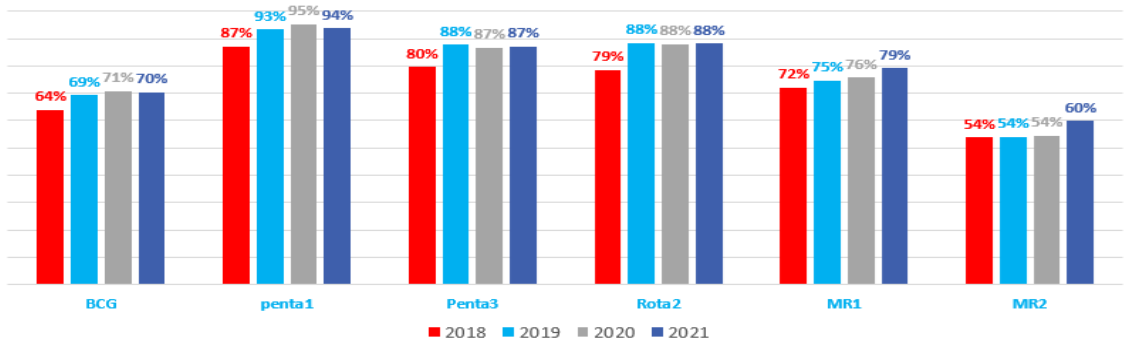
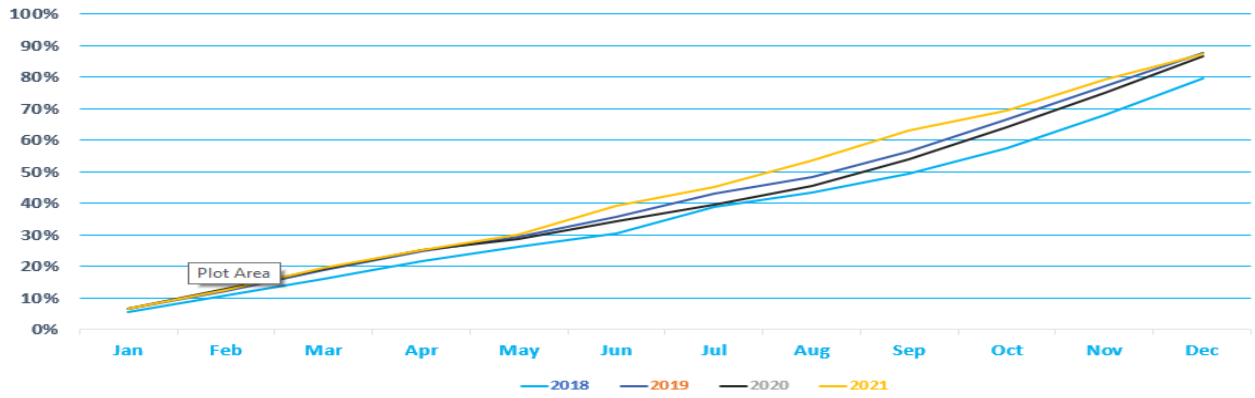


Figure 18: trend of PENTA3 coverage, 2018-2021



Comments:

The Covid-19 pandemic had significant impact on health services globally but in Yemen the pandemic did not significantly disrupt immunization services. The over 7 years old war in Yemen did not also disrupted immunization services to a large extent as the program transitioned to outreach services. There was no disruption to vaccine supply to the country and the sub national level for immunization services. The country continued with provision of fixed site routine immunization services in the context of covid -19 with the use of PPEs and adherence to infection prevention and control practices. There may have been targets that could not visit the health facilities given the pandemic, the country continued with the strategy of integrated outreach to reach those that missed the fixed site services and in the hard-to-reach communities with integrated package of interventions in the communities. 3-5 rounds of this integrated outreach were conducted in 2020 and 2021 respectively. This approach of sustaining service delivery supported the country to sustain the immunization coverage to a reasonable extent. According to the country's administrative data, Penta 3 coverage was 88% in 2019 and 87% in 2020 and 2021 while the MCV1 coverage which was 75% in 2019 improved to 76% and 79% in 2020 and 2021 respectively.

The WHO-UNICEF coverage estimate (WUNIEC) also showed the sustained immunization coverage with Penta 3 coverage estimated at 73% in 2019 and 72% in 2020 and 2021 while MCV1 was estimated at 67% in 2019 and 68% and 71% in 2020 and 2021 respectively.
To address people's hesitation, the components of primary health care services must be provided in health facilities in an integrated manner and not focus only on the immunization service, which enhances the citizen's confidence and service request.

Though Yemen has had good acceptance of routine immunizations except in some low performing districts, recently there has been an increase in locally and internationally generated misinformation and disinformation. With vaccines already being perceived as a foreign agenda by some communities, and with growing concerns about vaccine safety resulting from mistrust of quality of services in the country, vaccine hesitancy is increasing and needs to be addressed. District and location specific interventions to address disparities and zero dose children need to be strengthened through social mobilization plans integrated into local microplans. Advocacy and partnerships for quality engagement need to be strengthened to enhance promotion and endorsement of immunization and safety of available services through local influencers, religious leaders, and key CSO and private sector partners. Multimedia engagements, especially online, need to be strengthened for social listening and tracking, and to address misinformation and disinformation as relevant. Qualitative and quantitative insight will also be collected on an ongoing basis to inform co-creation of solutions to vaccination barriers together with communities and to inform trends in vaccine hesitancy.

7. Question: How has the introduction of COVID-19 vaccine progressed?

- Reflect on current coverage levels of the adult population and key at risk population.
- Describe how the country plan to use opportunities for integrated delivery of COVID-19 vaccine with routine immunisation & other primary health care services

Comments:

Yemen prepared national COVID19 vaccination deployment plan to cover the whole country. COVID19 vaccination was launched on 20 April 2021 targeting priority groups such as elderly people, health care workers and people with chronic comorbid conditions living in the 13 southern and eastern governorates. Later the target age group is expanded to include all adults 18 years and above to utilize available vaccines that have short shelf lives and in view of slow uptake among priority groups.

As of 30 June 2022, total of 855,292 people received at least one dose of COVID19 vaccines including 276106 Janssen doses, 251,385 and 312,025 as first and second AstraZeneca doses, 15,205 and 571 as first and second Sinovac doses. Total of 80 people received booster doses. To date 5.8% of the population in the South are fully vaccinated

The country revised down its target to fully vaccinate 30% of the population in the 13 governorates by end of 2022. In June 2022, number of vaccination sites are expanded to 1400 sites to increase access to vaccination services. In addition, a circular is sent to all targeted facilities in the 13 governorates to integrate COVID19 vaccination into routine immunization services. Moreover, COVID19 vaccination was integrated into routine EPI in the 13 governorates and the first integrated outreach with COVID19 vaccination was implemented in May 2022 and the second on June 2022. Additional integrated outreaches are scheduled in July and August 2022. The program is likely to achieve the target when two rounds of COVID19 campaign are implemented in October and November of 2022.

B. Financial implementation of Gavi cash grants

Cash[1] Support Summary*

Grant	Recipient	Period	Status as of <30 June 2022>					Compliance**	
			Grant Value $	Appr.	Disb.	Expenditure $	Utilisation %	Fin. Rep	Audit
HSS2	UNICEF	2018-2020	2,478,320		2,478,320	2,478,120	99		
HSS2	WHO	2018-2020	**2,623,582**			**2,623,582**	100		
HSS3	UNICEF	2021	9,583,521		1,453,494.18	1,099,832	76		
HSS3	WHO	2021	3,945,378			841,975	21		
CCEOP	UNICEF	2021	5,320,514		5,320,514	2,955,219.44	56		
2020 TCA	UNICEF	2020	1,664,161		1,664,161	1,663,119	100		
2021 TCA	UNICEF	2021	1,248,121		1,248,121	1,227,808	98		
2021 TCA	WHO	2021	749,972			733,880	89		
CDS Early Access	UNICEF	2021	965,812		965,812	862,528	89		
CDS Early Access	WHO	2021	3028439			1830734	60		
COVAX CCE	UNICEF	2021	738,190		738,190	670,495.17	91		
COVAX TA	UNICEF	2020	516,200		516,200	516,200	100		
COVAX TA	WHO	2020	344,165			279305	81		
IPV dose 2 introduction	UNICEF	2021	258,101		258,101	258,101	100		

*All amounts are in USD
**Comment below in case of non-compliance

8. Question: How well is the country able to absorb Gavi funding and what are the drivers?

- Comment on the financial implementation progress of grants. What are the key issues?

Comments:

The country is able to absorb funding from Gavi as well as those from other donors. The utilization rate for the various Gavi funding is reflected in the table above, the reflected absorption rate for CCEOP and COVAX CCE support is based on funds disbursed to country for implementation excluding procurement related cost. Adequate coordination between MoPHP and partner, timely implementation of activities and procurement, distribution and installation of related equipment and supplies in timely manner and the facilitation of fund transfer to the MOPH&P contribute to good

[1] All HSIS grants (HSS, VIGs, OPS, Switch), EAF and CDS cash support as applicable.

absorption. However, there are delays with submission of requests for some activities on HSS3 which accounted for the low utilization and this would be addressed and solve the problems related to bureaucracy and regulations of transfer the fund after completion of the activities.

9. Question: How well is the country resolving issues arising from assurance activities? What issues are left to solve and what is the path forward?

- What is the progress of Grant Management Requirements implementation and past audit recommendations (external + Gavi Programme Audit)?
- Comment on the improvements that have been made to financial management and risk assurance activities with support of assurance providers (e.g., Fiscal Agents, Monitoring Agents, TA)? Specifically, what actions have been taken to enable more of Gavi funds to be channelled back through government systems?

Comments:

The country is making all efforts to respond to issues arising from financial assurance activities. To mitigate risks associated to Cash transfers to partners, UNICEF adopted the Enhanced Harmonized Approach to Cash Transfers (HACT Plus) including conduct of conducts an Enhanced Risk Assessment (ERA). The objective of ERA/micro assessments is to assess the capability of partners to handle financials/funds given to them by donors (financial management capability) including. Financial systems of the implementing partners, Implementing Partners' internal controls, Partners funds flow, Partner's procurement system, Partners organizational structure if at all they have enough human resources to handle donor Programme funds and interventions, Internal audit function of the implementing partners and segregation of duties of IPs. The following measures related to HACT are included under this enhanced framework:

- internal supervision and monitoring by the Ministry - The Ministry of Public Health and Population has a financial and accounting system that is subject to the financial and supervisory laws in force. Through the General Department of Financial Affairs, continuous and permanent monitoring is carried out before, during and after implementation, in addition to documenting and recording all supporting documents that can be referred to at any time by stakeholders and partners upon request.

- Re-assessment – through an enhanced micro-assessment methodology beyond UNICEF's HACT framework- of all implementing partners (including Government counterparts), and until then considering them as high-risk.

Limitation of direct cash advances to implementing partners to the minimum possible by increasing the use of direct payment to suppliers and service providers; and reimbursement of expenditure already paid for by implementing partners.

Implementation of an enhanced spot checks approach increasing the number of assurance activities to implementing partners – Program monitoring visits (PMV)s, Spot checks and Audits.

Strengthen third party monitoring by increasing the number of field verifications and coordination of the work of field monitors. Process of identify TPM agent for HSS3 ongoing

The updates on the Grant Management Requirement as shared during the stakeholder meeting are available in the annex to the report

10. Question: Please comment on any other financial management-related bottlenecks for implementation and compliance.

Comments:

Delayed processing of payment in some instance due to delays submission of complete and correct documentations resulting is delay in implementation.

Bureaucracy of release the fund for activities and the regulations and transfer the fund after completion of the activities is one of the major bottlenecks for the implementation and compliance, as the MOPH&P and HFs and HWs doesn't have fund to conduct activities before transfer the fund needed.

The multiplicity of TPMs/PMVs, especially the non-professional ones, weakens the ministry and partners and provides assessments that may hinder the implementation of activities and achieving the required progress, since the control partners sometimes rely on weak and non-specialized cadres in the health aspect.

11. Question: Is the country complying with co-financing requirements in a timely manner?

Indicator:

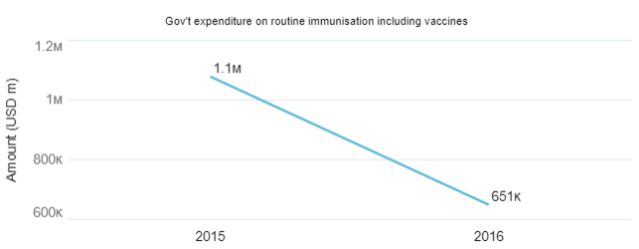
- Co-financing commitment fulfilled

Contextual Information

PEF Tier: Tier 2 | Fragility Status: Fragile | 1. Initial self-financing

Indicator Name	Year	Source	Value
GNI per capita	2018	World Bank	940
Health Centres per 100k population	2013	WHO - GHO	4.75
Nurses/Midwives per 1000 population	2018	WHO - GHO	7.85
Population	2020	UNPD	29,825,968
Surviving Infants	2020	UNPD	837,019
Under-5 mortality (per 1000)	2019	UNICEF	58.36

Health financing (and trends)



Comments:

The country has been honouring the co-financing obligation for Gavi supported vaccine but since the crisis in Yemen coupled with the economic challenges, the country has not been able to honour the commitment from its domestic resources. UNICEF has since stepped in to mobilize resources (mainly from the WB) to ensure the co-financing obligation is honoured every year. To date, the country has not defaulted with this obligation.

However, at the JA, there were discussions around the co-financing commitment and there was the request from the country to Gavi to consider the country for waiver for the next few years given the economic predicament of the country and its fragility.

C. Implementation of Technical Country Assistance (PEF-TCA)

12. Question: Is the country implementing TCA and COVAX TA as expected? Please explain how the TCA has helped to support the achievement of the country objectives.

Indicator:

- Partner performance as per workplans

Row Labels	Completed	Major Delays	Minor Delays	On Track	Re-programmed	Unreported	Grand Total	Achievement
COVAX Technical Assistance (WHO)	4	0	2	2	0	0	8	8
COVAX Technical Assistance (UNICEF)	6	0	0	0	0	0	6	6

Target Country Assistance (WHO)	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Target Country Assistance (UNICEF)	**18**	**1**	**0**	**1**	**0**	**0**	**20**	**19**
Grand Total								

Detailed reporting on milestones yet to be completed

Gavi PEF TCA 2021 **(The activities in this table are the results of the joint work between MOPH&P and WHO and UNICEF, and the Ministry of Health and its facilities at all levels are considered the implementing agency).**

Implementing partner	**Milestone**	**Report/Activity**	**Description of progress (16 June 2022)** - **Completed** - **Major Delays** - **Minor Delays** - **On Track** - **Re-programmed**
WHO	Zero dose children are brought down by 20% across the country compared to 2020	Enhancing knowledge and skills of vaccinators through a capacity building /refresher training in priority districts having higher number of Zero dose children. The data team at country level will start regular analysis of zero dose children and where these are concentrated on quarterly basis and share the information with MoPH for appropriate action. In addition to capacity building other activities like micro plan revision, enhancing supervision and focussed vaccination activities including regular outreach and considering PIRI	**Minor delays** Identified districts with large number of zero dose children. Discussed with SCF and ICRC Yemen held but plans still to be materialized. Implemented three rounds of integrated outreach in 2021/early 2022 in all governorates and some of identified districts were included. Training and supportive supervision conducted during implementation of the IOR.
WHO	At least 20% of the population vaccinated achieving average coverage of at least 70%	Provide technical support in planning and development of National Deployment & vaccine plan for COVID vaccine	**On track** Developed national vaccine deployment plan and COVAX acceleration plan. Supported COVID19 vaccination in all districts since launched on 20 April 2020. Provided technical support for the implementation of integrated outreach activities. As of 06 June 2022, total of 845,950, individuals received at least a dose of vaccine (close to 10% of the population under IRG). However, vaccine uptake is very slow due to low community perception, demand and competing priorities

WHO	100% of the vaccinators trained on vaccination policy for the unimmunized children during 2nd year of life MCV2 coverage improved by at least 5% compared to 2021	Provide technical support to increase coverage of MCV2, and using 2YL platform to reduce number of unimmunized children	**Minor delays** Technical support provided to conduct three rounds of IOR in 2021. In addition, MR outbreak campaigns were conducted in 38 and 74 governorates in the North and South respectively. Health workers were trained on Measles elimination strategy and the need to increase coverage of MCV2. However, separate EPI training has not been done due to delay in finalization of HSS3, fund release, delay in requests and competing priorities.
WHO	3rd Sentinel site of CRS established in Sana' At least 80% of lab reagents/equipment's requested are provided	Provide technical assistance for 1) establishment of 3 sentinel sites for congenital rubella syndrome 2) sensitization / awareness of health care providers about VPDs 3) provision of lab reagents / equipment's to CPHL.	**On track** Regular technical support provided to labs in the form of refresher trainings as well operational support in terms of staff incentives, Lab reagents and equipment's provided. Delay in establishment of 3 Sentinel sites for CRS as the activity is related to HSS3 which is only recently finalized.
UNICEF	At least one spot check conducted on HSS units on GAVI grant and follow up actions and recommendation implemented	Support the MoPHP on preparation and management of HSS3 grant and implementation of activities on the grant and support the implementation of GAVI grant Management requirement (GMR) 1) Support all procurement related activities on HSS3 2) Support compilation of HSS programmatic report 3) Support set up of TPM arrangement for HSS activities 4) Support the management and implementation of approved incentive payment on HSS3. 5) Support monitoring and supportive supervision of Immunization activities at central, governorate, districts, and HF levels 6) Support conduct of financial spot checks and program monitoring visits on GAVI HSS units in MoPHP	[reported 15/06/2021] **On track** UNICEF continues to make efforts with conduct of HACT assurance activities. During the period of Jan-June 2021, three Program Monitoring Visits (PMVs) were conducted on HSS related activities and one spot check commissioned. The spot check delayed because the MoPHP did not grant the permission early enough but was recently completed and report being compiled by the third party. Recommendations will be follow-up
UNICEF	At least 75% of the year one procurement completed and	Support the MoPHP on preparation and management of HSS3 grant and implementation of activities on the grant and support the implementation of GAVI grant	[reported 15/06/2022] **Major delay** The agreement between Gavi and UNICEF on the HSS3 support was

	delivered to the Ministry.	Management requirement (GMR) 1) Support all procurement related activities on HSS3 2) Support compilation of HSS programmatic report 3) Support set up of TPM arrangement for HSS activities 4) Support the management and implementation of approved incentive payment on HSS3. 5) Support monitoring and supportive supervision of Immunization activities at central, governorate, districts, and HF levels 6) Support conduct of financial spot checks and program monitoring visits on GAVI HSS units in MoPHP	signed in early November 2021 and fund disbursement to the country was processed before the end of 2021. There has been delay from the MoPHP to submit request for procurement and other approved activities on the HSS3 until towards end of May 2022 when some requests were submitted. There may be further delays as the request deviated from the budget approved and the payment modality in place

Comments:

2. Looking forward: Summary of key discussion points and follow up actions

Briefly summarise the key discussion points and follow up actions resulting from the Joint Appraisal review and dialogue. You should also specify any expected adjustments to the workplan, targets and budget[2].

Follow up action	Timeline	Responsible person/partner	Funding source
Strengthening RI and focus on zero dose			
Finalize selection of health centres to be supported under HSS3 in 66 districts (taking inconsideration the situation changed in these 66 districts, giving the possibility to identify other districts, targeting HFs not supported form other sources, and not exceed the fund of this activity)	**ASAP /mid July**	**MOPHP (the updated list is available)**	
Update development of micro-plans that Harmonize fixed, outreach and mobile service delivery strategies. Update Micro plans, *guidelines, trainings, etc.* social mobilization plans	Discuss in core working group	MOPHP	WHO HSS3?
Develop IOR workplan & funding source (2022-23) *1 round before September; subsequent rounds after new workplan*	30 Sept 2022	MoPHP and alliance partners	*N/A*

[2] This refers to all types of Gavi support

Develop integrated RI C-19 outreach and campaigns workplan until Dec 2023		MOPH and Alliance partners	None required
Develop a monitoring planning sheet for outreach activities	End of July	MOPH and Alliance partners	None required
Engagement of and implementation of Third Party Monitoring to 4 levels	July 2022	UNICEF	Gavi
Better understand barriers to immunization service uptake *(enable access to data collection)*	Aligned to EAF app?		PEF TCA / TA
Comprehensive EPI Review that includes Data Quality review	End 2023	MOPHP	PEF TCA
Strengthen VPD surveillance and response			
Strengthen relationship between surveillance and immunization at district level – review TORs including of Surveillance Officer		MOPHP	
Define the functions of Emergency Operation s Center (EOC)	30 Sept 2022	MOPHP, WHO	WHO
Costed workplan for EOC – including all funding sources/gaps	30 Sept 2022	MOPHP, WHO	WHO
Reactivate EPI Operation Room – clarify roles vs EOC	30 Sept 2022	MOPHP, WHO	WHO Emergency Funds
Develop emergency response contingency plan for VPDs based on zero dose analysis	30 Sept 2022	MOPHP, WHO, UNICEF, BMGF	N/A
Strengthen logistics, cold chain, HMIS			
Conduct Effective Vaccine Management (EVM) assessment, , Consider CVM approach and include results of the situation analysis conducted	30 June 2023	UNICEF	PEF TCA
Conduct Data Quality Review (linked with EPI review)	Q1 2023	WHO	PEF TCA
Strengthen/align/roll-out DHIS2; incorporate vaccine stock and wastage data	Ongoing	DHIS2 Committee (MOPHP, WHO, UNICEF)	PEF TCA (inform if separate TA needed)
Improve monitoring system	Ongoing		
Update the cold chain inventory	Ongoing		
institutionalize quarterly vaccine reporting and conduct physical stock takes	Q4 2022 and onwards	UNICEF	N/A
3 level training on cold chain and vaccine management	31 October 2022	UNICEF	Funding secured
Confirm CCEOP1 Y3 plan	By 31 Dec 2022	MOPHP, UNICEF	
Prepare CCEOP2 application	Before mid-2023	MOPHP, UNICEF	PEF TCA
Reach COVID-19 vaccination targets			
Incorporate lessons learnt on COVID-19 demand generation for RI strategy	July 2022	UNICEF	TCA??
Risk communication and community engagement	Ongoing	MOPHP	

Surge campaign to be conducted in southern and eastern governorates	In next 3 months	MOPHP, WHO, UNICEF	Op Cost secured (WHO); vaccines available (UNICEF)
4 Integrated Outreach Rounds (IOR) - integrated C-19	Dec 2022	MoPHP	Vaccines and funds secured
Identify the role of the health education centre to contribute to reaching zero dose children	Q3 2022	MOPHP, WHO, UNICEF	TBD
Understand the barriers on vaccine uptake	Q 2 2023	MoPHP, WHO, UNICEF	TCA??
Empower community actors to deliver integrated health messaging	During EAF application development		
Increasing focus on health education and awareness in promoting health, nutrition and raising immunity through various channels – e.g, training and awareness sessions, education across schools	Ongoing	WHO	N/A
Increase focus on faith actors – e.g., training and orientation sessions, schools' outreach	Ongoing	WHO	N/A
Equity Accelerator Funding			
Identify priority districts for EAF application based on 6-point criteria including 66 Gavi funded priority districts	End July 2022	MOPHP	N/A
Agree on process to identify zero dose children in missed communities *(see Zero Dose Analysis Card)*	End August 2022	MOPHP, Alliance	N/A
Identify TA needs (to support in identifying barriers and designing innovative approaches)	June/July 2022	MOPHP, Alliance, Gavi	Funded through Gavi
Form writing committee	July 2022	MOPHP	
Develop road map for application and clarify on strategic approach	July 2022	MOPHP	
Expand partnerships, focus on community actors, and integrate services to reach zero dose children including engagement with community groups			
Development of first draft of application	August 2022	MOPHP, Alliance	
Submission of application	September 2022	MOPHP, Alliance	
Other Grant Management Actions			
CDS budget finalization	23 June 2022	UNICEF	
Co-financing – discussion with development partners and Gavi Secretariat (MR SIA $217,000) - **MOPHP to share official letter**	Ongoing the official letter is shared.	Gavi, World Bank other development partners	
Complete IPV2 roll-out in all districts	Share update by end June	MOPHP	IPV2 Product Switch

			Grant ended/spent
Explore opportunities to re-operationalize non-functional health facilities and finalized a work plan to support all HFs in the country 100% from suitable fund in WHO&UNICEF		Gavi	TCA?
Identify core steer group to follow up on all agreed actions **plan** on a fortnightly basis Development of workshop report	Share nominees by 23 June	Focal point from MOPHP, Alliance, Gavi	N/A
Accountability framework on all Gavi funding levers with quantifiable milestones	30 December 2022	MoPH	TCA
Finalize M&L Plan	Nominations by end July	Gavi (Katja) and focal points	
Revitalize coordination committees A) HSCC - update members and meet 4 times/year B) Possible National Logistics Working Group (sub-committee)		Gavi to share TOR/SOW for NLWG (MOPHP to inform if in existence or sub-committee needed)	PEF TCA
Engage with MoPHP on the implementation of asset tagging, including identification of funds for the same	September 2022	MoPHP/UNICEF	??

This report is the outcome of a 4 day meeting that included the participation of the Minister of Health Aden and Advisor to the Minister of Health in Sana'a as well as participation of WHO and UNICEF country representatives.

Annex 2 is the participants list both virtual and face to face

Annex 1: Updates on GMR

S/n	GMR description	Updates
1	**Monitoring and Supervision**	
	Both UNICEF and WHO will engage Third Party Monitoring (TPM) agents to specifically cover the Gavi funds including cash, cold chain equipment and vaccines. The following actions which will apply:	WHO has engaged a TPM company for the Covid-19 vaccine deployment activities
		ToR developed in collaboration with Gavi team and UNICEF is in the process of identifying a TPM firm for the HSS3 and other related Gavi investment – Currently at bids technical evaluation stage
		Funding for the TPM to be advanced by Gavi following understanding of the budget involved
		MoPHP to be fully engaged for endorsement of the TPM activities at central, Governorate, district and HF levels
2	**Financial and programmatic reporting**	
2.1	WHO and UNICEF shall submit six-monthly financial reports in line with Gavi Guidelines on Financial Management and Audit Requirements	UNICEF and WHO had indicated that financial reporting from the country would not be possible. The usual practice of HQ offices sharing the financial report should be sustained
2.2	Six monthly progress reports (financial and programmatic) shall be submitted to UNICEF by all implementing entities receiving funds directly from UNICEF.	This is ongoing the next set of report should be in June and would be shared with Gavi
3	**Funding modality and assurance arrangements by Alliance partners**	
3.1	UNICEF will manage funds on behalf of the Government of Yemen through the stipulated in the grant agreement between Gavi and UNICEF for this purpose.	This is not the case. Funds are managed by both UNICEF and WHO based on activities for which funds are channeled.
3.2	Considering fiduciary risk, as part of UNICEF HACT-PLUS procedures, standard micro-assessments shall be carried out for all fund recipients (Government and CSOs) as per the stipulated thresholds.	Completed by UNICEF for all recipients of not just Gavi funds but other funding source
3.3	UNICEF will ensure that findings of the micro-assessment are taken into consideration and additional risk mitigation measures are introduced as appropriate.	Completed and ongoing

3.4	To ensure timely implementation of activities, UNICEF will ensure that the approved Gavi funds are made available to the implementing entities within 15-30 days of transfer of funds by Gavi.	Not fully done but timely implementation is ensured per modality
3.6	Gavi will disburse to WHO, only funds meant for activities implemented by WHO and managed through Direct Implementation (DI) modality.	Activities under WHO support are managed through direct implementation
3.7	Through DI, WHO implements as per its own financial management policies and procedures and makes payments from the Country Office through banking channels approved as per WHO guidelines and delegation of authority.	All payments are managed through Kuremi microfinance banking and payment is channeled directly to the beneficiaries
4	**Finance Manual for use at HSS Units, MoPH Saana and Aden**	
4.1	A Finance and administration Policy and Procedures manual will be developed (current one updated) for use at the HSS Units, MoPH Aden and Sana'a. The following will be included: Reporting procedures (i.e. monthly, quarterly and annual reports); Fixed asset management; and Record Archiving.	No such assistance from UNICEF to develop financial procedure manual for Gavi funds as its expected MoPHP has its manual. Such may require request of MoPHP authorities and agreement between Gavi, UNICEF and MoPHP
5	**Cold chain equipment and all program assets and supplies**	
5.1	Procurement of all cold chain equipment funded by Gavi or any other subsequent cash grants will be carried out by UNICEF in accordance with UNICEF guidelines and procedures for procurement.	This is happening with CCEOP project and expected to happen with procurement related activities on HSS3 channeled through UNICEF
6	**Annual work plans/budgets/procurement plans**	
6.1	MoPH with support from UNICEF will prepare annual operational work plans, budgets and procurement plans (including items to be procured by UNICEF) and submit to Gavi for review and approval.	Done for 2020 and 2021. For 2022 the plan was developed based on HSS3 with budget and timeline for MoPHP review and implementation
7	**Fixed Assets Management- MoPH**	
7.1	A comprehensive Fixed Asset Register (FAR) will be maintained for all assets, including but not limited to cold chain equipment, vehicles and IT equipment procured or to be procured through Gavi grants to Yemen.	Detailed Fixed Asset Register developed and share with MoPHP for use

	This Fixed Assets Register will be maintained by Government of Yemen and updated regularly.	In place
7.2	All assets procured with Gavi funds will be tagged with unique identifiers and asset verification will be carried out at least annually, reconciling the physical assets count and condition to the FAR at all levels.	Not yet done. To be discussed with the MoPHP
7.3	Scope of work of the TPM firm will include carrying out independent physical verification of cold chain equipment at all levels	Cold chain equipment functionality in the TPM checklist to be share with MoPHP for approval when TPM is to happen
8	**Vaccine stock management and inventory control:**	
8.1	A standard web-based stock management tool will be implemented for vaccine stocks management at all levels.	This is in the HSS3 for implementation and being discussed
8.2	Until the web-based system is fully operational, manual stock registers will be maintained at all levels parallel to the computerized system.	Ongoing
8.2	The issuance of stock will be strictly on First Expired First Out (FEFO) basis and the stock management tool will only allow issuance of stock on FEFO basis.	Ongoing
9	**Verification of stock**	
9.1	Periodic (ideally quarterly) physical verification of stocks will be carried out by MoP/ EPI staff (independent of stock management) at the NVS.	Ongoing but irregular
9.2	The TPM firm will also carry out physical verification on a periodic basis at the NVS, Governorate, District and Health Facility level.	In the TPM checklist to be share with MoPHP for approval when TPM is to happen
9.3	Results of the physical verification will be formally documented and agreed action plans followed up.	The outcome informs distribution plan and also informs shipments into the country
9.4	The report of physical verification will be shared with Gavi at least biannually.	Usually done during the TCA milestone reporting

Annex 2: Detailed reporting on milestones

Gavi PEF TCA 2021/2022 and COVAX TA

Implementer	Milestone	Report/Activity	Description of progress (16 June 2022) - **Completed** - **Major Delays** - **Minor Delays** - **On Track** - **Re-programmed**
WHO	Zero dose children are brought down by 20% across the country compared to 2020	Enhancing knowledge and skills of vaccinators through a capacity building /refresher training in priority districts having higher number of Zero dose children. The data team at country level will start regular analysis of zero dose children and where these are concentrated on quarterly basis and share the information with MoPH for appropriate action. In addition to capacity building other activities like micro plan revision, enhancing supervision and focussed vaccination activities including regular outreach and considering PIRI	**Minor delays** Identified districts with large number of zero dose children. Discussed with SCF and ICRC Yemen held but plans still to be materialized. Implemented three rounds of integrated outreach in 2021/early 2022 in all governorates and some of identified districts were included. Training and supportive supervision conducted during implementation of the IOR.
WHO	More than 80% of the governorate and districts supervisors trained on MLM receive refresher trainings	Improve the managerial skills of governorates and district level managers through mid-level management on the job Refresher training based on the observations and deficiencies identified during supervisory visit. Supporting Implementation of Integrated Outreach to vaccinate the children in remote & Hard to reach areas, marginalized communities including IDPs, Migrants and refugees/returnees	**Completed** Completed MLM training for all governorate and district EPI focal persons. Trained total of 256 participants.
WHO	All health facilities developed EPI micro plan. Risk assessment conducted and 80% VPDs outbreak investigated and adequately responded	Provide technical support to the MoPH at central and governments for planning to develop annual work plan continuously do risk assessment to identify low coverage areas, predicting outbreaks due to VPDs and supporting mitigation measures as well planning and implementation of outbreak response activities	**Completed** Annual work plan developed and implemented with some delays in activities. Micro planning tool revised, training material developed and piloted. Quarterly risk assessment carried out with MoPH team especially for AFP surveillance and Measles. Outbreak response vaccination activities where possible and vaccine as well operational cost available otherwise limited response activities conducted.
WHO	At least 20% of the population	Provide technical support in planning and development of	**On track**

	vaccinated achieving average coverage of at least 70%	National Deployment & vaccine plan for COVID vaccine	Developed national vaccine deployment plan and COVAX acceleration plan. Supported COVID19 vaccination in all districts since launched on 20 April 2020. Provided technical support for the implementation of integrated outreach activities. As of 06 June 2022, total of 845,950, individuals received at least a dose of vaccine (close to 10% of the population under IRG). However, vaccine uptake is very slow due to low community perception, demand and competing priorities
WHO	100% of the vaccinators trained on vaccination policy for the unimmunized children during 2nd year of life MCV2 coverage improved by at least 5% compared to 2021	Provide technical support to increase coverage of MCV2, and using 2YL platform to reduce number of unimmunized children	**Minor delays** Technical support provided to conduct three rounds of IOR in 2021. In addition, MR outbreak campaigns were conducted in 38 and 74 governorates in the North and South respectively. Health workers were trained on Measles elimination strategy and the need to increase coverage of MCV2. However, separate EPI training has not been done due to delay in finalization of HSS3, fund release, delay in requests and competing priorities.
WHO	3rd Sentinel site of CRS established in Sana' At least 80% of lab reagents/equipment's requested are provided	Provide technical assistance for 1) establishment of 3 sentinel sites for congenital rubella syndrome 2) sensitization / awareness of health care providers about VPDs 3) provision of lab reagents / equipment's to CPHL.	**On track** Regular technical support provided to labs in the form of refresher trainings as well operational support in terms of staff incentives, Lab reagents and equipment's provided. Delay in establishment of 3 Sentinel sites for CRS as the activity is related to HSS3 which is only recently finalized.
WHO	At least 90% of data clerks recruited for governorate level trained	Provide technical support to train the data related staff of MoPH especially the one supposed to be recruited at governorate level under HSS3	**Completed** Trained all governorate level EPI officers on data management. Recruitment delayed due to delay in finalization of HSS3
WHO	At least 50% of data clerks recruited for governorate level trained	Provide technical support to train the data related staff of MoPH especially the one supposed to be recruited at governorate level under HSS3	**Completed** Trained all governorate level EPI officers on data management. Recruitment delayed due to delay in finalization of HSS3
UNICEF	1) Immunization supply forecast for 2021 available in Q1 of	Strengthen government capacity to plan and implement effective Immunization supply chain management. (1. Support	[reported 15/06/2021] **Completed**

	2021 and shipment plan developed for implementation in use	development of quarterly vaccine distribution plan from the central to the governorate and governorate to the districts store and ensure availability of vaccine at district and HF levels 2) Support planning and implementation of Year one CCEOP deployment plan and the delinking process in CCEOP implementation 3) support the installation and commission of the walk-in cold room in the 13 governorates. 4) Support the installation and commissioning of the RTMDs at central and governorate stores	Working with UNICEF supply division in collaboration with the MoPHP engaging MoPHP parameters, UNICEF country office supported the development of the 2021 immunization forecast which has been completed and shipment plan based on the plan developed and currently being implemented to ensure availability of vaccine in the country for immunization services
UNICEF	At least one Physical stock take conducted at the central cold store and 90% of the governorate and district conducted and reported at least one quarterly vaccine physical stock take	Support supply chain Data for management and decision. VSSM is currently in use at the central level and other levels engaged with manual record keeping for vaccine and supplies management (1. Support vaccine supply planning and strengthening of regular VSSM update and use at central level, 2. Support monitoring of vaccine stock by quarterly physical stock take at central and governorate level.3) support cold chain inventory update and reporting from all districts, 4) Conduct Effective Vaccine Management (EVM) Assessment	[reported 15/06/2021] **Completed** UNICEF continues to support the MoPHP to have some oversight on stock situation across the immunization supply chain levels in the country. Q1 stock was submitted from 100% of the governorate and over 85% of the districts. The physical stock take is becoming challenging especially in the North where the MoPHP authority has stopped the activities of the cold chain and vaccine management consultants which delayed the Q1 stock report
UNICEF	Annual Demand promotion plan of action developed to accelerate immunization in the communities	Support linking community to service component of Reaching Every Community in 66 high risk districts: 1) Strengthen government capacity to plan and implement effective Advocacy, Communication and Social Mobilization (ACSM) interventions at national, governorate and district levels for EPI routine and IORs and actively participate in linking community networks into HF micro-planning; 2) Promote community access to and demand for Immunization services community networks, supporting the development and distribution of IEC materials to address rumours and improve	[reported 15/06/2021] **Completed** UNICEF support health education centres to put annual plans of social mobilization (SM) activities for immunization, including IOR and World Immunization week (WIW) commemoration. The plan is under implementation phase. UNICEF has activated health community networks (community health workers, Community midwives and Community Health & Nutrition Volunteers) to worked together for conveying unified immunization messages

		uptake of vaccination; 3) Support and monitor ACSM activities for new vaccines (COVID-19 /IPV 2nd dose) introduction plans, implementation and evaluation; 4) Support capacity development of inter-personal communication (IPC) for Health workers, to increase demand for vaccines. 5) Mapping gatherings of migrants, IDPs and other special groups such as (CWDs) and mobilize them for immunization services.	
UNICEF	Availability of 2021 EPI operational plan and implementation started	Strengthen government capacity to plan and implement activities at the Governorate/district/sub district level with focus on Immunization coverage and equity 1) Support the development of integrated PHC micro plan at Health facility level. 2) Support development of annual EPI operational plan for 2021	[reported 15/06/2021] **Completed** UNICEF closely worked with WHO to put together operational plan for 2021 and this was shared with MoPHP in the North and South. Activities on the operational plan have since commenced implementation in the country
UNICEF	One Polio campaign implemented by the end of June with at least 90% target reached.	Technical support at the National and subnational levels for continued strengthening of Immunization related activities 1) Support planning and implementation of at least four integrated outreach one each quarter. 2) Support planning and implementation of Polio and MNTE supplemental Immunization activities by end of the year 3) Support introduction of new vaccine including phased introduction covid-19 Vaccine and introduction of second dose of IPV into RI program by end of Q2 4) Support planning and implementation of VPDs outbreak response. 5) Support capacity building of the health workers at facility and community level.	[reported 15/06/2021] **Completed** UNICEF supported the procurement and distribution of Polio vaccine and Vit A for the Polio campaign and Vit A supplementation which was implemented 29-31 May 2021. UNICEF also supported the communication and community engagement activities. UNICEF also supported the campaign with Third Party Monitoring (TPM) and supervision and monitoring by staff in the field and from the country office. The campaign which achieved 89% took place in the Northern governorate after so much delays and intense advocacy from UNICEF management and other partners
UNICEF	At least 95% of the EPI taskforce and NITAG meetings supported and facilitated action points followed	Support MoPHP and participate in coordination/technical meeting with partners and CSO at country and regional level contributing to issues advancing immunization coverage and equity 1) Participate in EPI Taskforce and Health System Strengthening	[reported 15/06/2021] **Completed** The EPI taskforce meeting frequency has reduced in the last one year. However, UNICEF continues to be represented at each taskforce meeting both in the South and the

	for implementation	Coordination Committee meeting, 2) Participate at the NITAG meeting 3) support coordination, planning and participate at the GAVI Joint Appraisal/MSD meeting 4) Support coordination and organization of teleconferences with GAVI for updates	North where immunization and related issues are discussed. 100% Four EPI taskforce and one NITAG meeting were attended in the North and not less than 3 EPI taskforce meeting in the South were attended amidst other adhoc meetings
UNICEF	At least one spot check conducted on HSS units on GAVI grant and follow up actions and recommendation implemented	Support the MoPHP on preparation and management of HSS3 grant and implementation of activities on the grant and support the implementation of GAVI grant Management requirement (GMR) 1) Support all procurement related activities on HSS3 2) Support compilation of HSS programmatic report 3) Support set up of TPM arrangement for HSS activities 4) Support the management and implementation of approved incentive payment on HSS3. 5) Support monitoring and supportive supervision of Immunization activities at central, governorate, districts, and HF levels 6) Support conduct of financial spot checks and program monitoring visits on GAVI HSS units in MoPHP	[reported 15/06/2021] **On track** UNICEF continues to make efforts with conduct of HACT assurance activities. During the period of Jan-June 2021, three Program Monitoring Visits (PMVs) were conducted on HSS related activities and one spot check commissioned. The spot check delayed because the MoPHP did not grant the permission early enough but was recently completed and report being compiled by the third party. Recommendations will be follow-up
UNICEF	At least 90% of the 13 walk-in cold rooms installed and commissioned in the governorate and at least 80% of the RTMDs installed at the governorate cold stores	Strengthen government capacity to plan and implement effective Immunization supply chain management. (1. Support development of quarterly vaccine distribution plan from the central to the governorate and governorate to the districts store and ensure availability of vaccine at district and HF levels 2) Support planning and implementation of Year one CCEOP deployment plan and the delinking process in CCEOP implementation 3) support the installation and commission of the walk-in cold room in the 13 governorates. 4) Support the installation and commissioning of the RTMDs at central and governorate stores	[reported 15/11/2021] **Completed** UNICEF continues to support improvement in the vaccine storage capacity across the country. 10 of the 13-walking cold room have been installed and the installation for the eleventh unit will soon be completed. Installation of RTMD for the central store in the North and South is completed. Additional units of walk-in cold rooms have been procured for other governorates and installation will be completed early in 2022.
UNICEF	At least 2 Physical stock takes conducted at the central	Support supply chain Data for management and decision. VSSM is currently in use at the central level and other levels engaged	[reported 15/11/2021] **Completed**

	cold store and about 90% of the governorate and district conducted and reported at least 2 quarterly vaccine physical stock takes.	with manual record keeping for vaccine and supplies management (1. Support vaccine supply planning and strengthening of regular VSSM update and use at central level, 2. Support monitoring of vaccine stock by quarterly physical stock take at central and governorate level.3) support cold chain inventory update and reporting from all districts, 4) Conduct Effective Vaccine Management (EVM) Assessment	Though challenging, UNICEF support the physical stock take for Q2 in July 2021 and Q3 in October 2021 at central and governorate level
UNICEF	The 66 low immunization coverage Districts have community volunteers and other community networks to promote immunization uptake	Support linking community to service component of Reaching Every Community in 66 high risk districts: 1) Strengthen government capacity to plan and implement effective Advocacy, Communication and Social Mobilization (ACSM) interventions at national, governorate and district levels for EPI routine and IORs and actively participate in linking community networks into HF micro-planning; 2) Promote community access to and demand for Immunization services community networks, supporting the development and distribution of IEC materials to address rumours and improve uptake of vaccination; 3) Support and monitor ACSM activities for new vaccines (COVID-19 /IPV 2nd dose) introduction plans, implementation and evaluation; 4) Support capacity development of inter-personal communication (IPC) for Health workers, to increase demand for vaccines. 5) Mapping gatherings of migrants, IDPs and other special groups such as (CWDs) and mobilize them for immunization services.	[reported 15/11/2021] **Completed** UNICEF had increased number of health community networks worked to promote demand of vaccines in the 66 high risk districts for the respective period: •2924 Community volunteers (CV). •2331 Community health and nutrition volunteers (CHNV) •1028 Community midwives (CMW) •384 Community health workers (CHWs). As part of UNICEF health community networks system to connect networks with supported health facilities for immunization services which is one of the Minimum services packages (MSP) especially in the 66 high risk districts. the above community networks worked to increase the demand of vaccines and promote immunization messages during their day-to-day activities, and they had a remarkable role on commemorating World immunization week (WIW) 2021. There are also other community networks which were established by UNCIEF via C4D section whose main TOR work is related to health education and promotion social mobilization such as Religious leaders (2177) and Mother-to-mother clubs (271). During this period CVs worked on the second phase of health education 5+1 messages including immunization. In Azal district, the

			report shows that vaccination messages had the highest rate of delivery.
UNICEF	At least 50% of the operational plan funded activities implemented	Strengthen government capacity to plan and implement activities at the Governorate/district/sub district level with focus on Immunization coverage and equity 1) Support the development of integrated PHC micro plan at Health facility level. 2) Support development of annual EPI operational plan for 2021	[reported 15/11/2021] **Completed** Over 70% of activities funded on the 2021 EPI operational Plan of action (PoA) supported by UNICEF were implemented including immunization supply chain related activities, Demand generation activities, implementation of campaigns and integrated outreach and support to Covid-19 vaccine deployment in the country. Other activities funded which are yet to be completed are ongoing
UNICEF	Vaccine availability secured and at least 3-5% of the population of Yemen (including Health workers, aged and people with co morbidity) vaccinated with covid vaccine	Technical support at the National and subnational levels for continued strengthening of Immunization related activities 1) Support planning and implementation of at least four integrated outreach one each quarter. 2) Support planning and implementation of Polio and MNTE supplemental Immunization activities by end of the year 3) Support introduction of new vaccine including phased introduction covid-19 Vaccine and introduction of second dose of IPV into RI program by end of Q2 4) Support planning and implementation of VPDs outbreak response. 5) Support capacity building of the health workers at facility and community level.	[reported 15/11/2021] **Completed** UNICEF supported the country in 2021 to secure Covid-19 vaccine although there were challenges at some points. Covid-19 vaccine is readily available in Yemen with not less than a total of 1,3368,800 doses of Covid-19 vaccine shipped to Yemen by the end of Nov. 2021 (including 817,600 doses of AstraZeneca, 151,200 doses of J&J and 400,000 doses of Sinovac). As at early Nov. 2021 about 1.9% (567,842) of the population of Yemen had received at least one dose of Covid-19 vaccine. There has been challenge with vaccine uptake in Yemen as the deployment since commandment has been only in the South with about 30% of the country's population. Advocacy has continued to the authority in the North to come on board the vaccine deployment to improve uptake and protect the population
UNICEF	100% of the organized teleconference meetings with GAVI and other partners supported and facilitated, and action point	Support MoPHP and participate in coordination/technical meeting with partners and CSO at country and Regional level contributing to issues advancing immunization coverage and equity 1) Participate in EPI Taskforce and Health System Strengthening Coordination Committee meeting,	[reported 15/11/2021] **Completed** UNICEF participated at all the scheduled weekly technical coordination meetings and adhoc meetings with Gavi and WHO. UNICEF regional office was also represented at the meetings.

	followed for implementation	2) Participate at the NITAG meeting 3) support coordination, planning and participate at the GAVI Joint Appraisal/MSD meeting 4) Support coordination and organization of teleconferences with GAVI for updates	Scheduled meeting with MoPHP partners to discuss issues especially related to HSS3 support were supported and attended by UNICEF team. The meetings were opportunities for UNICEF to provide updates on the supports provided to the country in immunization supply chain management system, demand generation and contribution to Covid-19 vaccine deployment in the country. Global session conveyed by COVAX for countries were all attended by UNICEF team from Yemen and action points from all the coordination and special sessions were followed up
UNICEF	1). At least 50% of Year1/2 CCEOP equipment s installed in 50% of the locations deployment, installation and commission completed	Strengthen government capacity to plan and implement effective Immunization supply chain management. (1. Support development of quarterly vaccine distribution plan from the central to the governorate and governorate to the districts store and ensure availability of vaccine at district and HF levels 2) Support planning and implementation of Year one CCEOP deployment plan and the delinking process in CCEOP implementation 3) support the installation and commission of the walk-in cold room in the 13 governorates. 4) Support the installation and commissioning of the RTMDs at central and governorate stores	[reported 15/06/2022] **Completed** During the reporting period only 100 units of the year1&2 quantity were delivered to the country and 100% of the quantity were installed in 100 health facilities. The Post Installation Inspection (PII) for 20% sample of the 100 units was also completed by a Third-Party Monitoring Agent in Yemen. The analysis of the PII data is being done by UNICEF supply Division and recommendations to be shared with the country to inform future installations. Toward the end of May, a total of 401 unit as part of the year1 &2 quantity were delivered to the country and the distribution is being planned for installation at the health facilities
UNICEF	At least 3 Physical stock takes conducted at the central cold store and about 90% of the governorate and district conducted and reported at least 2 quarterly vaccine physical stock takes.	Support supply chain Data for management and decision. VSSM is currently in use at the central level and other levels engaged with manual record keeping for vaccine and supplies management (1. Support vaccine supply planning and strengthening of regular VSSM update and use at central level, 2. Support monitoring of vaccine stock by quarterly physical stock take at central and governorate level.3) support cold chain inventory update and reporting from all districts, 4) Conduct Effective	[reported 15/06/2022] **Completed** Though challenging, UNICEF support the physical stock take for four quarters in 100% of the governorates at central in 2021 There will be need for MoPHP to institutionalize the reporting from districts, governorate and central level and have stock reporting in the DHIS2 which is being rolled out in the country

		Vaccine Management (EVM) Assessment	
UNICEF	Communities have access to information and IEC material	Support linking community to service component of Reaching Every Community in 66 high risk districts: 1) Strengthen government capacity to plan and implement effective Advocacy, Communication and Social Mobilization (ACSM) interventions at national, governorate and district levels for EPI routine and IORs and actively participate in linking community networks into HF micro-planning; 2) Promote community access to and demand for Immunization services community networks, supporting the development and distribution of IEC materials to address rumours and improve uptake of vaccination; 3) Support and monitor ACSM activities for new vaccines (COVID-19 /IPV 2nd dose) introduction plans, implementation and evaluation; 4) Support capacity development of inter-personal communication (IPC) for Health workers, to increase demand for vaccines. 5) Mapping gatherings of migrants, IDPs and other special groups such as (CWDs) and mobilize them for immunization services.	[reported 15/06/2022] **Completed** Several IEC materials were developed and distributed to the communities in the 15 northern governorates as part of the efforts to improve routine immunization. IEC materials were also developed and distributed across the governorates in the South for the outbreak response and Covid-19 vaccine deployment
UNICEF	1) Third round of MNTE campaign implemented in the HRDs by the end of 2021 with at least 75% coverage	Technical support at the National and subnational levels for continued strengthening of Immunization related activities 1) Support planning and implementation of at least four integrated outreach one each quarter. 2) Support planning and implementation of Polio and MNTE supplemental Immunization activities by end of the year 3) Support introduction of new vaccine including phased introduction covid-19 Vaccine and introduction of second dose of IPV into RI program by end of Q2 4) Support planning and	[reported 15/06/2022] **Completed** The third round of MNTE campaign was implemented in 47 selected high-risk districts in the South and a total of 269,488 women of childbearing age (WCBA) were vaccinated accounting for 70%. One of the draw back during the implementation of the fact that schools were not in session which usually provide opportunity to reach eligible school going girls in block. Two governorates also did not implement due to operational reasons the MoPHP could not

		implementation of VPDs outbreak response. 5) Support capacity building of the health workers at facility and community level.	address before the campaign. The campaign was also implemented amidst other competing vaccination activities including Oral Cholera Vaccination and Polio outbreak Response campaign as well as Covid-19 vaccination
UNICEF	1) MSD discussion with in country and regional stakeholders facilitated ; 2) the MSD report developed and shared with Gavi by the end of Q4 of 2021	Support MoPHP and participate in coordination/technical meeting with partners and CSO at country and regional level contributing to issues advancing immunization coverage and equity 1) Participate in EPI Taskforce and Health System Strengthening Coordination Committee meeting, 2) Participate at the NITAG meeting 3) support coordination, planning and participate at the GAVI Joint Appraisal/MSD meeting 4) Support coordination and organization of teleconferences with GAVI for updates	[reported 15/06/2022] **Completed** Though could not hold by the end of 2021, UNICEF supported the planning and the logistics for the Annual Review meeting which was held 13-16 June 2022 in Intercontinental Hotel Amman. The meeting drew participant from Gavi Secretariat led by the Director of conflict and Fragile countries, MoPHP from the North and South led by the Minister of Health from the South, UNICEF country office led by the Representative, Regional office, and HQ participants, WHO country office led by the WHO WR and the Regional office participants. World Bank and BMGF were also represented at the annual meeting. The report of the meeting is being compiled
UNICEF	At least 75% of the year one procurement completed and delivered to the Ministry.	Support the MoPHP on preparation and management of HSS3 grant and implementation of activities on the grant and support the implementation of GAVI grant Management requirement (GMR) 1) Support all procurement related activities on HSS3 2) Support compilation of HSS programmatic report 3) Support set up of TPM arrangement for HSS activities 4) Support the management and implementation of approved incentive payment on HSS3. 5) Support monitoring and supportive supervision of Immunization activities at central, governorate, districts, and HF levels 6) Support conduct of financial spot checks and program monitoring visits on GAVI HSS units in MoPHP	[reported 15/06/2022] **Major delay** The agreement between Gavi and UNICEF on the HSS3 support was signed in early November 2021 and fund disbursement to the country was processed before the end of 2021. There has been delay from the MoPHP to submit request for procurement and other approved activities on the HSS3 until towards end of May 2022 when some requests were submitted. There may be further delays as the request deviated from the budget approved and the payment modality in place
UNICEF	2) Gavi approved incentive		[reported 15/06/2022]

	payment on HSS3 completed to at least 85% of the beneficiaries		**Completed** The agreement between Gavi and UNICEF on the HSS3 support was signed in early November 2021 and fund disbursement to the country was processed towards the end of the year. At the time the incentives were to be processed, the MoPHP objected to the incentive covering only November and Dec 2021 and Jan-Dec 2022 and requested Gavi for review to commence from Jan 2021. Following internal consultation, Gavi management approved retroactively from June to Oct 2021. At the end of April 2022, the incentive for 10 months June 2021 to March 2022) was processed by UNICEF to 100% of about 562 beneficiaries (372 in the North and 190 in the South).

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Implementer	**Milestone**	**Report/Activity**	**Description of progress (16 June 2022)** - **Completed** - **Major Delays** - **Minor Delays** - **On Track** - **Re-programmed**
WHO	TORs for Covid-19 NCC including roles and responsibilities and meetings schedule finalized with MoH sign-off.	A.1 Establish (or engage an existing committee) a National Coordinating Committee (NCC) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings	[reported 9/11/2021] **Completed** MoPHP established coordination committees with clear ToR and members designated by signature of Minister of Health. The national coordination committee provides oversight while COVID19 taskforce chaired by deputy minister of health provides technical support and day to day monitoring of vaccine introduction activities.
WHO	TORs for Covid-19 NTWG including roles and responsibilities and meetings schedule finalized with MoH sign-off.	A.2 Establish (or engage an existing working group) a National Technical Working Group (NTWG) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings	**Completed** Established NITWAG with terms of reference for members nominated by H.E Minister of health. The committee is meeting, though infrequent, to discuss on issues presented by the COVAX task team.

WHO	NTWG subcommittees for the following workstreams: 1) service delivery 2) vaccine, cold chain & logistics, 3) demand generation & communication (4) prioritization, targeting and COVID-19 surveillance, (5) Monitoring and Evaluation: determination and proof of eligibility, proof of vaccination, monitoring of coverage among at-risk groups, and monitoring of vaccine impact (6) Safety, including injury prevention and AEFI detection and response, established or if pre-existing, engaged.	A.2 Establish (or engage an existing working group) a National Technical Working Group (NTWG) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings	[reported 14/6/2021] **Completed** A national working group is established with 3 sub-committees including monitoring and evaluation, 2) training subcommittee, 3) demand generation sub-committees and vaccine and logistics sub-committees. members are drawn from various departments of MoPHP and UNICEF and WHO country office staffs.
WHO	Expedited regulatory pathway for approval of COVID-19 vaccines (i.e., emergency use authorization, exceptional approval/waiver mechanism based on reliance/recognition, abbreviated procedure, fast track, etc.) identified and confirmed.	C.1 Confirm to WHO the existence of any expedited regulatory pathway for approval of COVID-19 vaccines (i.e., emergency use authorization, exceptional approval/waiver mechanism based on reliance/recognition, abbreviated procedure, fast track, etc.). Timelines and maximum number of days should be mentioned. (expected timeline: maximum 15 working days)	[reported 6/4/2021] **Completed** Expedited regulatory pathway applied to COVID19 vaccine and AstraZeneca is approved for emergency use authorization in Yemen. Import permit confirmed and indemnification signed. The expedited pathway covers all COVID19 vaccines while import permit will be required for each vaccine manufacturer
WHO	NDVP developed with input from relevant bodies (National COVID-19 Response Coordinating Committee, CNCC,	A.6 Develop the National Deployment and Vaccination Plan (NDVP) with input from relevant bodies (National COVID-19 Response Coordinating	**Completed** National vaccine deployment plan (NDVP) developed according to WHO guideline and covering all thematic areas: prioritization, M&E, AEFI surveillance, supply and cold chain

	CTWG, NITAG, National Immunization Programme, National Regulatory Authority, AEFI committee and other relevant groups such as private sector), in line with WHO guidance and SAGE recommendation.	Committee, CNCC, CTWG, NITAG, National Immunization Programme, National Regulatory Authority, AEFI committee and other relevant groups such as private sector). The NDVP should be in line with WHO guidance and SAGE recommendations (plan can be developed by adapting the Pandemic Influenza NDVP, if existing)	management, demand generation, coordination, and planning. During the reporting period vaccine supply constraint was resolved and supported Yemen to develop COVID19 acceleration implementation plan and expanded target population to include all adults 18 years.
WHO	Necessary monitoring tools developed or existing tools (vaccination card/certificate - facility-based nominal registers and/or tally sheets, vaccination reports (paper and/or electronic)) adapted and analytical tools to monitor progress and coverage among different at-risk categories developed.	G.2 Develop or adapt necessary monitoring tools or adapt existing tools: vaccination card/certificate - facility-based nominal registers and/or tally sheets, vaccination reports (paper and/or electronic) and analytical tools to monitor progress and coverage among different at-risk categories	[reported 14/6/2021] Completed Developed recording and reporting formats necessary of management of covid19 vaccination. These include vaccination card, tally sheet, registration book and summary reporting templates. In addition, supported development of electronic vaccination certificate which was launched on 05 June 2021. Developed COVID19 monitoring dashboard for tracking progress of implementation of vaccination which is also shared with relevant stakeholders.
WHO	Monitoring tools produced and distributed to eligible vaccination providers. Any changes to electronic systems, developed, tested and rolled-out, and training for use of these tools and processes to traditional and new providers conducted.	G.2 Develop or adapt necessary monitoring tools or adapt existing tools: vaccination card/certificate - facility-based nominal registers and/or tally sheets, vaccination reports (paper and/or electronic) and analytical tools to monitor progress and coverage among different at-risk categories	**Completed** Supported in developing monitoring tools including registration books, tally sheets and summary reporting forms using both paper and electronic platforms. Moreover, electronic vaccination certificate was launched and is in use since August 2021. In addition, developed electronic dashboard which captures data by geographic areas, gender, dose given, doses used and population category. Training provided to 144 central, governorate, district level data entry focal points in addition to 447 health workers trained on manual for covid19 vaccine deployment. information is being used to provide regular feedback to national levels.
WHO	Protocols for infection prevention	E.1 Update protocols for infection	[reported 6/4/2021]

	and control measures including adequate personal protection equipment (PPE) updated.	prevention and control measures including adequate personal protection equipment (PPE) to minimize exposure risk during immunization sessions	Completed COVID19 prevention protocols adapted for safe implementation of COVID19 vaccination. This is incorporated in the health workers training guideline.
WHO	TORs for Covid-19 NTWG including roles and responsibilities and meetings schedule finalized with MoH sign-off.	A.1 Establish (or engage an existing committee) a National Coordinating Committee (NCC) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings	**Completed** National Coordination committee has been established that is meeting regularly. In addition to that various national technical groups notified by the health minister and these committees have been supporting vaccination efforts as per defined ToRs.
WHO	Master list and strategy of service providers for effectively delivering COVID-19 vaccine to various target populations delivered.	E.3 Identify and develop a master list and strategy of service providers who could effectively deliver COVID-19 vaccine to various target populations	**Completed** Following significant improvement in availability of supplies and to expand access to vaccination services, supported MoPHP to expand vaccination sites from133 fixed to 1400 health facilities, integrate COVID19 into routine services and implement two rounds of integrated outreach. The country adopted fixed, outreach, and integrated routine and outreach strategies.
WHO	Potential COVID-19 vaccine delivery strategy identified to best reach target groups.	E.2 Identify potential COVID-19 vaccine delivery strategies leveraging both existing vaccination platforms and non-vaccination delivery approaches to best reach identified target groups	**Completed** The national committee, with technical support of WHO, the country adopted fixed, outreach, and integrated routine and outreach strategies. Following significant improvement in availability of supplies and to expand access to vaccination services , MoPHP expanded fixed vaccination sites to 1400 from 230 fixed sites and integrated COVID19 vaccination in all 1980 outreach sessions. Fixed site and outreach vaccination strategies were used to vaccinate elderly people. Outreach teams people living in zone II and zone III of the catchment population from the selected fixed vaccination sites. People with chronic medical conditions were served using a combination of fixed site strategy, temporary fixed and outreach strategies. Temporary fixed teams

			were assigned to work in chronic care centers and home-based care centers. Health adults living in the implementing districts accessed vaccination using any of the above strategies as convenient to them.
WHO	Estimates of potential numbers of target populations that will be prioritized for access to vaccines stratified by target group and geographic location, i.e., prepare first to define, identify, and estimate no. of HCWs are available.	D.2 Estimate potential numbers of target populations that will be prioritized for access to vaccines stratified by target group and geographic location, i.e., prepare first to define, identify, and estimate no. of HCWs	Completed Before September 2021, the COVAX implementation followed high risk approach targeting elderly, health care workers and people with comorbid illness and reaching other adults gradually depending on vaccine availability. The task team supported estimation of target population using available information. According to the estimate 71,245 health care workers and 246,117 elderly people aged 60 years and above were to be vaccinated. In addition, following improvement in vaccine supply and low vaccine uptake, the task team expanded the target population to include all adults 18 years and above and worked with other sectors to update number of teachers , IDPs, and other priority groups. Population estimates are negatively affected by old census, lack of HR data base and discrepancies in figures retained by MoH and other sectors such as executive unit of IDPs.
WHO	Guidelines, documented procedures, and tools for planning and conducting vaccine pharmacovigilance activities (i.e., AEFI reporting, investigation, causality assessment, risk communication and response) are made available.	I.2 Assure competent and trained staff to perform vigilance activities	**Completed** Supported to update procedures for AEFI detection, investigation and reporting are embedded into the national health workers training guideline. The existing national AEFI committee is upgraded with addition of relevant experts to support causality assessments. Trained 63 AEFI focal persons at central and governorate levels. Existing AEFI forms were updated to include COVID19 vaccine related AEFI. Printed and distributed tools to all implementation sites. The existing national AEFI committee is upgraded with addition of relevant experts to support causality assessments. The

			guideline and tools were updated as new information are received such as vaccine safety among pregnant women, providing booster dose, heterologous schedule.
WHO	Progress of NITAG working groups on COVID-19 vaccines monitored, and interim recommendation on prioritization and risk groups issued.	D.2 Estimate potential numbers of target populations that will be prioritized for access to vaccines stratified by target group and geographic location, i.e., prepare first to define, identify, and estimate no. of HCWs	[reported 9/11/2021] Completed Macro plan developed with estimated figures for HCWs, and other population groups disaggregated by governorates and districts. In addition, population estimates are provided for each quantity of vaccines received in accordance with the priority list indicated in the national vaccine deployment plan. Accuracy of estimated target population was challenged by old census, lack of human resource management database for health care workers and discrepancies in IDP figures among government and other sources.
WHO	Competent and trained staff to perform vigilance activities	I.2 Assure competent and trained staff to perform vigilance activities	**Completed** Training conducted for 63 central and governorate level AEFI focal persons. In addition, AEFI surveillance was integrated into health workers training manual for deployment of COVID19 vaccine in which over 3600 health workers were trained. focal persons are supporting investigation of AEFI cases and daily reporting of AEFIs. As of June 2022, total of 173 AEFIs were reported and all of which were classified to be mild cases.
WHO	Global and regional guidance disseminated to NITAGs & RITAGS and NITAG working groups on COVID-19 vaccines.	A.2 Establish (or engage an existing working group) a National Technical Working Group (NTWG) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings	**Completed** The NDVP guideline and tools were updated as new information are received such as vaccine safety among pregnant women, providing booster dose, heterologous schedule. Global updates are shared with NITAG members and other stakeholders as they are received from regional and HQ. vaccine introduction activities.

Implementer	**Milestone**	**Report/Activity**	**Description of progress (June 2022)** (Completed, Major Delays, Minor Delays, On Track, Re-programmed)

UNICEF	Vaccine stock management tools and operating procedures to reflect the characteristics of COVID-19 vaccines (i.e., vial size, VVM,) updated.	Update vaccine stock management tools and operating procedures to reflect the characteristics of COVID-19 vaccines (i.e., vial size, VVM,)	[reported 15/03/2022] **Completed** MoPHP has existing vaccine register (Ledger) at all the supply chain level for documentation of receipt of vaccines. This will be used to document vaccine deliveries at central, governorate, districts, and facility level. UNICEF supported the revision of other vaccine management tools including issuing voucher, stock-in voucher, VAR, damage report form to be used during the vaccination exercise. UNICEF additionally supported the revision of the vaccination form including, daily tally sheet, daily summary, team leaders report form, district supervisor report form and governorate supervisor report form to include vaccine information (quantity, batch, and expiry date), UNICEF supported the development of COVID-19 vaccine management SOP for use at each level of vaccine management. These tools, form and SOP are being printed for distribution
UNICEF	Demand plan (includes advocacy, communications, social mobilization, risk and safety comms, community engagement, and training) designed.	Design a demand plan (includes advocacy, communications, social mobilization, risk and safety comms, community engagement, and training) to generate confidence, acceptance, and demand for COVID-19 vaccines. Must include a crisis communications preparedness planning	[reported 15/03/2022] **Completed** UNICEF supported the development of communication and community engagement strategy for the deployment of COVID -19 vaccine in the country
UNICEF	Key messages and materials for public communications and advocacy, in alignment with demand plan developed.	Develop key messages and materials for public communications and advocacy, in alignment with demand plan	[reported 15/03/2022] **Completed** UNICEF supported development of demand generation information and education material. These were printed and distributed to the health facilities and communities.
UNICEF	Multimedia materials and tools for social and mass media engagement developed	Develop key messages and materials for public communications and advocacy, through mass and social	[reported 15/03/2022] **Completed** The development of TV and radio materials to be used on radio, TV and social media was completed and used through the

		media in alignment with demand plan	various channels of communication in the South where the deployment has commenced. Materials also developed for the North to be used, when required. Evidence generated on vaccine hesitancy across Yemen and in Health Workers in the south to guide demand generation.
UNICEF	Dry storage and cold chain capacity at all levels with regards to the COVID-19 vaccines characteristics are assessed and supply and logistics gaps are identified and filled.	Assess dry storage and cold chain capacity at all levels with regards to the COVID-19 vaccines characteristics and fill the identified supply and logistics gaps	[reported 15/11/2022] **Completed** UNICEF support to use the WHO/UNICEF supply chain sizing tool was used completed to assess the gaps in cold chain which informed the application to COVAX for CCE support. Procurement is ongoing for some of the equipment and the country is doing resource mobilization to fill the remaining gaps
UNICEF	Standard operating procedures (SOPs) or guidelines for collection and disposal of medical waste to the relevant stakeholders provided.	H.6 Provide standard operating procedures (SOPs) or guidelines for collection and disposal of medical waste to the relevant stakeholders	[reported 15/11/2022] **Completed** UNICEF supported to develop SOP for COVID-19 vaccine management and waste disposal management. These SOPs were printed and distributed to all levels of supply chain management for COVID-19 vaccine deployment and was also part of the training of health workers

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