Forecasting and Supply Planning Assessment Tool

unicef

for every child

Forecasting and Supply Planning Assessment Tool

The Forecasting and Supply Planning Assessment Tool (FSPAT) is a comprehensive assessment tool for evaluating forecasting and supply planning (FSP) from the planning to the monitoring of an improvement plan during its implementation. Inspired by the UNICEF Supply Division 'Strategies to Strengthen Country Vaccine Forecasting Capacity', the FSPAT is intended to help countries identify their current gaps in, and determine the most appropriate actions to improve, their FSP performance.

The tool is composed of TWO questionnaires: (1) the programme questionnaire (qualitative); and (2) the data quality/key performance indicator (KPI) questionnaire (quantitative). In addition to the general questions, the **qualitative** component covers five themes – leadership and coordination, strategic planning and integration, assessments and improvement planning, implementation, and performance monitoring – that address FSP capability (human resources [HR], policies and procedures and technology) and FSP performance. This qualitative component, which is designed for administration at the central and national levels, can be completed within a day if all relevant stakeholders and documents are available. Meanwhile, the **quantitative** component helps the programme assess the quality of the data that serve as inputs for FSP as well as the overall performance of the forecast and supply plan. It is intended for administration at all levels of the supply chain (SC), including stores and health facilities.

Before using the FSPAT, countries – including the primary assessor – must set clear objectives and make relevant background documents available. It is also important to determine whether the evaluation will be comprehensive (i.e., using the entire questionnaire) or partial (i.e., limited to qualitative or quantitative assessment).

The user should remember that the questions are linked to specific FSP standards. Hence, answers should support the formulation of relevant recommendations that will effectively inform action planning for improving FSP.

Assessment and location details

Assessment date	
Country	
Name of programme/department	
Name and position of interviewee/ group	
Contact phone number/email address	
Name of assessor	

Q. N°	Question	Response	Comments/observations
0	GENERAL QUESTIONS		
0.1	Which unit within the MOH (Ministry of Health)/working group is responsible for coordinating SC activities in the country?		
0.2	Which partners (local and international) support supply chain management (SCM) in the country?		
0.3	How many levels are there in the health SC? Please name them.		
0.4	How many facilities manage health commodities at each level of the SC?		

Q. N°	Question	Response	Comments/observations
0.5	Please describe the SC system for health commodities.		
0.6	Please describe the FSP process in place.		
0.7	How does information flow through the health SC?		

A. Programme questionnaire

Q. N°	Question	Response		Comments/observations
1	**LEADERSHIP AND COORDINATION**			
1.1	**Human resources** **Requirement:** *There is a multidisciplinary team responsible for FSP in the MOH or specific programme with clearly defined roles and responsibilities.*			
1.1.1	**Is there a team responsible for FSP?** (**Guidance**: The team responsible for FSP can be any working group or unit responsible for FSP in the MOH or specific programme.)	Yes	☐	
		No	☐	
1.1.2	**Does the team responsible for FSP have written Terms of Reference (ToR)?** *(Please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
1.1.3	**Who leads the team responsible for FSP?** *(Please select one.)* (**Guidance**: This can be verified from the ToR of the team responsible for FSP if these exist. If there are no ToR, ask the assessed programme.)	MOH staff	☐	
		Development partners	☐	
		Consultants	☐	
		Other (please specify): _____		
1.1.4	**Is there a list of team members responsible for FSP?** *Please obtain a copy or take a picture.)* **(Guidance**: The list should include at least the names and organizations of members and preferably their job titles. Where applicable, ask if the assessed programme has a member in the team.)	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
1.1.5	**Does the team responsible for FSP contain at least one member with expertise and experience in one or more of these areas?** *(Please select all that apply.)*	Product selection	☐	
		Forecasting	☐	
		Supply planning	☐	
		Pharmaceutical management	☐	
		Pipeline monitoring	☐	
		Procurement	☐	
		Finance and budgeting	☐	
		Stock management	☐	
		Cold chain management	☐	
		Warehouse management	☐	
		Transportation and distribution	☐	
		Logistics Management Information System (LMIS)	☐	
		Data analysis and management	☐	
		Immunization programme management and implementation	☐	

Q. N°	Question	Response		Comments/observations
1.1.6	**Which functions are included in the ToR?** *(Please select all that apply.)* (**Guidance**: The ToR should cover one or more of the FSP responsibilities listed. Ask for clarification if needed.)	Develop a work plan for FSP activities	☐	
		Organize and complete FSP preparatory activities	☐	
		Develop a forecast and supply plan	☐	
		Ensure FSP monitoring and implementation of a continuous improvement plan	☐	
		Lead standardization of FSP processes and training of members	☐	
		Liaise with and leverage skills and expertise available in other programme areas to ensure alignment and integration	☐	
		Support other innovative activities such as new vaccine introduction	☐	

Q. N°	Question	Response		Comments/observations
1.2	**Policies and procedures** **Requirement:** *There are policies and/or guidance for planning and capacity development for SC HR that take FSP competencies into consideration.*			
1.2.1	**Are any policies and/or guidance on SC HR planning and capacity development available?** *(If yes, please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	
1.2.2	**Does the policy or guidance include HR and training required by personnel who are responsible for FSP?**	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
1.3	**Technology** **Requirement:** *There is training material covering key technical areas of FSP.*			
1.3.1	**Is training material covering key technical areas of FSP available?** *(If yes, please obtain a copy or take a picture and indicate the FSP areas covered.)* **(This material can be part of the overall SCM training material.)**	Preparatory activities for FSP – gathering and ratifying data and assumptions, FSP consultation meetings and/or workshops.	☐	
		Forecasting – determination of projected consumption over a defined period, including methods and tools	☐	
		Supply planning – determination of total commodity requirements and when products should be delivered including methods and tools	☐	
		Pipeline monitoring – review of stock information across the entire SC network to ensure adequate commodity supply	☐	
		FSP performance monitoring – use of established KPIs (e.g., forecast accuracy) to monitor performance	☐	
		None covered	☐	

Q. N°	Question	Response		Comments/observations
1.4	**Output/Performance Requirements:** *(1) There is a clear training plan for personnel responsible for FSP (can be part of the overall SCM training plan).* *(2) Personnel responsible for FSP receive formal training.*			
1.4.1	**Is there a training plan for personnel responsible for FSP?** *(Please obtain a copy or take a picture.)* **(This training plan can be part of the overall SCM training plan.)**	Yes	☐	
		No	☐	
1.4.2	**Has the FSP team received formal FSP training?** *(If yes, please obtain a copy or take a picture of the evidence e.g., training report.)*	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
2	**STRATEGIC PLANNING AND INTEGRATION**			
2.1	**Policies and procedures** **Requirement:** *FSP function is informed by and integrated into existing national strategic plans.*			
2.1.1	**Are there any multi-year strategic plans (e.g., comprehensive multi-year strategic plans [cMYP]) available?** *(If yes, please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	
2.1.2	**How often is the multi-year strategic plan updated?**	Annually	☐	
		Every 2 years	☐	
		Never	☐	
		Other (please specify): _____		
2.1.3	**What key information required for FSP does the multi-year strategic plan cover?** *(Please select all that apply.)* (**Guidance**: Review relevant sections of the multi-year strategic plan to verify whether the key points listed are covered.)	Demographic data (e.g., total population, population growth rates)	☐	
		Information on current and future programme (e.g., programme performance, plans, strategies, and targets for each forecasting year)	☐	
		Morbidity data (e.g., incidence and prevalence of specific diseases/health conditions)	☐	

Q. N°	Question	Response		Comments/observations
2.1.4	**Does the multi-year strategic plan inform FSP?** (**Guidance**: Request copies of the multi-year strategic plan and the most recent FSP report [or populated FSP tools when there is no formal report] to verify alignment of assumptions.)	Yes	☐	
		No	☐	
2.1.5	**Is there an SC strategy available?** *(If yes, please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
2.1.6	**Does the SC strategy cover key technical areas of FSP?** *(Please select all that apply.)* (**Guidance**: Review relevant sections of the multi-year strategic plan to verify whether the key points listed are covered.)	Preparatory activities for FSP – gathering and ratifying data and assumptions, FSP consultation meetings and/or workshops.	☐	
		Forecasting – determination of projected consumption over a defined period, including methods and tools	☐	
		Supply planning – determination of total commodity requirements and when products should be delivered including methods and tools	☐	
		Pipeline monitoring – review of stock information across the entire SC network to ensure adequate commodity supply	☐	
		FSP performance monitoring – use of established KPIs (e.g., forecast accuracy) to monitor performance	☐	

Q. N°	Question	Response		Comments/observations
2.1.7	**Does the SC strategy inform FSP?** (**Guidance**: Request copies of SC strategy and the most recent FSP report [or populated FSP tools if there is no formal report] to verify alignment of assumptions.)	Yes	☐	
		No	☐	
2.1.8	**Does the annual Expanded Programme on Immunization (EPI) work plan include FSP activities?** (**Guidance**: If yes, please obtain copies of the SC strategy and annual work plan to verify alignment between the SC strategy and the most recent annual work plan.)	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
3	**ASSESSMENTS AND IMPROVEMENT PLANNING**			
3.1	**Output/Performance Requirements:** *(1) There is an evidence base to inform improvement planning for FSP.* *(2) There is a comprehensive set of planning documents to support improvement of FSP.*			
3.1.1	**Are there any recent SC assessment reports that cover key technical areas of FSP? (If yes, please obtain a copy and indicate the technical areas of FSP covered.)** (**Guidance**: The assessment report may be a broader SC assessment such as an effective vaccine management assessment [EVMA] report or an assessment specific to FSP.)	Preparatory activities for FSP – gathering and ratifying data and assumptions, FSP consultation meetings and/or workshops.	☐	
		Forecasting – determination of projected consumption over a defined period, including methods and tools	☐	
		Supply planning – determination of total commodity requirements and when products should be delivered including methods and tools	☐	
		Pipeline monitoring – review of stock information across the entire SC network to ensure adequate commodity supply	☐	
		FSP performance monitoring – use of established KPIs (e.g., forecast accuracy) to monitor performance	☐	
		None covered	☐	

Q. N°	Question	Response		Comments/observations
3.1.2	**Are there any recent SC improvement plans that include FSP?** *(If yes, please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	
4	**IMPLEMENTATION**			
4.1	**Policies and procedures** **<u>Requirement</u>:** *Policies, procedures, roles and responsibilities for FSP are clearly documented.*			
4.1.1	**Are there any policies, guidance or standard operating procedures on FSP?** *(If yes, please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	
4.1.2	**Is there an established and documented methodology for forecasting?**	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
4.1.3	**Which forecasting methodology is used by the programme?** *(Please select all that apply.)* (**Guidance**: Confirm this against the most recent FSP report [or populated forecasting tool if there is no formal report.])	Demographic/wastage factor-based	☐	
		Consumption-based	☐	
		Vaccination session-based	☐	
		Other (please specify): _____		
4.1.4	**Is there an established timeline for forecasting?** (**Guidance**: If yes, review the FSP standard operating procedures to confirm.)	Yes	☐	
		No	☐	
4.1.5	**What is the timeline for forecasting and supply planning?** (**Guidance**: Only applicable when there is an established timeline)			

Q. N°	Question	Response		Comments/observations
4.1.6	**Does the FSP timeline align with budgeting, funds-release and procurement cycles? (<u>Guidance</u>**: Timely FSP informs budgeting, funds release and procurement.)	Budgeting cycle	☐	
		Funds-release cycle	☐	
		Procurement cycle	☐	
4.1.7	**How many years into the future are considered during FSP exercises?** *(Please select one.)* (**<u>Guidance</u>**: Check the most recent FSP report [or populated forecasting tool if there is no formal report.])	1 year	☐	
		2 years	☐	
		3 years	☐	
		4 years	☐	
		5 years	☐	
		More than 5 years	☐	

Q. N°	Question	Response		Comments/observations
4.2	**Technology Requirements:** *(1) There are comprehensive/standardized tools for FSP.* *(2) There are necessary supporting technologies for FSP.*			
4.2.1	**Are any standardized tools used in forecasting and/or supply planning?** *(If yes, please obtain a copy or take a picture. Please provide comments where needed. Please select all that apply.)*	Forecasting	☐	
		Supply planning	☐	
		Both forecasting and supply planning	☐	
		None	☐	

Q. N°	Question	Response	Comments/observations
4.2.2	**What tool(s) are used in FSP?** (**Guidance:** Only applicable if standardized tools are in place)	Forecasting Please specify: _____	
		Supply planning Please specify: _____	
		Both forecasting and supply planning Please specify: _____	

Q. N°	Question	Response		Comments/observations
4.2.3	**Does the FSP team include at least one member of MOH staff proficient in using standardized forecasting and/or supply planning tools?** *(Please select all that apply.)*	Forecasting	☐	
		Supply planning	☐	
		Both forecasting and supply planning	☐	
		None	☐	
4.2.4	**Does the team responsible for FSP have access to the necessary supporting technology for FSP?** *(Please select all that apply.)* (**Guidance**: At least one member should have full access to the technology.)	Functional computer	☐	
		Stable electricity	☐	
		Reliable internet connection	☐	

Q. N°	Question	Response		Comments/observations
4.3	**Output/Performance Requirements:** *(1) The implementation of FSP is data-driven with appropriate documentation of the entire process.* *(2) The team responsible for FSP is functional.*			
4.3.1	**Did the FSP team have access to relevant data during the last FSP exercise?** *(Please select all that apply.)*	Programme background information (e.g., service delivery model, partners, past programme and supply chain challenges, political environment, programme and policy changes)	☐	
		List of routine, supplementary immunization and outbreak response antigens	☐	
		List of immunization supplies	☐	
		Vaccine introduction, switch and withdrawal plan	☐	
		Target population	☐	
		Target coverage	☐	
		Dropout rate	☐	

Q. N°	Question	Response		Comments/observations
4.3.1 (cont.)	**Did the FSP team have access to relevant data during the last FSP exercise?** *(Please select all that apply.)*	Number of doses per person	☐	
		Wastage rate (open and closed vial)	☐	
		Number of vaccination sessions per period	☐	
		Number of weeks per period	☐	
		Number of weeks of reuse for opened multidose vial	☐	
		Number of supply chain levels	☐	
		Historical consumption	☐	

Q. N°	Question	Response		Comments/observations
4.3.1 (cont.)	**Did the FSP team have access to relevant data during the last FSP exercise?** *(Please select all that apply.)*	Historical reporting rate	☐	
		Historical stockout days	☐	
		Projected growth rate	☐	
		Stock on hand — quantities, including expiry dates	☐	
		Expected product shipments (stock on order)	☐	
		Projected consumption for the remainder of the implementation year	☐	
		Maximum and minimum inventory control level or Buffer rate	☐	

Q. N°	Question	Response		Comments/observations
4.3.1 (cont.)	**Did the FSP team have access to relevant data during the last FSP exercise?** *(Please select all that apply.)*	Established shipment intervals	☐	
		Product information (e.g., prices, vial size and registration status)	☐	
		Supplier information and cost (e.g., product prices, pack size, lead time and shipping and handling cost)	☐	
		Funding information (e.g., funders/sources, funding commitment and fund disbursement schedule)	☐	
		Procurement mechanism and lead time	☐	
		Distribution cost (e.g., customs clearance fees, in-country distribution cost)	☐	
		Storage and other in-country costs (e.g., in-country storage costs, in-country sampling and quality assurances costs and insurance costs)	☐	

Q. N°	Question	Response		Comments/observations
4.3.2	**Are data from decentralized levels (e.g., regions, districts, facilities) used to develop the national forecast and supply plan?** (**Guidance**: Confirm using the most recent FSP report.)	Yes	☐	
		No	☐	
4.3.3	**Are the data from different sources or tools triangulated (e.g., EPI forecasting tool, stock management tool [SMT], District Vaccine Data Management Tool [DVD/MT], District Health Information System 2 [DHIS2], ViVa)?** (**Guidance**: Confirm using the most recent FSP report.)	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
4.3.4	**Is FSP conducted in collaboration with all key stakeholders?** *(If yes, please obtain a copy or take a picture of the evidence.)* (**Guidance**: Check the most recent FSP report to confirm which stakeholders participated in the quantification exercise.)	Yes	☐	
		No	☐	
4.3.5	**Were the results of the most recently completed forecasting and supply plan exercise presented to stakeholders?** *(If yes, confirm by requesting the presentation or any other relevant documentation.)*	Yes	☐	
		No	☐	
4.3.6	**Are any recent forecasting and supply plan reports (or supply plan) available?** *(If yes, please obtain a copy or take a picture.)*	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
4.3.7	**Does the forecasting and supply plan report (or supply plan) cover key components of the quantification report (or supply plan)?** *(Please select all that apply.)*	Forecasting assumptions and considerations	☐	
		Forecasted quantities	☐	
		Quantities required to fill the supply pipeline (products/commodity needs)	☐	
		Funding requirements/costs	☐	
		Shipment schedule (including specific lead times where applicable)	☐	
4.3.8	**Does the team responsible for FSP meet regularly to plan for FSP exercises?** *(If yes, please obtain a copy or take a picture of the evidence – this will typically be minutes from team meetings.)*	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
4.3.9	**Do the team's meeting minutes specify action points, including accountability and deadlines?**	Yes	☐	
		No	☐	
4.3.10	**Are action points from previous minutes reviewed?**	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
5	**PERFORMANCE MONITORING**			
5.1	**Output/Performance Requirements:** *(1) Implementation of FSP activities in the improvement plan is monitored.* *(2) The forecast and the supply plan are monitored and inform SCM decisions.*			
5.1.1	**Is the implementation status of the FSP activities in the improvement plan monitored?** *(If yes, please obtain a copy or take a picture of the evidence.)*	Yes	☐	
		No	☐	
5.1.2	**How often are the forecast and the supply plan reviewed?** *(If applicable, please ask how often and provide comments where needed.)* (**Guidance**: The forecast should be reviewed regularly, ideally quarterly but at least annually. Once updated, the forecasts should be used to update the supply plan).	Quarterly	☐	
		Semi-annually	☐	
		Annually	☐	
		Never	☐	
		Other (please specify): _____		

Q. N°	Question	Response		Comments/observations
5.1.3	**Is the total commodity requirement funded?** *(If yes, take a picture of the evidence.) (Please select fully, partially or never from the list)* (**Guidance**: The commodity requirement is funded when the allocated funds are released for procurement.)	Fully	☐	
		Partially	☐	
		Never	☐	
5.1.4	**Is there any evidence that FSP assumptions inform SCM decisions e.g., commodity allocation?** *(If yes, take a picture of the evidence. Examples include stock allocation, storage capacity estimates, etc.)*	Yes	☐	
		No	☐	
5.1.5	**Is there any evidence that the quality of data used for FSP is monitored?** *(If yes, take a picture of the evidence.)* (**Guidance**: This evidence can be the report of the most recent data quality assessment conducted.)	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
5.1.6	**Are there established key performance indicators (KPIs) for monitoring the performance of the forecast and the supply plan?** *(If yes, please obtain a copy or take a picture of the evidence. Please select all that apply.)*	Forecast accuracy	☐	
		Supply plan accuracy	☐	
		Other (please specify): _____		
		None	☐	
5.1.7	**Are there established benchmarks for each of the KPIs?** *(If yes, please obtain a copy or take a picture of the evidence.)*	Yes	☐	
		No	☐	

Q. N°	Question	Response		Comments/observations
5.1.8	**How often are these indicators tracked?**	Quarterly	☐	
		Semi-annually	☐	
		Annually	☐	
		Never	☐	
		Other (please specify): _____		
5.1.9	**Is there any evidence that the underlying causes of poor forecast performance have been identified and addressed?** *(If yes, please obtain a copy or take a picture of the evidence.)*	Yes	☐	
		No	☐	

B. Data quality/KPI questionnaire

<table>
<tr><th>Q. N°</th><th>Question</th><th colspan="4">Answer</th><th>Comments</th></tr>
<tr><td rowspan="5">1</td><td rowspan="5">How consistent is physical stock with the stock record balance? Please provide comments if necessary. (<u>Guidance</u>: This is a measure of data accuracy used to check whether the recorded data match the source data. Note that calculations can be made later during the analysis phase of the assessment.)

Steps
1. Pick stock records for three products.
2. Carry out a physical count of usable stock for each of the three products.
3. Write the physical count quantity for each product in column A.
4. Write the stock management record/ stock card balance for each product in column B.
5. Calculate the percentage of accuracy for each product using the formula in column C. This percentage should be as close to 100 per cent as possible, indicating highly accurate recorded data.
6. Discuss reasons why accuracy is not 100 per cent and include these in the comments.</td><td>Product #</td><td>Physical count</td><td>Stock record balance</td><td>$\%\ Accuracy = \frac{(A - \lvert A - B \rvert) \times 100}{A}$</td><td rowspan="5"></td></tr>
<tr><td></td><td>A</td><td>B</td><td>C</td></tr>
<tr><td>1</td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td><td></td></tr>
</table>

Q. N°	Question	Answer					Comments
		SC data	**Product #**	**Stock record quantity**	**SC report quantity**	$\%\ Accuracy = \frac{(A - \lvert A - B \rvert) \times 100}{A}$	
				A	**B**	**C**	
2	**(Question for storage facilities only)** **How consistent are the SC data that have been recorded and reported?** Please provide comments if necessary. (**Guidance**: The purpose of this question is to assess consistency between the SC data recorded at the facility and the SC data reported by the facility. For facilities using electronic stock management systems, the recorded SC data should be compared with the data in the SC report. Note that calculations can be made later during the analysis phase of the assessment.) **Steps** **1**. Please select the most recent SC report. **2**. Choose the stock records for the three selected products that cover the time of the selected SC report. **3**. Using the stock records, calculate the total "quantity issued" and "quantity received" for the reporting period for each of the selected products and write the results in column A. **4**. Using the stock records, find the "stock on hand/ stock at end of reporting period" and write the quantities in column A for each product. **5**. Using the SC report, find the "quantity issued", "quantity received "and "stock on hand/stock at end of reporting period" and write the quantities in column B. **6**. Calculate the percentage of accuracy for each product using the formula in column C. The percentage of accuracy should be as close to 100 per cent as possible, indicating highly accurate recorded data. **7**. Discuss reasons why accuracy is not 100 per cent and include these in the comments.	Quantity issued	**1**				
			2				
			3				
		Quantity received	**1**				
			2				
			3				
		Stock on hand/ stock at end of reporting period	**1**				
			2				
			3				

<table>
<tr><th>Q. N°</th><th>Question</th><th colspan="4">Answer</th><th>Comments</th></tr>
<tr><td rowspan="5">3</td><td rowspan="5">How consistent is the total “quantity issued” to downstream facilities and the total “quantity received” in downstream facilities? (<u>Guidance</u>: This is a measure for consistency between the reported issue quantity from a store and the reported receipt quantity in the receiving facilities. It is only possible to assess this consistency if all health facilities submitted their reports in the reporting cycle. Note that calculations can be made later during the analysis phase of the assessment.)

Steps
1. Pick the issuing facility’s most recent SC report.
2. Collect all the SC reports submitted by the lower levels to this facility, covering the same period as the facility’s most recent SC report.
3. From the issuing facility’s SC report, find the total quantity issued to downstream facilities for the three selected products. Write the quantity for each product in column A.
4. From the reports submitted to the issuing facility, calculate the total quantity received by downstream facilities for each of the three products. Write the quantities in column B.
5. Calculate the percentage of accuracy between quantities in the issuing facility’s SC report and the downstream facility’s reports for each product, using the formula in column C. The accuracy should be as close to 100 per cent as possible, indicating good consistency between the data sources.
6. Discuss reasons why accuracy is not 100 per cent with staff and include these in the comments.</td><td>Product #</td><td>Total quantity issued (from issuing facility’s SC report)</td><td>Total quantity received (from downstream facilities’ SC reports)</td><td>$\%\ Accuracy = \frac{(A - \lvert A - B \rvert) \times 100}{A}$</td><td rowspan="5"></td></tr>
<tr><td></td><td>A</td><td>B</td><td>C</td></tr>
<tr><td>1</td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td><td></td></tr>
</table>

Q. N°	Question	Answer					Comments
4	**How timely are downstream facilities in submitting their SC reports?** (**Guidance**: This measures the total number of downstream facilities that submitted their SC reports by the reporting deadline for each of the three most recent reporting periods. It is only possible to calculate this if there is an established reporting schedule with a reporting deadline. Note that calculations can be made later during the analysis phase of the assessment.) **Steps** **1**. Obtain an updated and complete list of downstream facilities required to submit reports. **2**. Obtain the reporting schedule. **3**. Obtain all the reports submitted to this facility in the last three reporting periods. **4**. By reviewing the dates on which the reports were received, identify how many of them were submitted before the reporting deadline in each reporting cycle. Write this number in column A. **5**. In column B, write the total number of downstream facilities that were required to submit reports during each of the reporting cycles. **6**. Calculate the percentage of reporting timeliness for each of the reporting periods using the formula in column C, then write the percentage for each reporting cycle. **7**. Calculate the average facility reporting timeliness for last three consecutive reporting periods and write these in column D. **8**. Discuss reasons for reporting delays with staff and write these in the comments.	**Reporting period #**	**Total reports submitted before reporting deadline**	**Total facility reports required**	**% of reporting timeliness by reporting period** $C = \frac{A}{B} \times 100$	**Average facility reporting timeliness for last three consecutive reporting periods (%)** $D = \frac{C1 + C2 + C3}{3}$	
			A	**B**	**C**	**D**	
		1					
		2					
		3					
		TOTAL					

Q. N°	Question	Answer					Comments
5	**How complete are SC reports submitted to this facility?** (**Guidance**: Reporting completeness is important for ensuring that all data are reported. The measure purely considers that all data are reported, not whether the reported data are correct. Please note that calculations can be made later during the analysis phase of the assessment.) **Steps** **1**. Obtain an updated and complete list of downstream facilities required to submit reports. **2**. Obtain all the reports submitted to this facility in the last three reporting periods. **3**. By reviewing the reports received, identify how many of the reports have data in all required fields in each reporting cycle. Write this number in column A. **4**. In column B, write the total number of downstream facilities that were required to submit reports during each of the reporting cycles. **5**. Calculate the percentage of reporting completeness for each reporting period using the formula in column C, then write the percentage for each reporting cycle. **6**. Calculate the average facility report completeness for the last three consecutive reporting periods and write these in column D. **7**. Discuss the reasons for incomplete reports with staff and write these reasons and the missing data points in the comments.	**Reporting period #**	**Total SC reports with all required data fields completed**	**Total facility reports required**	**% of reporting completeness by reporting period** $C = \frac{A}{B} \times 100$	**Average completeness of downstream facilities' reports for the last three consecutive reporting periods (%)** $D = \frac{C1 + C2 + C3}{3}$	
			A	**B**	**C**	**D**	
		1					
		2					
		3					
		TOTAL					

Q. N°	Question	Answer				Comments
6	**How consistent and reliable are the consumption data reported by the service delivery facilities?** (**Guidance**: By triangulating the reported issue/consumption data with the number of patients receiving specific treatments, it is possible to assess the reliability of the reported data. The exercise requires assumptions to be made since there can be external reasons why the two numbers do not match (e.g., stock-outs and referrals to private pharmacies). Nevertheless, this measure can provide an overall idea of the data's reliability. Here is an example of what can be compared: - Vaccine doses vs. children vaccinated.) **Steps** **1**. Please select the most recent SC report for the facility. **2**. In the report, find the "quantity issued' (or "quantity utilized") during the reporting period. Record the quantity for selected vaccines in column A. **3**. In the report for programmatic information (or in DHIS2 or a similar information system), find the number of children vaccinated with the selected vaccines. Write the number of children immunized in column B. **4**. For each vaccine, compare the number of patients with the number of doses. The following is an indication of reliable data - Immunization: the number of children vaccinated is lower than the number of doses issued (considering there will be wastage of vaccines). **5**. Discuss the findings with staff and write the reasons for any discrepancies in the comments.	**Product #**	**Reports issued/ utilized (in tins and doses)**	**Number of cases reported for the reporting period**	% discrepancy/open vial wastage rate= $\frac{(A - B) \times 100}{A}$	
			A	**B**	**C**	
		1				
		2				
		3				

Q. N°	Question	Answer				Comments
7	**Applies only to the central/national and regional levels (when a disaggregated forecast is conducted).** **How consistent is forecasted consumption with actual consumption?** Please provide comments if necessary. (**Guidance**: This is a measure of accuracy of the forecast, to check whether the forecasted consumption matches the actual consumption data. Note that calculations can be made later during the analysis phase of the assessment.) **Steps** **1**. Pick three products from the list of products in use at the facility. **2**. From the most recent forecasting and supply plan report (or populated forecasting tool), identify the forecasted quantity for the three products. **3**. Write the forecasted quantity in column A for each product. **4**. Write the total quantity consumed (doses administered and wasted) in column B for each product. **5**. Calculate the percentage of accuracy for each product, using the formula in column C. The percentage of accuracy should be as close to 100 per cent as possible, indicating highly accurate recorded data. **6**. Discuss why accuracy is not 100 per cent (or below the country's benchmark) and include in the comments.	**Product #**	**Forecasted quantity**	**Total quantity consumed**	$\%\ Accuracy = \frac{(B - \lvert A - B \rvert) \times 100}{B}$	
			A	**B**	**C**	
		1				
		2				
		3				

Q. N°	Question	Answer				Comments
8	**How consistent is the supply plan with the actual orders placed?** Please provide comments if necessary. (**Guidance**: This is a measure of accuracy of the supply plan, to see if the planned procurement matches the actual orders placed. Note that calculations can be made later during the analysis phase of the assessment.) **Steps** **1**. Pick three products from the list of products in use at the facility. **2**. From the most recent forecasting and supply plan report (or populated supply planning tool), identify the planned procurement quantity for the three products. **3**. Write the planned procurement quantity in column A for each product. **4**. Write the total quantity of actual orders placed in column B for each product. **5**. Calculate the percentage of accuracy for each product using the formula in column C. The percentage of accuracy should be as close to 100 per cent as possible, indicating highly accurate recorded data. **6**. Discuss reasons why accuracy is not 100 per cent (or below the country's benchmark) and include these in the comments.	**Product #**	**Planned procurement quantity**	**Actual quantity of orders placed**	$\%\ Accuracy = \frac{(B - \lvert A - B \rvert) \times 100}{B}$	
			A	**B**	**C**	
		1				
		2				
		3				

<table>
<tr><th>Q. N°</th><th>Question</th><th colspan="5">Answer</th><th>Comments</th></tr>
<tr><td rowspan="4">9</td><td rowspan="4">For commodity stores – why do we write this?
What percentage of unopened products are lost due to reasons other than opening for usage (closed vial wastage)? Please provide comments if necessary.
(<u>Guidance</u>: The purpose of this question is to assess the percentage of total unopened products managed by the store that are lost due to expiry, excess heat exposure, freezing, breakage, missing inventory, loss of accompanying diluent or discarding of unopened vials at the end of outreach sessions. High closed vial wastage is indicative of poor temperature monitoring, stock management storage or transportation practices. Note that calculations can be made later during the analysis phase of the assessment.)

Steps
1. Pick three products from the list of products in use at the facility.
2. Please select a review period (preferably one year).
3. Using the stock records, identify the “opening balance” for the chosen review period, calculate the total “quantity received” within the review period and the “quantity discarded unopened” – wastage due to expiry, excess heat exposure, freezing, breakage, missing inventory etc. for the reporting period for each of the selected products.
4. Write the “opening balance” in column A for each product.
5. Write the “quantity received” for each product in column B.
6. Write the “quantity discarded unopened” for each product in column C.
7. Calculate the closed vial wastage for each product using the formula in column D. The closed vial wastage rate should be less than 1 per cent, indicating good transport, storage and product handling practices.
8. Discuss reasons why closed vial wastage was more than 1 per cent and include these in the comments.</td><td>Product #</td><td>Opening balance</td><td>Quantity received</td><td>Quantity discarded unopened</td><td>Closed vial wastage rate (D) = $D = \frac{C}{(A+B)} \times 100$</td><td rowspan="4"></td></tr>
<tr><td></td><td>A</td><td>B</td><td>C</td><td>D</td></tr>
<tr><td>1</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>3</td><td></td><td></td><td></td><td></td></tr>
</table>

Note: Negative % accuracy is indicative of 0% accuracy.


unicef
for every child