VITAMIN A SUPPLEMENTATION PROGRAM

Community assessment to inform the design and improve the performance of Vitamin A supplementation services

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1. What is VAS?

The World Health organization (WHO) recommends that all children aged 6 to 59 months be supplemented every six months with high dose of vitamin A (100,000 IU for 6 to 12 months old and 200,000 IU for 12 to 59 months old children). The recommendations are associated with the evidence that when twice yearly vitamin A supplementation (SVA) covers at least 80% of the children aged 6 to 59 months, it contributes to reducing the under-five mortality rates by up to 24%.

VAS is delivered, in most countries, through twice yearly national campaigns. These events combine polio immunization, routine immunizations (such as measles) as per the country's immunization calendar, vitamin A supplementation and deworming. In some countries, additional services such as detection of wasting or family planning are also integrated in the package delivered. The campaigns are organized as door-to-door events where health workers visit each household or as fixed strategies where caregivers are invited to bring their children to the nearest health facility (or outreach site when combined with fixed facility delivery) to receive the services.

Alternative to the event based delivery of VAS is their integration into routine services: a six month contact point is commonly integrated within countries vaccination calendars at exactly 6 months of age. In addition, when increased coverage of facility based routine immunization and eradication of polio render campaigns unnecessary, VAS is integrated as a routine service provided in health facilities.

2. What is a community assessment?

A community assessment is a description of a community and its people. This description aims at providing specific information that will be used to identify needs for new services, programming these services or make adjustments to existing ones.

Many different approaches and methodologies can be found for community assessments. For instance, sampling can be purposive or random; data collected can be quantitative or qualitative; analysis can be descriptive or inferential.

In a VAS programming perspective, community assessments are essential and should be conducted to inform program design, monitor ongoing interventions or evaluate programs after their completion. Currently, the most common community assessments conducted are cross sectional surveys to measure the coverage of VAS services (Post event coverage surveys, PECS). However, a wide range of other methodologies exist that have potential for greatly enhancing performance of

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VAS services. Often fast and easy to implement, these approaches could adequately complement PEC surveys.

3. Objectives of community assessments

Among the many objectives of community assessments, the most common ones are:

- To inform program design
- To monitor or evaluate the performance of programs and services
- To inform research on specific community aspects

Specific goals of community assessment for VAS can be numerous. Below are a few examples among the most common ones:

- Support the design of VAS interventions by detailing the needs of the communities, the assets they have to respond to those needs, the beliefs and structures that shape the communities and the modes of communication that are prevalent within the communities;
- Monitor the progress of VAS interventions associated with raising awareness within the communities;
- Identify barriers to attendance to VAS services;
- Promote community engagement in VAS services by ensuring community participation to the design and implementation of services and by tailoring efficiently VAS programs to community specifics.

4. Principles

As mentioned in the previous sections, community assessments achieve their objectives by focusing on specific aspects of communities. Communities are complex system no assessment can understand completely, so assessments should be focused to the information needed.

What is to be assessed?

Five main domains are proposed here that cover most of needs related to VAS programming:

- To identify the needs of the community members;
- To identify the assets that exist in the community;

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- To identify the perceptions and beliefs that prevail in the community;
- To identify what are the features of the information flow and communication in the community;
- To identify what are the social and cultural structures in the community.

Although these five domains are very general, and cover a large array of assessment needs, they may not be sufficient for programs other than VAS, and even in the VAS practice, other aspects may have to be added.

Some details are provided below on the meaning and content of each domain.

Table 1. Five potential domains of assessment for VAS programming

Community needs	Refers to the gap between what a situation is and what it should be. Assessment of the needs enable the discovery of what is lacking and what improvements need to be done. Needs assessment should consider both the quantitative data such as epidemiological ones and the needs perceived by the population, which may be very different and will have an impact on attendance to services proposed.
Community assets	Community assessments enables the identification of resources and opportunities that exist within the communities and can be used to meet community needs. These assets can be material, such as the existence of facilities for health or sanitation, but can only consist in knowledge and experience in the community inherited from previous programs, the presence of local organizations with which programs can be built, the existence of strong social networks and structures, etc.
Community perceptions	Community awareness on VAS and its benefits should be investigated alongside community member's health seeking behaviors and practices around immunization. The knowledge acquired will help programme managers measure the gap between reality and the ideal where community members are aware of the importance of VAS and motivated to attend VAS related services. It will also help identify how the services should be designed: communities who do not have the time or capacity to attend traditional health services may require the VAS ones to be decentralized through outreach posts.

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Community communication features	Modes and channels of communication within a community are important to assess in order to identify the best approaches for social mobilization: How do people access information on health, when, during what type of activity, from whom? Identifying key informants within the communities is also an important part of the assessment: who are the persons in the community that are trusted for health information? Religious leaders, health workers, community health workers and traditional leaders are often the most trusted key informants on whom social mobilization programs can rely on.
Community structure and norms	Social norms and structures of a community may be powerful bottlenecks of demand for services if ignored and not considered sufficiently in program design and implementation. On the other hand, they can be strong enablers if integrated in program design. For instance, family structures are essential for health behaviors: what are the roles of the fathers, mothers and parents in law? Who takes decisions? Who takes care of the children? What are the main groups in the communities? Do they influence others? How? Are there community groups existing? What is their role?

Who should conduct the assessment?

Program managers at national and sub national level should be the ones supporting the process that should ultimately be conducted by local actors such as local health authorities or local non-governmental organizations.

When should a community assessment be conducted?

As indicated in the objectives, community assessments are useful at every step of VAS interventions that aim at increasing VAS coverage and relate to communities:

- At the design stage to inform the program;
- During the implementation following a monitoring calendar;
- Anytime during the implementation to identify barriers to coverage and corrective measures if performance of the program proves to be lower than expected;
- At the end of a program cycle to evaluate the overall performance of the services.

It should be insisted on the fact that no VAS intervention aiming at improving coverage of VAS services should go through an entire programmatic cycle without at least one community assessment being conducted.

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What sampling to adopt?

A wide range of sampling approaches exist. The sampling should be selected very carefully as the entire assessment will depend on it: sampling dictates the time and resources that will be necessary and also ensures that the data collected and the analysis are reliable or not, and answer the research question or not.
Table 2 below proposes a few examples of types of sampling available. The first one is a quantitative probabilistic one, the four others are qualitative purposeful sampling methods. This means that only the first one can yield findings that can be generalized to the entire population.

Table 2. Example of sampling options available for community assessments

Random	systematic process that ensures that each person has the same chance as every other one to be selected
Maximum variation	selection of individuals based on the largest differences between them
Homogenous	selection of individuals based on similar features
Snowball or Chain	selection of individuals based on the results of the previous interviews
Critical Case	selection of individuals based on specific features

The sample size is also to be considered carefully. Too small a sample for representative surveys will reduce the accuracy of the survey and results will not be informative. A too large sample will increase significantly the resources needed for the assessment. A balance between accuracy and costs should be considered for any assessment in order to decide on the sample size.

What modes of data collection?

- **Questionnaires** are the most common tool for collecting data and information. They may be focusing on quantitative data or may be open for qualitative ones. In the case of quantitative data, questionnaires are to be respected rigorously and the surveyor is not free to make adjustments during the survey. Each question is associated with a maximum number of answers. In the case of qualitative assessment, questionnaires are often used to guide the discussion and do not have to be followed systematically. The surveyor can use the answers provided to formulate the next questions. In that case, the use of Dictaphone is common to ensure that the information from the interviewee is captured entirely and exactly. Many types of interviews exist from the most rigid to the most flexible one.

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- **Observations** are commonly used for monitoring ongoing programs: observations of practices of social mobilization or Vas campaigns. They can be used in addition to both quantitative and qualitative questionnaires to identify behaviors, for instance to check the level of hygiene of the household or to confirm the availability of documents such as health cards
- **Focus group discussions** consist in gathering small groups of individuals (5-15 individuals) with similar features (mothers, people living in the same community, etc). By asking initial questions and structuring the subsequent discussion, the facilitator/interviewer can obtain, for example, information on common VAS perceptions or what is important for the community what do they think of the services provided.

5. Process

5.1. Define the scope of your community Assessment

This is done by clearly identifying:

- **Is the assessment meant to inform program design, monitor ongoing programs or evaluate programs at their conclusion?**

The type of data and information to be collected varies significantly depending on the type of assessment.

Initial assessments aim at providing program managers with as much information as needed on the population: what are their needs, where are these needs more prevalent, what do they think about their needs and how do they think they can best be answered, or what are the opportunities existing in the communities to answer those needs?

Monitoring assessments will be built on the intervention designed: each intervention is defined by the improvements it seeks in epidemiological data, in knowledge or in behaviors. The monitoring assessment will aim at measuring the progress towards achieving the improvement required and in most cases will be a quantitative one.

Evaluation assessments will be more similar to initial assessment as they will combine measuring quantitative representative data to identify if the program reached its expected outcomes but will also integrate, in many cases, qualitative assessments to have a better understanding of population perceptions on the services proposed and identify reasons for gaps in performance.

- **Does the assessment have to be representative of the whole population?**

For interventions aimed at curative or preventive service delivery, population representative data are necessary so the scale of the problem is identified: for instance, knowing which districts have the highest prevalence of VAD and highest rates of U5M helps targeting the most vulnerable ones. On the other hand, to understand how to organize social mobilization activities, there is no need to conduct a population representative assessment as what is needed is an in depth understanding of communication channels and features, and if the communities are fairly homogeneous, it can be expected that they all have similar features.

- **Does the assessment require only quantitative data (i.e. coverage data for VAS) or does it require more in depth qualitative understanding (i.e. what people think about VAS)?**

Similarly, both types of data can be required for program design and evaluation. For monitoring, in most cases only quantitative data are considered, but in case major gaps are identified it may be required to conduct an ad hoc qualitative assessment to identify the causes of the gap and address it in real time.

Table 3 and 4 below provide examples of different types of assessment, their features and advantages, for quantitative and qualitative approaches.

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Table 3. Examples of assessments and their characteristics for quantitative approaches

example of survey	Type of assessment	purpose	approach employed	type of data collected	sampling used	strength	weakness	Use for VAS	example of questions
QUANTITATIVE									
DHS, MICS, SMART	cross sectional surveys	representative snapshot of the population	descriptive analysis of the population	community health needs assessment (epidemiological, demographic, VAD, U5M), community access to services (VAS coverage, service availability mapping), community knowledge and awareness, etc	30 clusters * 30 measures most common - sampling can vary	population representative so it can be used to make generalization of results	Resource demanding and only gives a snapshot	essential for identifying areas with highest needs (VAD, U5M) - monitoring performance of VAS interventions such as distribution (coverage), social mobilization (awareness), health promotion (knowledge) or map services available	did you receive vitamin A capsules in the last 6 weeks?
PECS									Do you know the benefits of Vitamin A supplementation
LQAS					5 SA's * 19 measures most common - sampling can vary				How far do you live from the closest health facility?
Barrier analysis	mixed	comparative analysis to infer on determinants of behaviors	statistical comparative analysis between doers and non-doers perceptions	semi-structured questionnaire identifying determinants leading to individuals being doers or non-doers -	purposive with selection of 45 doers and 45 non-doers	allows identifying determinants of behaviors with fair level of population representation	Resource demanding	essential for identifying why people do or do not attend services in the case of VAS distribution	what makes it difficult for you to go to the health facility for your child to receive VAS every 6 months?
									Who is it in your household who decides whether your child should receive Vas or not?
									Meet the people key informants guided you to and ask them if they ever participated in Vas campaigns, if not what prevented them from participating and what could be done to help them participate

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Table 4. Examples of assessments and their characteristics for qualitative approaches

example of survey	Type of assessment	purpose	approach employed	type of data collected	sampling used	strength	weakness	Use for VAS	example of questions
QUALITATIVE									
formative assessment	investigating channels of communication	identify how people receive information in a community	qualitative analysis of interviews and observations	Identify the modes, supports, places of exchange of information in a village, the key informants, etc	multiple purposive sampling combining semi structured interviews and focus group discussions	provide detailed understanding of how information is shared in a community	non representative of all communities if heterogeneous area (i.e. urban vs. rural)	essential to design a social mobilization intervention for VAS, should always be conducted to inform the design of social mobilization and to monitor it - can be combined with investigation of community social and cultural features	to a focus group of mothers, ask them to explain what are the main sources of information they get on health To religious leaders, ask them individually what they know about VAS, and what they think about participating to the information of people on VAS importance and services
formative assessment	investigating features of Hard to reach population	identify who is Hard to reach and why	qualitative analysis of interviews and observations	investigate, using key informants, who is not receiving a service and identify the reasons for not receiving it through interviews	snowball sampling may be best suited for this assessment	Allows in depth understanding of HTR determinants	only provides HTR perceptions, may have to be combined with representative data	essential for a in depth understanding of the features of HTR population for VAS and the determinants for being HTR, in order to inform the design of interventions	Discuss with community leaders and health facilities workers to identify the people who have the best knowledge on the communities, its health status and health practices. Then meet these key informants and ask them whether they know people who did not receive VAS during the last campaign / never participate to the VAs campaigns Meet the people key informants guided you to and ask them if they ever participated in Vas campaigns, if not what prevented them from participating and what could be done to help them participate

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5.2. Data collection and data processing and analysis

Whether they are obtained through a quantitative or a qualitative approach, data and information collected need to be coded and analyzed. For each type of assessment, dedicated guidelines exist that provide all details on each step from initial design to data collection, data analysis and final reporting.

Several options exist for presenting the findings of the assessment. A useful and commonly used one is the use of a SWOT analysis table as shown in table

Table 5. Example of SWOT presentation of assessment findings

Strengths	Weaknesses
• People are aware of the benefits of VAS for children 6 to 59 months • Communities have traditionally been involved in service delivery within the health system	• Health facilities do not offer reliable outreach services. • Stock outs of VAS are common at facility level
Opportunities	**Threats**
• Community platforms exist targeting children 6 to 59 months • Health promotion interventions are being implemented in communities	• Organization supporting community platforms are competing with each other • Monitoring and evaluation systems of authorities and local actors unreliable

5.3. Recommendations

Recommendations from an assessment, whatever the type or approach considered, should always follow a few rules:

- Recommendations should be SMART:
    - **Specific** to the finding: they should answer the finding exactly and be supported by the findings (i.e. common to have recommendations about aspects that were not even assessed)
    - **Measurable**: The recommendation should not be vague but associated with a clear quantitative target (i.e. Improve knowledge of people is not measurable if not associated with targets)

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- **Achievable**: the recommendations target should be possible to achieve without requiring major changes in the context (i.e. increase number of health workers is often recommended but rarely achievable)
- Should be **relevant:** The recommendations are realistic in the given context and correspond to a concrete logical solution to the problems identified (i.e. proposing distribution by community actors if not allowed by law can be considered as irrelevant)
- Should be time-bound: The recommendation should be achieved after a reasonable time period (i.e. improve capacity of health actors without quantified targets and timeframe makes it a useless recommendation)

- Recommendation should be **action oriented** and as concrete as possible.

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