	Webinar Participant Question	Presenter Response
All	What could be the risk for vaccine-preventable diseases if zero-dose (ZD) is not reduced by 50 percent by 2030?	**Nigeria:** The risk from failure to reduce zero dose to 50 percent by 2030 presents both a present and real danger. This situation would lead to increased outbreaks of vaccine-preventable diseases like measles, diphtheria, pertussis, etc. We witnessed this issue in Nigeria in the northern states due to the gap we had in some cohorts of children who were not vaccinated during the COVID-19 lockdown. There could also be an increase in infant and child mortality rates, which would derail us from achieving Sustainable Development Goal (SDG)3. Studies have shown that unvaccinated children are ten times at risk of dying compared to their vaccinated counterparts. Outbreaks are costly and put strain on the limited health care workforce and system, which poses a threat to global health security. It will also undermine donor confidence in failing to achieve the target of IA2030, and will also truncate Gavi's transition and sustainability plans.
Gavi	Gavi defines ZD children as infants who have not received the first dose of diphtheria, tetanus, and pertussis-containing (DTP) or Penta vaccines by the end of their first year of life. Suppose a child received (Bacille Calmette-Guérin) BCG vaccine just after birth, but due to any reason, the child was unable to get the first dose of Penta in the first year of life, but received the first dose	The lack of DTP1 in the child's first year is Gavi's operational indicator of ZD and what Gavi uses to monitor progress for the strategy. Countries may find that other definitions or measures are more relevant for programmes. Here is an article that discusses this practical meaning and measurement of ZD https://www.mdpi.com/2076-393X/12/2/195. DTP1 is actually a proxy indicator for community access, as this is supposedly the first point of contact of the child with the health system at a community level. Because ZD is primarily concerned about missed communities, this indicator was selected. It is definitely a good, but imperfect, indicator, and some countries may decide to use flexibilities and select other context-adapted measures more suitable for their contexts.

	Webinar Participant Question	Presenter Response
	after the first year and within the second year of life, will this child be considered as ZD?	
ZDLA	How does the integration of continuous learning with ZD drivers and interventions help ensure that insights move beyond the identification of root causes to actually informing adaptive program strategies in real time?	That's where the circular nature of the Identify-Reach-Monitor and Measure-Advocate (IRMMA) framework comes in. The continuous learning piece involves regularly going back to drivers and root causes, because of new insights that might emerge with experience you gain in implementing the intervention, as well as end users providing their ongoing perspectives. Going back to review if the original drivers and root causes still hold true or not then informs changes/adaptations to the intervention.
ZDLA	We use "change logs" in our programming as well, and track decisions around what changes are being made to interventions but are finding it more difficult to track actual data that lead to decision-making. Do you have strategies or processes that have helped your team move from discussion on changes to use of data to facilitate data change?	Our changes follow a structured data use process, including both an internal review process and external surveys. Internal review includes the pause and reflect sessions where the implementing groups appraise their process and recommend changes observed in the pause and reflect form. The external review includes conducting surveys through focus groups and key informant interviews to gain external inputs. These are jointly reviewed at the user advisory group, a local touchpoint that includes other stakeholders for decision making. The changes from these processes are then recorded in the change log and follow the same circle of testing and feedback collection for outcome assessment.
ZDLH Nigeria	For the lot quality assurance sampling survey, you sampled two age cohorts—4.5–11 months and 12–23 months. What specific	While the 12-23 month cohort provided us with the ZD status of the children, the 4.5-11 month cohort provided us with information on the timeliness of Penta 1 administration. This serves as an important indicator for system-level and community-level barriers. We also deep-dived with the caregivers assessment

	Webinar Participant Question	Presenter Response
	information does the 4.5–11 month cohort provide?	using the behavioral and social drivers (BeSD) tools to identify factors for each cohort and based on each location and this informed the interventions we recommend at those levels. The 4.5-11 month cohort also serves as an accountability measure for the impact of recent outreach or other programmatic efforts compared to the 12-23 months which reflect past efforts. So, it serves as an in-process monitoring for us to prevent and intervene to ensure this cohort receives their vaccines within the active window.
ZDLH Nigeria	I noticed a strong focus on advocacy and budget allocation evidence being used and impactful with national and state level stakeholders and a focus on more programmatic evidence with local and district level stakeholders. Do you think this is reflective of the need of the health system or on what is achievable with the time frame of the project? Would there be a need for more programmatic evidence discussions at national level and more budget advocacy at district and local level? And if yes, do you foresee any challenges with such an approach?	While the current focus on budget advocacy at the national and state levels, and programmatic evidence at the local level, aligns with the time bound nature of the project, I believe it also reflects existing systemic realities. An example is during our rapid assessment, from the subnational budget analysis, we found that dedicated budget lines for immunization activities usually do not exist at the subnational level. We had to continuously advocate for creation of immunization specific budget lines, this shows the need for continued advocacy, particularly at the state and national levels, to institutionalize such financing mechanisms. Because, in Nigeria, health is on the concurrent list and the national, state, and local government areas all have mandates for health care financing. However, I would caution against creating a rigid division between where budget advocacy and programmatic discussions take place. In practice, these activities must occur concurrently across all levels. Some decisions, especially those tied to policy and funding can only be made at the national and to some extent at state level. But the effectiveness of those decisions depends on evidence generated at the local level. Challenges we noted are the limited fiscal transparency at the lower level, while we also notice political detachment and “noise” at higher levels. An example is

	Webinar Participant Question	Presenter Response
		that some national policy makers are detached from happenings at the lower levels. We can mitigate these challenges by advocacy and continued engagement. Finally, we recommend a dual approach, obtaining evidence and findings from the lower level and crafting simple messaging for all levels.
ZDLH Nigeria	Is there any strategy to increase institutional delivery, this will also address ZD?	We have advocated to the various existing social protection programs in the subnational locations in Nigeria to support institutional delivery by provision of cash to support transport, or vouchers for ambulances in hard-to-reach locations. We will continue advocating to stakeholders in this regard.