WEBINAR: USING DATA TRIANGULATION FOR IDENTIFYING ZERO-DOSE AND UNDER-IMMUNIZED CHILDREN

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Questions and answers extracted from the Q&A box

*Edited for clarity, with additional responses added by speakers after the webinar

FOR THE RCA IN BANGLADESH, HOW WERE HOUSEHOLDS AND NEIGHBORHOODS SELECTED? DO YOU FEEL THAT THE HOUSEHOLD VISITORS WERE ‘CONVENIENT’ AND THEREFORE LIKELY TO BE A BIT BIASED / ‘HIGH’ OR WERE THE TEAMS DIRECTED TO AREAS LIKELY TO HAVE LOW COVERAGE AND SO MAYBE REPRESENTING A ‘WORST CASE’ OR ‘LOWER THAN AVERAGE’ COVERAGE? IN OTHER WORDS, HOW WOULD YOU SAY THAT THE SAMPLING FOR RCA/RCM DIFFERS FROM THAT OF A REPRESENTATIVE PROBABILITY SAMPLE?

Dr. Carolina Danovaro - I don't think we have recent comparisons to answer exactly how they will differ. In general, RCA/RCM point to issues, but may be the better case scenario if leaving people systematically out.

Dr. Ana Morice Trejos - RCM uses convenience sampling. It’s not meant to be a probabilistic survey. I’m talking about the experience in the Americas. As it’s used as a supervisory tool, if they select risk areas, sometimes it can be biased to the worst-case scenario. But it’s a helpful tool to find unvaccinated populations and also, to provide rapid and relatively low-cost information to understand the reasons why those populations were not vaccinated to improve program performance at local level.

WHAT’S THE SOURCE OF THE SATELLITE IMAGES IN THE BANGLADESH PROJECT? ARE SATELLITE IMAGES AVAILABLE TO ALL COUNTRIES SO THAT THEY COULD BE USED FOR MICROPLANNING?

Dr. Rajendra Bohara - WHO-HQ GIS center is providing support to get satellite images from MAXAR technology (helped by CDC-USA) and satellite images are available at country level for microplanning.

WHAT HAVE YOU SEEN TO BE THE MOST EFFECTIVE WAYS TO COMMUNICATE DATA TO NON-HEALTH DECISION MAKERS WHO CAN
**PROVIDE SUPPORT FOR REACHING ZERO-DOSE CHILDREN AND FAMILIES?**

Dr. Rajendra Bohara - Besides the challenges of conveying health data to non-health decision-makers, program personnel play crucial roles in effectively communicating through data. This includes:

- Utilizing clear and visually appealing facts and infographics to present data in a simple format.
- Providing practical examples of the disease burden through advocacy efforts.
- Engaging community leaders, educators, and social workers in the data presentation process.
- Clearly articulating the policy changes or interventions required to support children and families affected by zero-dose (assuming zero-dose refers to a specific condition) through data analysis and presentation.

**WITH MORE THAN 90% COVERAGE RATE, I THINK IT WAS HARD TO FIND AND REACH ZERO-DOSE CHILDREN. PLEASE PROVIDE DETAILS ON THE METHOD YOU USED?**

Dr. Ana Morice Trejos - The rationale and approach to identify and reach zero-dose children is not only focused on the non-vaccinated but also on under-vaccinated communities. The purpose is to identify those risk areas to reach not only zero-dose children but to fully vaccinate those vulnerable populations. So, the approach can be helpful in countries reporting good coverage rates. Also, it’s important to consider that data quality can be an issue at subnational levels reporting high coverages that could be lower.

**IN SETTINGS LIKE BANGLADESH WHERE COVERAGE LEVELS ARE HIGH, IT SEEMS LIKE THE % OF ZERO-DOSE (MISSING DTP1) SEEMS SMALL (ALTHOUGH NUMBERS MAY BE LARGE). ARE THERE THOUGHTS ON OTHER DEFINITIONS OR INDICATORS TO DEFINE ZERO-DOSE, BEYOND DTP?**

Dr. Rajendra Bohara - Within routine activities, EPI-Bangladesh is currently contemplating administering BCG doses to children who were previously missed or have received zero doses. However, it’s worth noting that BCG coverage rates are notably higher when compared to DTP1, and its impact on the program is relatively limited. Additionally, EPI does not employ any other definitions or indicators for children under the age of one.

**QUESTION FOR BANGLADESH. DID YOU OBSERVE ANY GENDER RELATED BARRIERS TO THE ZERO-DOSE CHILDREN THROUGH THE ASSESSMENT? I RECOMMEND WRITING A CASE-STUDY FOR THIS INNOVATION.**

Dr. Carolina Danovaro - In Bangladesh there is an important denominator issue, where the denominator likely underestimates the number of surviving infants resulting in coverage >100% in many places, that’s why triangulation was done using surveys and then going to explore in the field.
Angela Montesanti Porter - You can use data triangulation to assess the differences in trends of different data sources, including national census, special micro census, microplans, and CRVS.

Dr. Ana Morice Trejos - There is not a perfect denominator, that’s because it’s important to triangulate data by using combined sources to find the best available denominator, in particular at subnational levels where official estimates can be inaccurate.

**IS THERE ANY SYSTEM THAT WAS IMPLEMENTED IN YOUR COUNTRY THAT TRACKS FROM 1ST DATE OF BIRTH TO END FOR TRACKING THE ZERO-DOSE/OR UNDER-IMMUNIZED?**

Angela Montesanti Porter - Some countries are triangulating Civil Registration and Vital Statistics data with their electronic immunization registries.

BECAUSE BANGLADESH HAS OVERALL HIGH COVERAGE, INSTEAD OF DOING A NATION-WIDE SURVEY, I THINK YOU SHOULD DO EXCLUSIVE SURVEYS IN SLUM AREAS OR HARD-TO-REACH AREAS (LIKE ISLAND I.E CHOR AREAS OR MOUNTAINOUS AREAS)

Dr. Carolina Danovaro - Probably useful in addition to the routine surveys being done, targeted assessments can provide more granular and actionable data.

THIS WAS USED FOR THE ENTIRE COUNTRY. IS IT POSSIBLE TO PILOT IN A DISTRICT?

Dr. Carolina Danovaro - Yes. The draft toolkit can be used at various levels, including piloting in one district.

Angela Montesanti Porter - It’s important to ensure you have data sources specific to that district. Yes, these tools are helpful at local levels. That’s why it’s important to keep them simple and practical.

THE RANDOM SAMPLING OF AREAS SUPPOSES THAT SOME OF THEM WILL NOT BE SELECTED, AND IN THE EVENT THAT ZERO-DOSE ARE LOCATED IN UNSAMPLED AREAS, WE WILL NEVER REACH THESE CHILDREN

Dr. Carolina Danovaro - Agree. We run the same risk with regular surveys. That’s why the proposal is to triangulate various data sources to first even try to locate where such areas are.

Dr. Ana Morice Trejos - That’s correct. In some cases, depending on the triangulated analysis and availability/quality of data, you need to implement a probabilistic survey. The rationale is to start triangulating the data to facilitate data use and promote critical thinking. By using rapid tools, teams can collect and analyze local/updated information to complement data triangulation. Based on that, the teams can decide if they need to implement a targeted probabilistic survey.
THERE IS A LARGE EMPHASIS RECENTLY ON "IDENTIFYING" ZERO-DOSE AND MAPPING THEM. HOWEVER, AT LOWER LEVELS THERE IS OFTEN ALREADY-EXISTING KNOWLEDGE THAT FOR EXAMPLE AREAS THAT ARE RELATIVELY INACCESSIBLE, OR HAVE MARGINALIZED OR NOMADIC OR IDP POPULATIONS, ARE LIKELY TO HAVE ZERO-DOSE CHILDREN -- THE BIGGER PROBLEM IS IN REACHING THEM. DOES THIS GUIDE ADDRESS THE QUESTION OF WHETHER ADDITIONAL ANALYSIS IS NEEDED IN THE FIRST PLACE, OR IF THE FOCUS SHOULD BE ON BARRIERS TO DELIVERING SERVICES?

Dr. Carolina Danovaro - It includes a decision support algorithm to answer those questions. In some cases, you know enough to take action.

Dr. Ana Morice Trejos - Yes, the assessment tools and interventions must consider the different settings where zero-dose can be reached. The zero-dose toolkit is linked to specific guidelines and tools to reach specific populations such as: migrants, urban areas, slums, etc.