Health Campaign Effectiveness Coalition Test & Learn

Cost and efficiencies related to integrated campaigns: Methods & findings from Sierra Leone and Nigeria--Q&A

1. Could you please elaborate on the rationale for the sampling design in Nigeria?

Answer: Out of the 4 states that conducted campaigns as part of Phase 3 of Nigeria's yellow fever elimination strategy, we selected 3 states to cover the north, south and center of the country. Below that, we used random sampling to select LGAs and wards within each LGA. Campaigns were organized at ward level, which is why wards were our 'lowest' sampling unit, and we included all facilities managed under a selected ward. We used the Sample Design Optimizer tool to optimize our LGA and ward selection in each state given our data collection budget, and given assumptions on the cost of collecting data from a given LGA or ward, taking into account how many facilities were managed by a ward, etc.

2. How were Ministry of Health staff engaged in the design, implementation and analysis of the cost studies?

Answer: In both countries, the EPI and other MOH focal points were included in discussions related to the study design early on, to ensure their preferences were included in terms of scope and sampling strategy, and they have reviewed the research protocol and data collection tools. During the implementation, they were key in obtaining government approvals at the sampled sites. For the data collection and analysis itself, we worked with local research partners.

3. Was environmental safety/ waste management included in the cost?

Answer: Indeed, waste management was included as a cost activity in both studies. (Also answered live)

4. Were differences statistically significant? And meaningfully different?

Answer: Differences in Sierra Leone between the integrated and non-integrated regions were not significant, mainly due to the small sample size. Whether the differences can still be meaningfully different is another question. As was also further discussed during the webinar, other differences between the regions may have driven the cost differences, and it is impossible to correct for those to single out the effect of integration. (Also answered live)

5. How do you account for opportunity cost? For example, a co-delivered nutrition and vaccine campaign may and probably will cost more than a single vaccination campaign ... but perhaps the nutrition campaign might not happen at all absent the opportunity for co-delivery.

Answer: Opportunity costs from a provider/MOH/partner perspective were included in both studies, and mainly consist of the cost of health worker and volunteer time. Although we do not have data on the opportunity cost of labor of a standalone campaign for each of the antigens and nutrition interventions, it is likely that these would have together resulted in greater opportunity costs of labor. In addition, for the nutrition component specifically, it is certainly likely that without the co-delivery opportunity, they would not have been able to organize a stand-alone campaign.

6. How did you break down the costs by inputs knowing that several stages of the campaign were integrated?

Answer: Costs shared across interventions were allocated to the different interventions based mainly on operational differences (e.g. waste management costs were allocated only the vaccines and not to the nutrition supplements), the number of doses delivered (for e.g. service delivery and transport), and cold chain volume (to allocate cold chain costs to the different vaccines). However, the outcome, the cost per dose per intervention delivered should not be interpreted as the cost of delivering a standalone campaign of each of these interventions. (Also answered live)

7. Even if a country does not see financial cost efficiencies when co-delivering several interventions, the benefits for the populations might be a good aspect to analyze. Do you think the benefits can be analyzed in terms of diseases averted and costs avoided for families and health services?

Answer: Just as there are likely benefits in terms of the opportunity cost of labor compared with standalone campaigns, the benefits to the population of being able to obtain multiple interventions at once and having to take less time off work, etc. are also likely to be present. Our studies did not include the cost incurred by the beneficiary/caregiver, as we assumed these to be small given that campaigns have the objective to bring immunization services closer to the population. But indeed, further analysis of these costs may need to be included in future studies focused on the question of co-delivery/integration efficiencies/advantages.

8. Was community participation taken into account in this study? Sometimes they participate in campaigns but it is sometimes difficult to quantify them?

Answer: We did not include costs incurred by community members directly, unless they were engaged as 'formal' volunteers during the campaign, as the perspective of the study

was that of the healthcare provider. We did however include any costs incurred for social mobilization meetings that were organized in the communities, and any payments made to community members as a part of that.

9. For the cost of volunteers, you can also consider using minimum wage.

Answer: Thanks for the suggestion. We have used either an equivalent salary rate for volunteers that had some level of training similar to e.g. community health workers, and in other cases, we have used a day laborer's rate used in the specific area of the sampled site.

10. Economic cost seems to be higher in Anambera that Katsina, this seems to be strange.

Answer: The graph that showed higher economic cost in the co-delivery state (Anambra) compared the cost per yellow fever dose delivered only (common denominator across the two states), not per vaccine dose (volume of YF and MenA combined), in which case it makes more sense that the economic cost (mainly driven by labor) were higher in the co-delivery state.

11. For policy and given the smallness of the sample size, the significance of the statistics may not be important.

Answer: Agreed, in addition, our sample size in Nigeria is considerably larger than that in Sierra Leone, so we are expecting some different outcomes there.

12. In some resource limited settings, there may be a case where local resources or community resources (eg. space in community, settings arrangements, use traditional equipments/devices for community mobilizations etc) are utilized. Can we include such resources for estimations of cost?

Answer: Given the perspective of our study (health providers/MOH/implementing partners), the cost of using e.g. community buildings or other resources was not included in the study. However, given that similar costs that were included in the study (e.g. the health facility building itself, megaphones present at the facility, etc.) were already so minor, I would not expect that such community resource costs would be substantial.

13. Would Laura be willing to share the methodology/protocol for their study with HCE grantee looking to do something similar?

Answer: Absolutely! We'll be sharing the document publicly in the next couple of weeks, but in the meantime, happy to jump on a call with any of the HCE grantees to discuss methods.