1. **In LAC a substantial part of the discussions related to coverage decisions are for complex high cost interventions and specialty care (for example cancer care). How could HIPTool be used in this context? Or is it mainly useful at the primary care level?**

Response: Yes, it is possible to add any intervention into HIPtool as long as (a) it links to a burden of disease cause (types of cancer in this example) and (b) cost and impact (ICER) data are available for the intervention. Interventions in HIPtool can be included for any level of the health system, and default interventions span (1) community, (2) primary health care, (3) first-level hospital, (4) referral and specialty hospital, and (5) population-level. These default health system platforms can easily be replaced with the levels of a local health system.

2. **Could HIPTool be used to calculate the impact of smoking cessation programs and treatments on country's BOD?**

Response: Yes, and similarly to the response to question 1, the smoking cessation interventions would have to be linked to burdens of disease they are addressing, and cost and ICER data will need to be included with them.

3. **How is the MPI (maximum potential impact) calculated for each intervention? For example, how was MPI for appendectomy calculated? Are the supporting documents for each intervention available to help the policy maker understand the source of these numbers?**

Response: MPI is calculated based on intervention cost/spending, coverage, ICER and burden of disease being addressed. For example, let us consider a scenario in which appendectomies address a BoD of 10,000 DALYs and have an ICER of $100/DALY averted. If existing coverage is 20% and spending is $100,000 then the existing impact of appendectomies is 1,000 DALYs averted ($100,000/$100 per DALY) – or 10% (1,000/10,000 DALYs) of the burden of disease. If we specify a maximum target/potential coverage of 80% (any desired or feasible target can be specified), then assuming a linear relationship this would be equivalent to $400,000 ($100,000 x 80%/20%) – which would have an impact of 4,000 DALYs averted and therefore an MPI of 40% (4,000/10,000 DALYS).
MPIs could also be based on expert opinion or generated using a different method, however, by the default they are calculated as described above. Supporting documentation (see technical annex and accompanying excel databook) detail HIPtool methods and all data sources used in the tool.

4. **Could this tool be used for one specific "disease" or event?**

Response: Yes, the tool can be used both within and across diseases.

5. **Does the tool help to "compare" different mixes of intervention packages?**

Response: Yes, various scenarios can be carried out using HIPtool as well as optimisations with different combinations of interventions/packages. Outputs can be used to generate graphs to compare the cost and impact of the various scenarios/ combinations of interventions and packages considered.

6. **How could HIPTool and the System Dynamic Models interact? (if)**

Response: For the moment, HIPtool does not interact with other models.

7. **Who decides on the services included in each intervention? Let's say care for hypertensive disorders in pregnancy? Don't they vary substantially from country to country? And wouldn't cost-effectiveness vary as the "production function" for each intervention varies across countries?**

Response: By default, DCP3 EUHC interventions are included in HIPtool. However, as you correctly point out, services will vary between countries and this will affect cost and impact/cost-effectiveness. For this reason, all the interventions and data and HIPtool can be overwritten with local data. So it is ultimately up to users to decide on whether EUHC (or other globally recommended interventions) are used or whether local services and data are used instead.

8. **Considering that this is a static analysis and that there are interactions between the impacts of each intervention what additional recommendation should the decision maker consider? Is there a recommended periodicity to review the results or does it go according to the new inputs?"**

Response: There are a few considerations that should be communicated to decision makers. An important one among these is uncertainty around the results and the underlying data being used (availability, quality etc.). Given that the model is static and impact is instantaneous, several scenarios can be carried out by varying available spending or intervention coverage to try and reflect incremental changes in impact over time. Rather than, for example, assuming an intervention can be scaled up to 80% coverage in a single year/immediately, several scenarios can be carried with coverage increasing by increments of e.g. 20% or any other desired/expected amount.

In terms of reviewing the results, this will vary according to need. For example, results could be reviewed and updated whenever there are planned revisions to a national health benefits package (within or across diseases) due to changes in funding, burden of disease or other reasons. They could also be reviewed if a single or several interventions are being examined for potential addition to a health benefits package or public funding. If more data and/or resources become available there may also be a desire to update results. These are only some example, but ultimately the frequency of reviewing results will depend on need (funding, disease burden etc.) and whether they are expected to change due to data.

9. **We know that the implicit limits on cost-effectiveness are a topic of discussion and decision makers must decide arbitrarily a maximum value in order to obtain results in the models and the debate is about which value to place and transparency concerning this. In HIPTool are there decisions like these to be made? Beyond the limit of cost-effectiveness which would it be?**

Response: If not misunderstanding, then this relates to ranges of available ICERs and also when ICERs are missing. Decisions about which values/data to include do need to be made for running HIPtool analyses. It is important to have such decisions documented in a way that is transparent, easy to understand, and ideally systematic – so that even if interventions data are considered on a case by case basis, the same criteria are applied across interventions or groups of interventions when making these decisions.