Talking points punch list

Rolling public comment document

Task scoping document

Priorities for March edition:

- "Malaria vaccine update" and ditch focus on R21?
    - the effort of getting a better understanding of RTS,S rollout may not be worth it
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- What are the implications of 2 week stability at room temp at 25-40C?
- Factor in economic savings of the effect of a reduction in cases of clinical malaria in vaccinated children on resources used to diagnose and treat malaria
- Additional emailing to confirm doses planned for rollout in 2024
- understanding the regulatory approval process for cameroon for rts,s and why they were the first ones to have the vaccine rolled out this year could be helpful
- Which seven countries will be getting R21?
- Understanding UNICEF's role and EPI's role in distribution better

Priorities for February version

- ☑ ~~Updates since last report~~
    - ☑ ~~Cameroon rollout~~
    - ☑ ~~Updated dose estimates~~
    - ☑ ~~Modeling results and interim phase 3 publication, and ASTMH abstract results as well~~
- ☑ ~~Incorporate Cameroon update section~~
- ☑ ~~Incorporate figures~~
    - ☑ ~~Edit malaria life cycle figure~~
    - ☐
- ☑ ~~Incorporate immunology data in table~~
- ☑ ~~Edit sections~~
- ☑ ~~Make sure phase 3 paper and modeling paper citations are updated throughout~~
- ☑ ~~Figure for "costs of R21 vaccination" section~~
- ☑ ~~Make/edit tracked changes version~~
- ☑ ~~Make sure 25M dose estimate is updated everywhere instead of 20M~~

Lower priority:

Priorities for January version

- [ ] Must-haves:
  - [x] ~~Update on prequalification~~
  - [x] ~~Public comment instructions at the top~~
  - [x] ~~Update 9% vs. 13% mortality calculations (updated)~~
  - [ ] UNICEF dose purchase numbers or other dose target info
  - [x] ~~Cover page~~
  - [x] ~~Inclusion of technical goals discussed in Zach's twitter thread (ask him to clarify as needed) - basically this is the regulatory convening thing and a rolling GAVI window for purchase orders (as opposed to the window opening once every three months)~~
- [ ] High priority:
  - [ ] Add immunogenicity comparisons and link to a blog post (include discussion of R21 abstract)
  - [ ] Add citations for Gavi rolling windows comment and
  - [ ] (if possible) some way of highlighting changes from the December version for visibility
  - [ ] Additional research/blog posts:
    - [ ] Immunology of RTS,S vs R21: draft
    - [ ] Mortality reduction estimates/modeling
    - [ ] Lessons learned from COVID-19 in Africa
  - [ ] Infographics (improve digestibility of important numbers)
    - [ ] Doses available and current plan vs. potential plan
    - [ ] Lives saved with vaccinating 40M
    - [ ] Cost of rollout
    - [ ] Barriers to implementation (prequalification, funding, country infrastructure/rollout, and more)
  - [x] ~~Include a list of relevant experts/spokespersons~~
  - [ ] Update with any new information that comes available (checking google alerts etc)
  - [ ] New section: What Lessons Can Be Drawn from the African COVID Vaccine Experience? (See bottom of this document)
  - [ ] New section(s) on barriers to implementation that aren't PQ (i.e. expanded explanations of the end paragraphs in the executive summary)
  - [ ] Create table comparing chemoprevention, bednets, and vaccination (cost-effectiveness, timing, etc.)
  - [ ]
    - [ ]
  - [ ] New section on CPAR: what is it, is it being used, how much time does it save, what are barriers to its use?
- [ ] Lower priority:
  - [ ] Create a special footnote method to create a an RTS,S/R21 table that looks good on one page
  - [ ] Better discussion/understanding of MVIP program
  - [ ] Increase readability, shorter, link relevant blog posts
  - [ ] Errata page on corrections of December document

- [ ] 1 page fact sheet
- [ ] Over time we will probably want to create a spreadsheet or tracker for different african countries with something like “have they put in a purchase order to GAVI?” “how many doses are in purchase order?” etc.
- [ ] Infographic showing the process for distributing a vaccine in african countries (i.e. UNICEF -> GAVI -> Country regulatory approval -> country purchase order -> ministry of health?)
- [ ] Discussion of what is the likely durability of R21 protection compared to RTS,S (probably discussed in modeling paper and can maybe infer from reduction in immunity over the first few years in the clinical trials)

- [ ] Tasks where we need help
  - [ ] Review lives saved calculation (both the one based on the WHO 13% science study number – not sure if I did the math right; and the Imperial SAGE publication one – I haven’t done a good job handling the different impact of vaccinating 5-17 months (which is what the IMperial projection is based on, I believe) with the impact of 5-36 month total eligible population). In the phase 3, the 18-36 month group has less efficacy but not dramatically so (something like 71% vs 78%) but i think as a matter of modeling based on antibodies (the Imperial method) the difference is probably greater.
  - [ ] CN Malaria prevention cost effectiveness work
  - [ ] Figure out where UNICEF is getting its demand figures from: UNICEF Procurement: Comprehensive supply for impactful and cost-efficient health programmes, November/December 2022, slide 12.
  - [ ] Consider adding in rts,s modeling study for comparison to r21 https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(22)00416-8/fulltext – possibly in a footnote
  - [ ] ~~Find a place to put in the WHO says the two vaccines have the same study results fact~~
    - [ ] ~~“There is no evidence to date showing one vaccine performs better than the other. “ — https://www.who.int/news/item/02-10-2023-who-recommends-r21-matrix-m-vaccine-for-malaria-prevention-in-updated-advice-on-immunization~~
  - [ ] Investigate this issue
    - [ ] concern that sporozoite vaccines, by limiting infection, will just delay infection to later but not reduce ultimate disease burden (because children don’t build up natural immunity due to infection and are thus still susceptible – the modeling paper raises a mild version of this when describing waning immunity for the controls vs. treatment group).
  - [ ] ~~Add in a clearer comparison to COVID vaccination and to what extent the 1 billion doses distributed during COVID can be used as a template for some of the efforts for R21 distribution.~~
  - [ ] Add in more discussion of chemo prevention and its use in tandem with rts,s
    - [ ] This modeling paper on RTS,S vs other chemoprevention might be helpful https://www.sciencedirect.com/science/article/pii/S0264410X23003948

- [ ] Review this FAQ from GAVI and update talking points accordingly – https://www.gavi.org/sites/default/files/news/2023/FAQs-malaria-vaccine-shipments.pdf
- [ ] To what extent will better malaria vaccination save relevant actors (global fund, US government, African countries, etc.) money on malaria treatments and diagnostics?
    - [ ] We should figure out what the cost savings are to reducing malaria cases by 2 cases per vaccination (i.e. what money doesn't need to be spent on diagnostics and treatments) and also how those costs are currently paid by international entities (i.e. how much money would the u.s. Government save on our malaria aid if fewer children had malaria? Is the vaccine cost saving to taxpayers in any way?)
- [ ] ~~Create table comparing chemoprevention, bednets, and vaccination (cost-effectiveness, timing, etc.)~~
- [ ] Fill in lessons from existing vaccine campaigns question
- [ ] ABie feedback – need to give clearer sense of what 1Day Sooner is doing
    - [ ] i basically only have one large-ish comment, which is that the Q that i most want to see is: what is 1daysooner doing to accelerate the distribution of doses? the "what steps could help achieve a better outcome" one come close to this, but i mostly want to know: what are the highest priority demands, is making a public demand going to possibly move the needle, is this campaign primarily a media campaign or something else, etc. — primarily just some more details on the sorts of things that individuals could do once they have this resource

Cut from December version:

What Lessons Can Be Drawn from the African COVID Vaccine Experience?

The response to Covid-19 showed that a fast and large-scale vaccine roll-out was feasible in low-to-middle-income countries. The COVAX mechanism is an initiative of GAVI, WHO, CEPI and UNICEF that played a key role in making the vaccine available in 92[1] eligible countries. From 2021 to 2022, 1 billion doses were delivered through COVAX[2]. The first Covid-19 vaccine to receive WHO prequalification received it in October 2023[3]. For Covid-19, WHO used its Emergency Use Listing procedure, which allowed large-scale distribution before prequalification. The Emergency Use Listing procedure requires that "the disease may cause an outbreak, epidemic or pandemic", and that "there are no products available capable of eradicating or preventing the disease"[4]. These criteria might not apply for malaria.

[1] 92 low- and middle-income economies eligible to get access to COVID-19 vaccines through COVAX

[2] COVAX: 1 billion vaccines delivered | UNICEF Supply Division

[3] BIMERVAX | WHO - Prequalification of Medical Products

[4] Coronavirus disease (COVID-19): Use of Emergency Use Listing procedure for vaccines against COVID-19