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| --- | --- | --- |
| **Transmission** |  | **Do we need age/sex?** |
| Transmission multipliers (multiple partnerships; condomless sex) | Surveys (e.g., DHS) | Yes |
| Pairing proportions (this will be regional – use PHIA data instead of what we have?) | Cohort studies (or PHIA) | Yes |
| Historical maternal-fetal transmission risk | Cohort studies or broad websites/google searches | No |
| **Continuum** |  |  |
| Testing rate (probability of receiving an HIV test) | Surveys (e.g., DHS) | (Ideally) |
| Engagement rate (proportion initiating ART within 12 months) | Cohort studies or dashboards like IeDEA | (Ideally) |
| Disengagement rate (by suppression status) | " | (Ideally) |
| Suppression rate (proportion virally suppressed within 12 months) | " | (Ideally) |
| Loss of suppression rate | " | (Ideally) |

Files to update for each country:

1. Parameters
   1. Default parameters (~line 181)
   2. If using an engagement model other than IeDEA, update engagement section
2. HIV\_mortality\_priors
   1. Add country to locations list
   2. Add values to prior
3. Set\_likelihood\_and\_prior: add section for country
4. Prior: add prior file; update values
5. Parameter\_mappings files
   1. Get\_age\_sex\_transmission.multipliers: update function calls and add that file to country-specific folder
   2. Get\_testing\_projection…: update function calls and add that file to country-specific folder
   3. Get\_engagement\_disengagement: update function calls and add files to country-specific folders
      1. For some countries, using South Africa’s engagement data and Kenya’s disengagement data
      2. NOTE, disengagement values are directly entered into the parameters file/folder; will not automatically update with function call
   4. Get\_suppression\_rebound\_data: if using something other than Kenya or SA’s data, update function calls and add files to country-specific folders
      1. For some countries, using Kenya or SA’s suppression/unsuppression data; uses a function call where all other locations assume Kenya – nothing to update
      2. NOTE, rebound/unsuppression values are directly entered into the parameters file/folder; will not automatically update with function call
6. Birth transmission risk
   1. Add to default parameters and prior
   2. (For non-SSA countries only)
7. Pairing proportions
   1. age\_mixing.R file – update function calls and add files to country-specific folders
   2. (For non-SSA countries only)
8. Data manager
   1. Save\_data\_manager:
      1. Add country to countries to pull
      2. Add country to individual countries in remainder\_countries.R and save new remainder\_countries.Rdata file and cascade\_weights.Rdata file
      3. Once I have a new remainder countries list, run through income\_status.R and save new locations\_income.Rdata
      4. Check country name and change functions accordingly
      5. Add data to “combined\_pdfs.csv” file
   2. Save a new data manager
9. Source code:
   1. Load new data manager