**Guide to IDM HIV Files**

OPTIMIZATION SETUP

Directions:

1. Create folder for your optimization (e.g. HIV-SEARCH-OptimTool)
2. In your optimization folder, create the following folders:
   1. bin
      1. Put your exe in here
   2. Data
      1. Put your Excel file with data to be used with analyzers in here
   3. InputFiles
      1. Create two folders and put in following files:
         1. Static
            1. Demographics.json

Has demographic structure for your model (setting-specific)

* + - 1. Templates
         1. Accessibility\_and\_Risk\_IP\_Overlay.json

Has

* + - * 1. Campaign.json

Main file to dictate scale-up of testing, ART over time, introduce interventions, etc.

* + - * 1. Config.json

Contains static parameters for your model (most of this doesn’t change for a new model)

* + - * 1. PFA\_Overlay.json

Determines sexual age mixing patterns for different risk groups

* + - * 1. Risk\_Assortivity\_Overlay.json

Determines how much risk assortivity there is in the model

* 1. Scripts
     1. Put dtk\_post\_process.py in here

1. In your main optimization folder, make sure you have the following scripts/files:
   1. Analyze\_SEARCH.py
      1. Specify analyzers and weights
   2. Optim\_attempt.py
      1. This is your **main file to set calibration running**
      2. Set analyzers and weights, parameters you want to fit, how many iterations, population scale factor
   3. ReEvaluateLikelihood.py
      1. Once your calibration is complete, use this to select best runs to use for generating impact results
   4. Simtools.ini
      1. Set environment to run model on (e.g. HPC🡪 Belegost)
      2. Set priorities and node group
      3. Give python post-processing path
   5. Site\_SEARCH.py
      1. Specify nodes
      2. Read in analyzers and reference data
   6. Utils.py
      1. Load in campaign file
2. Set up your virtual environment in preparation for installing Github repositories
3. Install following repos within your virtual environment
   1. HIV-Analyzers
   2. Dtk-tools

IMPACT SETUP

1. Create new folder inside your main optimization folder (e.g. “SEARCH Impact)
   1. TPI\_submission.py
      1. Set up scenarios