Purpose: integrating the data-cleaning pipeline used by LBD to augment ANC data that lives in the ancsitedat object of the epp attribute.

Inputs:

* The input file is found at /homes/mwalte10t/gbdeppaiml/lbd\_anc\_align/inputs.csv
* The following need to be checked as they rely on inputs from LBD:
  + lbd\_anc\_data
    - codetable
  + add\_info
  + geo\_coebook
  + rd
  + lbd\_anc\_mean\_est

Methods:

* In /gbdeppaiml/gbd/main.R, a lbd.anc toggle was used in read\_spec\_object() to indicate when this process should occur. Default is set as true, and if a country isn’t cleaned by the LBD team, it is turned off.
  + This toggle becomes is needed by read\_spec\_object when it pulls in the dt object from the directory that has the most recent, processed PJNZ files from UNAIDS.
    - **Note: as of 1/28/2020, these are the 2019 files**
  + The ANC data that has been processed by GBD using LBD methods is found in /share/hiv/data/PJNZ\_EPPASM\_prepped\_subpop/lbd\_anc/. These files were created in /hiv\_gbd2019/lbd\_anc\_align/lbd\_anc\_recreate.R.
    - Lbd\_anc\_recreate.R requires the following:
      * /home/j/WORK/11\_geospatial/10\_mbg/hiv/unaids\_anc/anc\_data\_2020\_01\_23.rds
        + Confer with LBD about the most finalized version of this file. **This is up to date as of 1/28/2020.**
      * /homes/mwalte10/lat\_long\_codetable.csv
        + Created with /homes/mwalte10/gbdeppaiml/lbd\_anc\_align/lat\_long.R.
      * Additional\_info.csv, pulled from /lbd\_hiv/data/anc/1\_data\_extraction on Stash.
      * Final\_geo\_codebook\_1\_27\_2020.csv, pulled from /lbd\_hiv/data/anc/2\_geomatchting on Stash.
  + Offsets were added in create\_offsets.R reads in GBD cleaned data using LBD methods from /share/hiv/data/PJNZ\_EPPASM\_prepped\_subpop/lbd\_anc/

Diagnostics:

* The primary diagnostic code is found in /homes/mwalte10/gbdeppaiml/lbd\_anc\_align/check\_diff\_plots.R. This contains the diff\_arise() functions which shows the differences in data between raw, old, and new data in a scatter plot.
  + Raw: pulls from the most recent PJNZ\_prepped folder. Requires loc argument.
  + Old: pulls from the dt object that is created and saved as a part of main.R. These have been generated for /gbd19/190630\_rhino runs onward. Requires the old run name in the form of /gbdyear/oldrun\_name.
  + New: pulls from the dt object that is created and saved as a part of main.R. Requires the new run name in the form of /gbdyear/newrun\_name.