The MENDS estimate creation can be broken down into five steps and need to be completed in sequential order:

1. Data preparation,
2. Weighting, and
3. Estimation and suppression,
4. Stack county and ZIP files, and
5. Create iVest files

These steps are completed by the following programs:

1. Data preparation
   1. 1\_0\_quickstart\_MENDS
2. Weighting
   1. 2\_0\_quickstart\_MENDS - national wgts
   2. 2\_0\_quickstart\_MENDS - state wgts
3. Estimation and suppression
   1. 3\_0\_quickstart\_MENDS - national est
   2. 3\_0\_quickstart\_MENDS - state est
   3. 3\_0\_quickstart\_MENDS - county est – 2019
   4. 3\_0\_quickstart\_MENDS - county est – 2020
   5. 3\_0\_quickstart\_MENDS - county est – 2021
   6. 3\_0\_quickstart\_MENDS - county est – 2022
   7. 3\_0\_quickstart\_MENDS - county est – 2023
   8. 3\_0\_quickstart\_MENDS - zip est – 2019
   9. 3\_0\_quickstart\_MENDS - zip est – 2020
   10. 3\_0\_quickstart\_MENDS - zip est – 2021
   11. 3\_0\_quickstart\_MENDS - zip est – 2022
   12. 3\_0\_quickstart\_MENDS - zip est – 2023
4. Stack county and ZIP files
   1. 4\_0\_Stack\_and\_export\_County
   2. 4\_0\_Stack\_and\_export\_ZIP
5. Create iVest files
   1. 5\_0\_Create\_iVest\_files.

Program 1.1 completes step 1 and therefore, needs to complete the processing prior to running the remaining programs. Programs 2.1 and 2.2 complete step 2 and can be run simultaneously. Programs 3.1 through program 3.12 complete step 3 and can be run simultaneously. Programs 4.1 and 4.2 only need to be run for county and ZIP level estimates, since to reduce processing time the estimates are run separately by year. Program 5.1 creates the iVest files for delivery. Prior to updating the programs, 3 folders should be created in the output file:

1. Pre\_Processed\_MENDS (e.g., C:\2\_Output\Pre\_Processed\_MENDS)
2. Estimates (e.g., C:\2\_Output\Estimates)
3. SAS LOG (e.g., C:\2\_Output\SAS LOG)

In these 3 folders, and additional folder should be created in the event that these programs need to be run multiple times (e.g., 20240101 Run for 042023-062023 estimates)

These are the only updates that need to be made to the programs prior to running:

|  |  |  |  |
| --- | --- | --- | --- |
| Macro | Definition | Present in | Example |
| ACSFILEPATH | The location of the raw ACS file | 1\_0\_quickstart\_MENDS | C:\ACS\_Data |
| ACSFILE | The name of the raw ACS file | ACS2022 |
| PROGFILEPATH | The location of the programs | 1\_0\_quickstart\_MENDS  2\_0\_quickstart\_MENDS - national wgts  2\_0\_quickstart\_MENDS - state wgts  3\_0\_quickstart\_MENDS - county est - 2019  3\_0\_quickstart\_MENDS - county est - 2020  3\_0\_quickstart\_MENDS - county est - 2021  3\_0\_quickstart\_MENDS - county est - 2020  3\_0\_quickstart\_MENDS - county est - 2023  3\_0\_quickstart\_MENDS - national est  3\_0\_quickstart\_MENDS - state est  3\_0\_quickstart\_MENDS - zip est - 2019  3\_0\_quickstart\_MENDS - zip est - 2020  3\_0\_quickstart\_MENDS - zip est - 2021  3\_0\_quickstart\_MENDS - zip est - 2020  3\_0\_quickstart\_MENDS - zip est - 2023 | C:\1\_SAS\_Programs |
| OUTFILEPATH | The core folder where all output will be saved | 1\_0\_quickstart\_MENDS  2\_0\_quickstart\_MENDS - national wgts  2\_0\_quickstart\_MENDS - state wgts  3\_0\_quickstart\_MENDS - county est - 2019  3\_0\_quickstart\_MENDS - county est - 2020  3\_0\_quickstart\_MENDS - county est - 2021  3\_0\_quickstart\_MENDS - county est - 2020  3\_0\_quickstart\_MENDS - county est - 2023  3\_0\_quickstart\_MENDS - national est  3\_0\_quickstart\_MENDS - state est  3\_0\_quickstart\_MENDS - zip est - 2019  3\_0\_quickstart\_MENDS - zip est - 2020  3\_0\_quickstart\_MENDS - zip est - 2021  3\_0\_quickstart\_MENDS - zip est - 2020  3\_0\_quickstart\_MENDS - zip est – 2023  4\_0\_Stack\_and\_export\_County  4\_0\_Stack\_and\_export\_ZIP  5\_0\_Create\_iVest\_files | C:\2\_Output |
| OUTFOLDER | The name of the file that the final output, data, and logs will be saved, e.g., C:\2\_Output\Estimates\**20240101 Run for 042023-062023 estimates** | 20240101 Run for 042023-062023 estimates |
| START\_YEAR | Subsets the raw data file and estimates to medical encounters in this year.  Acceptable values must be a 4-digit year and the year must be present on the EHR file | 2023 |
| END\_YEAR | Subsets the raw data file and estimates to medical encounters through this year.  Acceptable values must be a 4-digit year and the year must be present on the EHR file | 2023 |
| START\_MONTH | Subsets the raw data file and estimates to medical encounters in this month.  Acceptable values must be a 1 digit or 2-digit month and the month must be present on the EHR file | 4 or 10 |
| END\_MONTH | Subsets the raw data file and estimates to medical encounters through this month.  Acceptable values must be a 1 digit or 2-digit month and the month must be present on the EHR file | 6 or 12 |
| NEED\_ACS\_PREP | Process needs to include steps to format the raw ACS file.  Acceptable values must be Y (yes) or N (no) | 1\_0\_quickstart\_MENDS | Y |
| NEED\_DATA\_PREP | Process needs to include steps to format the raw data file.  Acceptable values must be Y (yes) or N (no) | 1\_0\_quickstart\_MENDS | Y |
| Delivery\_month | Month and year of file delivery | 1\_0\_quickstart\_MENDS  2\_0\_quickstart\_MENDS - national wgts  2\_0\_quickstart\_MENDS - state wgts  3\_0\_quickstart\_MENDS - county est - 2019  3\_0\_quickstart\_MENDS - county est - 2020  3\_0\_quickstart\_MENDS - county est - 2021  3\_0\_quickstart\_MENDS - county est - 2020  3\_0\_quickstart\_MENDS - county est - 2023  3\_0\_quickstart\_MENDS - national est  3\_0\_quickstart\_MENDS - state est  3\_0\_quickstart\_MENDS - zip est - 2019  3\_0\_quickstart\_MENDS - zip est - 2020  3\_0\_quickstart\_MENDS - zip est - 2021  3\_0\_quickstart\_MENDS - zip est - 2020  3\_0\_quickstart\_MENDS - zip est – 2023  4\_0\_Stack\_and\_export\_County  4\_0\_Stack\_and\_export\_ZIP  5\_0\_Create\_iVest\_files | April\_2024 |