

AHRQ QIs Population File Updates and Resolution

1. What do QI users need to know about the updates to the population estimates in the AHRQ QI population files?

The AHRQ QI Program discovered that the QI population files (v7.0 1995-2017 population file) contained some inaccurate county-level, age-, sex-, and race-specific population estimates beginning with the 2012 calendar year. The inaccurate population estimates affect the rates of all area-level indicators only and does not affect any provider level indicators. The inaccurate population estimates also affects rates of the following area-level indicators retired in v7.0:

- Prevention Quality Indicators (PQIs), and area-level Pediatric Quality Indicators (PDI 14-PDI 18, PDI 90-PDI 92),
- Patient Safety Indicators (PSI 21-PSI 27)
- Inpatient Quality Indicators (IQI 26-IQI 29)

The updated QI population file is now available at:

http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2018/1995-2017_Population_Files_V2018.zip.

2. How is the v2018 population file different from previous population files?

The updated QI population file uses the U.S. Census's 'County Population by Characteristics: 2010-2017 Vintage' tables. This QI population file includes estimates for the 1995-2017 period. Population data from 1995-1999 uses a different method for the age group (18-24) compared to the population data starting with 2000. Please see the details around the population methodology at:

http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2018/AHRQ_QI_v2018_ICD10_Population_File.pdf

3. What do QI users with the new v2018 AHRQ QI software need to know about the updated population file?

QI users with the v2018 AHRQ QI software **do not need to make any changes**. In the v2018 QI software population file, AHRQ has changed the process to use single year age bands provided by the U.S. Census based on county vintage estimates for 2000 through 2017.

Information for WinQI Users

4. Is the new v2018 WinQI software affected by the population file issue?

No. The WinQI v2018 software is not affected by the inaccuracies in the population files. The v2018 software includes the corrected population files.

5. Are previous versions of the WinQI software affected by the population file issue?

Yes. **Area-level** indicators calculated using QI v7.0.2 ICD-10-CM/PCS and/or prior versions of the software (back to v3.0) are affected by the population file inaccuracies.

QI users that generated rates for the **provider-level indicators using QIv7.0.2 ICD-10CM/PCS and/or prior versions of the software (back to v3.0)** are not impacted and no action is needed as population data is not used in calculating provider-level rates.

6. How can WinQI software users resolve the population file issue?

QI users who used area-level indicators WINQI v7.0.2 and prior versions will need to update their currently installed WinQI software. AHRQ is providing a patch, or a piece of software, for users to update their software. This patch is designed to update WinQI with the corrected population data, which will remove the inaccuracy in the population estimates. This does not require users to install a new version of the WinQI software. Please follow the steps below to resolve the inaccuracy in the rates:

- **Step 1:** Download the patch from the AHRQ QI website (Zip file): <http://www.qualityindicators.ahrq.gov/Downloads/Software/WinQI/V2018/WinQIPatchv1.0.0.zip>
- **Step 2:** Once downloaded, extract the content of the zip file and double-click on the file, “PopLoaderPatch.exe”. This opens a window for verifying your database connection and then click on the “Update WinQI” button.
- **Step 3:** The patch will take a few minutes to run. Once completed, the currently installed WinQI software will be updated with the corrected population data for the period 1995-2017.

Note: This patch assumes you have WinQI v7.0.2 ICD-10-CM/PCS or any prior WinQI version installed on your computer.

Also, if you have or plan to install v2018 ICD-10 CM/PCS WinQI or SAS there is no need to install this patch as v2018 software is not affected by the inaccuracies in the population files. The [v2018 software](#) includes the corrected population files.

Information for SAS QI Users

7. Is the new v2018 SAS QI software affected by the population file issue?

No. The SAS QI v2018 software is not affected by the inaccuracies in the population files. The [v2018 software](#) uses the corrected population files. QI users will need to download the v2018 population from the AHRQ QI website:

http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2018/1995-2017_Population_Files_V2018.zip

8. Are previous versions of the SAS QI software affected by the population file issue?

Yes. **Area-level indicators** calculated using QI v7.0.2 ICD-10-CM/PCS and/or prior versions of the software (back to v3.0) are affected by the population file inaccuracies.

QI users that generated rates for the **provider-level indicators** are not impacted and no action is needed as population data is not used in calculating provider-level rates.

9. How can SAS QI software users resolve the population file issue?

For the SAS QI v7.0.2 ICD-10-CM/PCS and prior versions of the software, users who use area-level indicators can access the corrected population file available on the AHRQ QI website. Please follow the steps below to resolve the inaccuracy in the rates:

- **Step 1:** Download the new population file from AHRQ QI website:
http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2018/1995-2017_Population_Files_V2018.zip
- **Step 2:** Update the population file reference in the SAS program file, [xyz]_ALL_CONTROL.sas and re-run the SAS QI program to generate rates for area-level indicators in each module.

The SAS QI v2018 software is not affected by the inaccuracies in the population files. The [v2018 software](#) includes the corrected population files.

10. Can the v2018 QI population file be used with prior versions of SAS QI software?

Yes. The v2018 QI population file has the same structure as previous population files. Therefore, it can be used with all previous versions of SAS QI software.

Information for Users Impacted by the Population File Inaccuracies

11. What is the impact of inaccurate population estimates on QI rates?

The inaccurate population estimates impact the denominator counts and rates in v7.0.2 and earlier versions (back to v3.0) of the **area-level indicators**, including the PQIs.

For QI users that generated the area-level indicators in v7.0.2 or any earlier versions of the AHRQ QI software (back to v3.), the inaccurate population estimates may understate or overstate the 18 to 24-year-old population for certain counties. The population file includes population estimates at the state and county level stratified by age, sex, and race based on the U.S. Census vintage population estimates. The overall impact of this inaccuracy is a 1.2% increase in the adult population for 2016, the last year in the file based solely on Census estimates. The population for 2017 is a projection from a linear regression based on the AHRQ estimates from the 2010-2016-time frame. The inaccuracy in the estimates either overstates or understates the population data for a county. This discrepancy impacts all area denominator counts and rates in area-level indicators. The numerator counts for the area-level indicators are still accurate in v7.0.2 and prior versions of the software.

The retired area-level measures in the IQI and PSI modules will also be impacted. Since the inaccuracy was identified with the adult population, the PDI module may not be impacted, but users may want to review their PDI rates.

12. How can QI users determine if rates are inaccurate as a result of the population files?

To determine if previously calculated rates are inaccurate, AHRQ recommends that users compare previously generated denominator counts with rates produced after applying the WinQI patch or downloading the new population file and updating the population file reference in the SAS QI program. Because of the inaccuracy in the population estimates, denominator counts and rates may be understated or overstated for the 18 to 24-year-old population in certain counties. (See Question 10 for details on the impact of this inaccuracy on rates). Not all county data are impacted by this inaccuracy. Some counties' rates have a larger impact than others.