

BETA-MAX OR MAX WHICH ONE IS RIGHT FOR YOUR RESEARCH?

Beta-MAX files are intended to be an early-release version of MAX files. In order to release the data as quickly as possible, no new data elements or values are introduced in Beta-MAX files. The data dictionary and record layouts for a given year of Beta-MAX will be the same as those for the previous round of MAX. For example, the 2009 Beta-MAX files will have the same data elements and same layout as the 2008 MAX files.

In most cases, the biggest difference between Beta-MAX and MAX will be the completeness of the data. Often, both claims and eligibility records submitted by the states in one calendar year (for example, 2010) apply to services or enrollment in the previous calendar year (for example, 2009). Therefore, traditional MAX files are built with seven quarters of MSIS data—the four quarters in the actual calendar year, plus three extra quarters from which only the records with service or enrollment dates during the MAX calendar year are kept. In contrast, Beta-MAX will not wait for the three extra quarters of MSIS data, although the extra quarters will be used if they are available when production begins. This will depend on the state.

The effect of having fewer “extra” quarters of data will likely vary by state and year. In most states, the prescription drug data in Beta-MAX will be very complete and will provide a good approximation of the final MAX data. The person summary, long-term care, and “other” services files will often be good enough for larger populations or summary statistics, although they may be less reliable for very small populations or narrowly defined measures. The inpatient hospital claims are least likely to be complete, although the completeness will improve significantly with each additional quarter. For all claims and eligibility files, the more quarters of MSIS that are used for production, the more complete the state’s Beta-MAX file will be.

Another limitation of Beta-MAX files is that the data quality review will be less thorough than the review of MAX files. Thus, Beta-MAX files are “use at your own risk.” Some states may submit dirty data in some years, which could significantly affect Beta-MAX data quality.

For more information about a specific Beta-MAX file, there are two sources of information:

1. The Beta-MAX Production Specifications for each year describe the specifications for each state’s files, including the number of MSIS quarters used during production. The document also provides details for any external cross-reference files (such as those used to update temporary IDs) that were used during Beta-MAX production.
2. The Beta-MAX Validation Tables provide more than 1,500 statistics and frequencies, and compare the Beta-MAX file to the corresponding MAX file from the previous year. When another year of MAX data is available, the data will be added to the tables. For example, the 2009 Beta-MAX Validation tables will provide a comparison to 2008 MAX and, when available, to 2009 MAX. The tables can help researchers determine whether a state’s Beta-MAX file is suitable for their study population.

For more general information about Beta-MAX, refer to the pilot report,¹ found at http://www.cms.gov/MedicaidDataSourcesGenInfo/13_BetaMAX.asp.

¹ Hourihan, Kerianne, Victoria Peebles, Laura Ruttner, and Julie Sykes. “Beta-MAX Pilot Implementation Results.” Final report submitted to the Centers for Medicare & Medicaid Services. Washington, DC: Mathematica Policy Research, July 2010.