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CENTERS for MEDICARE & MEDICAID SERVICES

CENTER FOR DRUG AND HEALTH PLAN CHOICE

TO: All Current and Prospective Medicare Advantage Organizations

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SUBJECT: Contract Year (CY) 2011 Automated Health Services Delivery (HSD) Review Process in HPMS

DATE: February 11, 2010

To assist applicants in preparing their CY 2011 Medicare Advantage (MA) application network submissions, this memo provides a high-level description of the methodology used by CMS to measure network adequacy in the application review process. CMS designed the automated HSD review using a combination of third party software and custom development in HPMS to measure applicants against the standardized criteria. These criteria were released on November 20, 2009 and are available on the CMS public website along with an overview of the methodology for developing the criteria at http://www.cms.hhs.gov/MedicareAdvantageApps/. The standardized criteria consist of three components: a) the number of providers by county and specialty type, b) the travel distance to providers and facilities by county and specialty type, and c) the travel time to providers and facilities by county and specialty type. The automated HSD review employs various technical solutions to measure applicants' networks against these access criteria, as described below.

Address Analysis and Geocoding

Following the successful upload and unload of an HSD submission, CMS geocodes the provider and facility addresses by assigning latitude and longitude coordinates based on their street-level locations. These coordinates are later utilized to calculate travel distances and times from beneficiaries.

The geocoding software uses several techniques to match addresses to its source data (e.g., adapting to alternative street or city names, adjusting for common abbreviations). Despite these practices, during the first two pre-check opportunities, CMS found that a small percentage of addresses (less than 5 percent of the total addresses submitted) could not be successfully geocoded. These addresses were listed on the Address Information Report (formerly called the Bad Address Report), and they were excluded from the automated checks.

In order to reduce the number of excluded records, CMS has decided to implement a second tier of geocoding. For those addresses that cannot be geocoded at the street-level, we will use zip code data and population patterns to estimate a provider or facility location within a zip code, which will allow these records to be included in the automated checks. This new tier will be implemented for the next HSD pre-check. To participate, submissions must be successfully uploaded and unloaded **by Thursday, February 11, 2010 at 11:59 p.m. EST**.

Beneficiary Census File

CMS contracted with a third party vendor to develop a sample beneficiary census file to be used in the calculations of travel time and distance to providers and facilities. Medicare enrollment counts at the zip code level were used to create the full beneficiary census file. To facilitate greater data processing efficiency in the automated HSD checks, a sampling technique was applied to decrease the overall size of the full beneficiary census file by reducing the number of beneficiaries in each zip code uniformly across each county. The resulting sample beneficiary census file contains 1.6 million records, a 3.4 percent sample of the full file.

An algorithm that factors in population patterns within a given zip code was then applied to the sample beneficiary census file to plot geographic coordinates. These geographic coordinates are intended to represent beneficiary locations; these are not actual Medicare beneficiary addresses. CMS uses these beneficiary geographic coordinates in concert with the provider and facility geographic coordinates to perform the travel time and distance analysis.

Testing indicates that the sample beneficiary census file produces consistent results of travel time and distance access analysis when compared to the results produced using the full beneficiary census file.

CMS has posted an **aggregated** version of the official sample beneficiary census file on the HPMS homepage for all MA applicants. This file contains the aggregate number of beneficiaries included in the sample beneficiary census file by state, SSA state/county code, and zip code. Separate documentation is also available that explains how CMS decided to address certain special cases in regard to SSA state/county.

Minimum Number of Providers

The first component of the review process is consistent with the automated process used by HPMS to evaluate the CY 2010 HSD submissions. For this part of the process, HPMS aggregates the number of providers of a particular specialty type listed as serving a given county and then compares that number to the MA Reference File.

If the number of providers is equal to or greater than the corresponding number in the MA Reference File, HPMS will assign a “yes” to the Met status for that particular county/specialty type for the minimum provider number criteria.

Travel Distance to Providers and Facilities

The second component of the review process tests the percentage of beneficiaries resident in a given county with access to a particular specialty type within the maximum travel distance. For a given county and specialty type, CMS uses the geographic coordinates for the associated providers or facilities and the geographic coordinates for the beneficiaries resident in the county and calculates the travel distance between them. The travel distance is calculated using a formula to determine the estimated driving distance (miles) between the latitude and longitude coordinates and provides an average for the total beneficiaries in the given county.

If at least 90 percent of the beneficiaries resident in that county have access to at least one provider or facility for the given specialty type within the maximum travel distance, then HPMS will assign a "yes" to the Met status for that particular county/specialty type for the travel distance criteria.

Travel Time to Providers and Facilities

The third component of the review process tests the percentage of beneficiaries resident in a given county with access to a particular specialty type within the maximum travel time. For a given county and specialty type, CMS uses the geographic coordinates for the associated providers or facilities and the geographic coordinates for the beneficiaries resident in the county and calculates the travel time between them. The travel time (estimated driving time in minutes) is calculated by applying a driving MPH (miles per hour) based on the geographic area (i.e., urban - 30 mph, suburban - 45 mph, or rural - 55 mph) to the estimated distance measurement outcome.

If at least 90 percent of the beneficiaries resident in that county have access to at least one provider or facility for the given specialty type within the maximum travel time, then HPMS will assign a "yes" to the Met status for that particular county/specialty type for the travel time criteria.

During the pre-check and application review processes, CMS is applying the travel time check only to those counties designated as "large metro" in the MA Reference File. CMS anticipates assessing travel time for some or all of the counties in the other geographic categories prior to making contract awards in September 2010.

Determination of Overall Status from Automated Review

HPMS will consider the results of all three components of the automated review in order to assign an overall status for a given county and specialty type. In order to achieve a "pass" status for a county/specialty type, you must have a Met status of "yes" in all measured categories (i.e., number of providers, travel distance, and where applicable, travel time).

Please keep in mind that receiving a Met status of "yes" or an overall status of "pass" from the automated review is only one step on the path to network approval, application approval, and ultimate contract award. Not all providers and facilities are subject to the automated review

process and standardized criteria; in those cases, they are instead subject to manual review and approval. Moreover, applicants must demonstrate that they meet all requirements laid out in the MA application, receive approval of their submitted bids, and meet any other defined requirements in order to be awarded MA contracts.

For questions regarding this memo, please contact Greg Buglio at either gregory.buglio@cms.hhs.gov or 410-786-6562.