



To: Issuers Participating in Maryland Health Connection
 From: MHBE Plan Management
 Date: March 1, 2016
 Re: Operational Guidance – 2017 Network Adequacy Metrics Plan Certification Standard

Network Adequacy Metrics: As stated in the Final 2017 Letter to Issuers Seeking to Participate in Maryland Health Connection, issuers are required to report certain quantitative provider network metrics. MHBE will post this information on its consumer website to support Marketplace initiatives and improve informed consumer choice.

These metrics will include:

- a. Average wait time for Primary Care Providers (PCPs) and Mental Health (MH) Providers;
- b. Average driving distance to PCPs and MH Providers;
- c. Average driving time to PCPs and MH Providers;
- d. Percent of PCPs and MH providers in network accepting new patients;
- e. Consumer Assessment of Healthcare Providers and Systems Score;
- f. OPTIONAL: Carriers are encouraged to report metrics for any other specialist categories of the issuer’s choosing; and
- g. OPTIONAL: Carriers are encouraged to report metrics for Substance Use Disorder Providers.

As with other application materials required for plan certification, the issuer reporting deadline for these metrics is July 1, 2016.

Tools & Instructions: MHBE has developed a template set, along with a set of instructions, to assist issuers in delivering these metrics. The *2016 Provider Metrics Sample Template* plays a critical role in determining the provider samples sizes required to derive the Network Adequacy Metrics. The *2016 Network Adequacy Metrics Template* will be used as the reporting sheet for the issuer’s calculated metrics.

Each metric will be described with the following format:

Metric Name	
Sampling Required	(Yes/No)
Instructions for Determining Sample Size	1. Instruction 1 2. Instruction 2 3. Instruction 3
Calculation Methodology	1. Step 1 2. Step 2 3. Step 3
Variables Required	Variables: <ul style="list-style-type: none"> • Variable 1 • Variable 2
Equation	Metric = Equation Variable 1 + Equation Variable 2
Further Manipulation/ Other Factors	1. Instruction 1 2. Instruction 2 3. Instruction 3
Submission Requirement	Row and Column



Assumptions: The accuracy of the issuer's calculated network adequacy metrics is dependent on the accuracy of the issuer's provider data. Issuers should engage in a robust effort to make sure that the provider data utilized to determine their network adequacy metrics are accurate, complete, and up-to-date. MHBE will assume that issuer provider data have undergone validation processes to the best of the issuer's ability.

Issuers with membership of greater than 20,000 members in the individual market are recommended to use claims submissions within the last six months as a method to verify a provider's network participation. Issuers with membership of fewer than 20,000 members in the individual market may use claims submissions within the last six months as well; although claims submissions should not be the sole verification method for such issuers.

Issuers must answer on the *2016 Provider Metrics Sample Template* whether they used any verification strategies to determine whether their provider data is accurate, complete, and up-to-date. These questions may be found on the Network 1 sheet, in cells N3 and N4.

Provider Type Definitions: Both the *2016 Provider Metrics Sample Template* and the *2016 Network Adequacy Metrics Template* identify the provider types to be used in the analysis. Definitions of these provider types are indicated below:

- Primary Care Physicians: Classifications for "Primary Care Physicians" include General Internal Medicine, Family Practitioners, Pediatricians, Geriatricians, Obstetricians/Gynecologists, and other physicians that would bill for the category Primary Care Visit to Treat Illness or Sickness.
- Non-Physician Primary Care Providers: Classifications for "Non-Physician Primary Care Providers" include APRNs that specialize in Primary Care (including Nurse Practitioners, Family Nurse Practitioners, etc.), Physician's Assistants, and other non-physician providers that would bill for the category Primary Care Visit to Treat Illness or Sickness.
- Mental Health – Prescribing Providers: All Mental Health/Behavioral Health Providers that are able to prescribe and monitor medication including, but not limited to, Psychiatrists, Nurse Psychotherapists, etc. that would bill for the categories In-Patient or Out-Patient Mental Health/Behavioral Health Treatment.
- Mental Health – Non-Prescribing Providers: All Mental Health/Behavioral Health Providers that provide therapy, assessment, and counseling including, but not limited to, licensed social workers, licensed professional counselors, psychologists, therapists, etc. that would bill for the categories In-Patient or Out-Patient Mental Health/Behavioral Health Treatment.
- Substance Use Disorder – Prescribing Providers: All Substance Use Disorder Providers that are able to prescribe and monitor medication, and that would bill for the category In-Patient/Out-Patient Substance Use Disorder Treatment.
- Substance Use Disorder – Non-Prescribing Providers: All Substance Use Providers that provide therapy, assessment, and counseling, and that would bill for the category In-Patient/Out-Patient Substance Use Disorder Treatment.



Metric Calculation Methodology: The tables below contain instructions on how to calculate the required metrics. County population density categories were determined using the Medicare Advantage Network Requirement method. County population densities and county population centroids were found using 2010 Maryland County Census data. Issuers will use the definitions in section *Provider Type Definition* to determine provider type populations.

Optional Reporting on Substance Use Disorder Providers: MHBE encourages issuers to report metrics for Substance Use Disorder providers. If the issuer chooses not to report such metrics, an explanation of why the issuer intends not to report this information should be included. MHBE will not publicly share the reported metrics but will use the data holistically to review whether such metrics should be included as reporting requirements or quantitative standards in future years.

Alternate Driving Distance and Driving Time Methodology for Integrated Delivery Systems: Issuers that operate as an integrated delivery system (IDS) will leverage an approach similar to that described in Table 4. IDS issuers will determine a statistically valid sample of their members in each of the counties within their service area using probability sampling methods. MHBE recommends random sampling. IDS Issuers will use the same instructions non-IDS issuers use to determine their Weighted Sample Size for providers. The IDS issuer will use the location of their Major Hub-Medical Centers (or latitudinal and longitudinal coordinate if using the straight-line method) instead of the county population centroid as the starting point. The member residences from the Weighted Sample Size will be the ending points. IDS issuers must select the most reasonable starting location (i.e. nearest Hub Medical Center) for counties that do not have a Major-Hub Medical Center. Average Member Driving Distances will continue to be aggregated according to county population density category. IDS issuers are not required to submit the weighted sample member list.

MHBE Survey Review/Audit of Respondents: Issuers will be required to submit a copy of the survey that will be sent to providers to answer the metric questions in Table 1 and Table 3. Issuers will also be required to submit a spreadsheet with the provider respondent population contact information. No specific format is required for the spreadsheet submission. MHBE will randomly select providers from issuer respondent populations to verify those providers received and submitted the survey.

MHBE Independent Calculation of Driving Distance: MHBE will randomly test an issuer's calculation of the Average Driving Time to determine compliance with the required methodology. If selected, an IDS issuer's calculation of Average Driving Time will be compared against member residence data from the HBX. Issuers must fall within a 10% variance of the MHBE Independent Calculation to pass an audit. Issuers that do not fall within the 10% variance will be required to recalculate, or validate, their calculated distance/time with MHBE.

Table 1.

Average Wait Time for Primary Care Providers (PCPs) and Mental Health (MH) Providers			
Sampling Required	Yes		
Instructions for Determining Sample Population	<p>The issuer will calculate this metric using a statistically valid sample from each applicable provider population (i.e., Primary Care Provider Types as defined/Mental Health Provider Types as defined). This metric will be calculated for each network the issuer offers. Issuers must consider each provider network as an independent pool for sampling purposes. The issuer will use this sample for the <i>Percent in Network Accepting New Patients</i> metric as well.</p> <ol style="list-style-type: none"> Determine the provider population using verified provider data; and Determine the statistically valid sample population using probability sampling methods. MHBE recommends using a random sampling methodology. 		
Calculation Methodology	<ol style="list-style-type: none"> Collect provider information using surveys, practitioner reported information, or other methods. <ol style="list-style-type: none"> For each Primary Care Provider Type in the respondent population, determine the appointment wait time for: <ul style="list-style-type: none"> Well visits (i.e. services that would be filed as a claim under “Preventive Services” with no cost-sharing); and Sick visits (i.e. services that would be filed as a claim under “Primary Care Visit to Treat Illness or Sickness”). For each Mental Health Provider Type in the respondent population, determine the appointment wait time for a visit, including both initial routine care and follow-up routine care appointments. Determine the average appointment wait times for each provider type: <ul style="list-style-type: none"> Sum the provider wait times, for each respective visit type, for all respondents; and Divide the summed wait times by the total number of respondents. Report the Average Appointment Wait Time in Days. Issuers are encouraged report the Appointment Wait Time at the 90th Percentile. 		
Variables Required to Report	<table border="0"> <tr> <td style="vertical-align: top;"> <p>Issuers are required to report:</p> <ul style="list-style-type: none"> N_{PCP}, Total Population for each PCP Type; N_{MH}, Total Population for each MH Provider Type; n_{PCP}, Sample Population for each PCP Type; n_{MH}, Sample Population for each MH Provider Type; </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> n_{PR}, Respondent Population for each PCP Type; n_{MR}, Respondent Population for each MH Provider Type; \bar{x}_{PCPW}, Average Appointment Wait Time PCPs Well Visit (Days); \bar{x}_{PCPS}, Average Appointment Wait Time PCPs Sick Visit (Days); \bar{x}_{MH}, Average Appointment Wait Time MH Providers (Days). </td> </tr> </table>	<p>Issuers are required to report:</p> <ul style="list-style-type: none"> N_{PCP}, Total Population for each PCP Type; N_{MH}, Total Population for each MH Provider Type; n_{PCP}, Sample Population for each PCP Type; n_{MH}, Sample Population for each MH Provider Type; 	<ul style="list-style-type: none"> n_{PR}, Respondent Population for each PCP Type; n_{MR}, Respondent Population for each MH Provider Type; \bar{x}_{PCPW}, Average Appointment Wait Time PCPs Well Visit (Days); \bar{x}_{PCPS}, Average Appointment Wait Time PCPs Sick Visit (Days); \bar{x}_{MH}, Average Appointment Wait Time MH Providers (Days).
<p>Issuers are required to report:</p> <ul style="list-style-type: none"> N_{PCP}, Total Population for each PCP Type; N_{MH}, Total Population for each MH Provider Type; n_{PCP}, Sample Population for each PCP Type; n_{MH}, Sample Population for each MH Provider Type; 	<ul style="list-style-type: none"> n_{PR}, Respondent Population for each PCP Type; n_{MR}, Respondent Population for each MH Provider Type; \bar{x}_{PCPW}, Average Appointment Wait Time PCPs Well Visit (Days); \bar{x}_{PCPS}, Average Appointment Wait Time PCPs Sick Visit (Days); \bar{x}_{MH}, Average Appointment Wait Time MH Providers (Days). 		
Equation	$\bar{x}_1 = \frac{\text{Sum of Appointment Wait Times}_{\text{Visit Type 1}}}{n_{1R}}$		
Further Manipulation/ Other Factors			
Submission Requirement	Columns D and E, “Average Appointment Wait Time” – 2016 Network Adequacy Metrics Template.		

Table 2.

Average Driving Distance and Driving Time to PCPs and MH Providers	
Sampling Required	Yes
Instructions for Determining Sample Size	<p>The issuer will calculate this metric using a statistically valid sample from the applicable provider population (i.e., Primary Care Providers as defined/Mental Health Providers as defined). This metric will be calculated for each network the issuer offers. Issuers must consider each provider network as independent pools for sampling purposes.</p> <ol style="list-style-type: none"> 1. Determine the provider population using verified provider data. 2. Issuers will use the <i>2016 Provider Metrics Sample Template</i> to separate their total PCP and MH Provider practice locations by county and provider type. Issuers may double count providers that practice in multiple counties and providers that practice at multiple locations within the same county (Columns H & I for PCPs, Columns N & O for MH Providers). 3. Issuers will determine the statistically valid sample population size for each county and provider type. Issuers will input this sample size population into the designated “Sample Size” columns in the <i>2016 Provider Metrics Sample Template</i> (Columns J & K for PCPs, Columns P & Q for MH Providers). 4. The <i>2016 Provider Metrics Sample Template</i> will produce the weighted sample size and document it in the designated “Weighted Sample Size” columns (Columns L & M for PCPs, Columns R & S for MH Providers). Issuers will use probability sampling methods to determine the providers in the weighted sample population. MHBE recommends using a random sampling methodology.
Calculation Methodology	<ol style="list-style-type: none"> 1. Determine the Driving Distance for each provider location in each county’s weighted sample size: <ol style="list-style-type: none"> a. Each Driving Distance will use the same coordinate starting point. This starting point is the population centroid for a given county. This information can be found on <i>2016 Provider Metrics Sample Template</i> in columns F & G. This information is presented in latitudinal and longitudinal coordinates; b. Each provider location in the county’s weighted sample size is the ending point for the purposes of calculating distance; c. Issuers may determine either the straight-line geographic distance or the real driving distance using roadways; and d. Issuers using straight-line geographic distance will adjust this distance by multiplying by factor of 1.25.¹ e. Issuers will aggregate provider location driving distances according to county population density category (Column D on the <i>2016 Provider Metrics Sample Template</i>).²

¹ Earlier work has found that average highway distance is about 25 percent greater than straight line distances, and that this difference is very consistent across urban and rural areas. HSR: Health Services Research 40:6, Part I (December 2005)

² The category for each county was determined using the population and population density parameters established by the Office Management and Budget and utilized by the Medicare Advantage Program. Population and population density parameters for each county are derived from 2010 Census Data.

	<p>2. Issuers will calculate the average driving distance to a provider location for each provider type and county population density category:</p> <ol style="list-style-type: none"> The numerator is the sum of driving distances for all provider locations for all counties of the same population density category; and The denominator is the count of all provider locations in the weighted samples. <p>3. Issuers will report the Average Driving Distance in miles. Issuers will round according to standard rounding rules.</p> <p>4. Issuers are encouraged to report Average Driving Distance at the 90th percentile.</p>
Variables Required to Report	<p>Issuers are require to report:</p> <ol style="list-style-type: none"> A completed <i>2016 Provider Metrics Sample Template</i> with as many “Network” worksheets as provider networks; A completed <i>2016 Provider Metrics Sample Template</i> with as many “List of Sample Providers” worksheets as provider networks; Binary responses (Yes/No) for straight-line distance methodology election; \bar{x}_{DC1P1}, <i>Average Driving Distance for each County Category and Provider Type (Miles)</i>; and \bar{x}_{TC1P1}, <i>Average Driving Time for each County Category and Provider Type (Minutes)</i>.
Equation	$\bar{x}_{DC1P1} = \frac{\text{Sum of Driving Distances}_{C1P1}}{\text{Sum of Weighted Samples}_{C1P1}}$ $\bar{x}_{TC1P1} = \bar{x}_{DC1P1} \times \text{Time Factor}_{C1P1}$
Further Manipulation/ Other Factors	<ol style="list-style-type: none"> Issuers using the straight-line method for calculating distance must multiply the driving distance by 1.25 to determine the road-adjusted distance. To determine Average Driving Time issuers should multiply their Average Driving Distance amount by the applicable time factor for the county category.³ Average Driving Time should be reported in minutes.
Submission Requirement	<p>Columns F-I, “Average Driving Distance” – <i>2016 Network Adequacy Metrics Template</i>.</p> <p>Columns J-M, “Average Driving Time” – <i>2016 Network Adequacy Metrics Template</i>.</p>

³ Time factors were determined using conservative ratios between driving distance and driving time standards for each county category as outlined in the DRAFT 2017 Letter to Issuers Participating in FFMs.

Table 3.

Percent of PCPs and MH Providers In Network Accepting New Patients	
Sampling Required	Yes
Instructions for Determining Sample Size	Issuers will use the same sample population used in <i>Average Appointment Wait Time</i> .
Calculation Methodology	<ol style="list-style-type: none"> 1. Collect provider information using surveys, practitioner reported information, or other methods. <ol style="list-style-type: none"> A. For each Primary Care Provider in the respondent population, determine whether the provider is accepting new patients through a binary response (Yes/No); and B. For each Mental Health Provider in the respondent population, determine whether the provider is accepting new patients through a binary response (Yes/No). 2. Determine the percent accepting new patients for each provider type: <ol style="list-style-type: none"> A. Count the total number of “Yes” responses; and B. Divide the summed wait times by the total number of respondents. 3. Report the metric as a percentage.
Variables Required to Report	Issuers are required to report: <ol style="list-style-type: none"> 1. Same variables, as applicable, for <i>Average Appointment Wait Time</i>; 2. P_{PCP}, <i>Percent PCPs Accepting New Patients</i>; and 3. P_{MH}, <i>Percent MH Providers Accepting New Patients</i>.
Equation	$p_1 = \frac{\text{Counts "Yes" Accepting New Patients}}{n_{1R}}$
Other Factors	
Submission Requirement	Column N, “(%) Accepting New Patients” – <i>2016 Network Adequacy Metrics Template</i> .

Table 4

Consumer Assessment of Healthcare Providers and Systems (CAHPS) Score	
Sampling Required	Yes
Instructions for Sampling	Issuers will follow established methods for this metric.
Calculation Methodology	<ol style="list-style-type: none"> 1. Issuers will follow established calculation methods for this metric. 2. Issuers will report this metric for each network/product-type where applicable.
Variables Required to Report	Issuers are required to report: <ol style="list-style-type: none"> 1. <i>Most up-to-date overall score on the CAHPS Health Plan Survey.</i>
Equation	
Further Manipulation/ Other Factors	
Submission Requirement	Column O, "CAHPS Score" – <i>2016 Network Adequacy Metrics Template.</i>