November 6, 2020

Hon. Guy Guzzone, Chair  
Senate Budget and Taxation Committee  
3 West Miller Senate Office Building  
Annapolis, MD 21401

Hon. Maggie McIntosh, Chair  
House Appropriations Committee  
121 House Office Building  
Annapolis, MD 21401


Dear Chairs Guzzone and McIntosh:

Pursuant to the 2020 Joint Chairmen’s Report, p. 102, the Maryland Department of Health Behavioral Health Administration respectfully submits the attached report on potential quality measures that would be available and useful to ensure that Marylanders in PBHS are receiving high-quality specialty behavioral health services in the most appropriate settings.

If you have any questions regarding this report, please contact Director of Governmental Affairs Webster Ye at (410) 767–6480 or webster.ye@maryland.gov.

Sincerely,

Robert R. Neall
Secretary

Enclosure

cc: President Bill Ferguson, Maryland Senate  
Speake Adrienne A. Jones, Maryland House of Delegates  
Webster Ye, Director of Governmental Affairs  
Aliya Jones, M.D., MBA, Deputy Secretary for Behavioral Health  
Sarah Albert, Department of Legislative Services (5 copies)
Quality and Performance Measures in Public Behavioral Health System

2020 Joint Chairmen’s Report, p. 102

Submitted by the Maryland Department of Health Behavioral Health Administration
October, 2020
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I. Background and Introduction

In the 2020 Joint Chairmen’s Report, p. 102, the Senate Budget and Taxation Committee and the House Appropriations Committee identified concerns with growth trends in the Public Behavioral Health System (PBHS) in recent years regarding the appropriateness of the care settings and the quality of care being provided in the PBHS. As a result, the Joint Chairmen of the budget committees have required the Maryland Department of Health (MDH) Behavioral Health Administration (BHA) to submit a report on the potential quality measures that would be available and useful to ensure that Marylanders in the PBHS are receiving high-quality specialty behavioral health services in the most appropriate settings. In response to the budget committees’ request, BHA has detailed its methodology to select potential quality measures; enumerated the quality measures with potential; and highlighted barriers and limitations of the available data affecting the development, implementation, and interpretation of the identified behavioral health quality metrics.

II. Methodology

Measure Selection Rationale. In response to the budget committees’ directive for the identification of behavioral health quality measures that would be useful and available to assess the appropriateness and quality of behavioral health care, BHA sought to identify quality measures that met the following criteria, including measures that:

- are based on nationally identified (tested) behavioral health quality measures or adaptations of those measures, where possible;
- are evidence-based, and efficiently calculated;
- can be reliably collected from a wide variety of behavioral health practice settings;
- are included in current BHA federal and state reporting requirements;
- are derived using behavioral health administrative service claims or other accessible data sources; and
- are clinically relevant, outcome focused, and aligned with BHA quality improvement priorities.

Quality measures selected for this report are primarily derived from behavioral health administrative service claims data. It is important to note that this data does not include Medicare claims, which disproportionately impacts the reporting of service utilization by older adults with behavioral health disorders. Despite this limitation, administrative claims data provides a readily available data source for the development of quality metrics, includes data on the majority of individuals who receive specialty behavioral health service in the Maryland PBHS, and is the primary data source for many national quality measures.

The above selection criteria aid in making the data comparable with national and other state data, limit the burden incurred on service providers by adding new points of data collection, are more readily automated, and are cost effective for the system as they limit more costly primary data collection efforts.
Measure Selection Process. The quality and performance measures included in this report were selected upon review of a comprehensive list of measures found in the current literature as well as reports and recommendations put forth by several agencies. First, a literature scan was conducted using PubMed®1 to identify process and outcome related quality metrics developed to assess the quality and effectiveness of mental health and substance use services. This was followed by a comprehensive review of behavioral health quality measures and measure sets from the following sources, including: the Center for Medicare and Medicaid Services (CMS), the National Quality Forum (NQF), National Committee for Quality Assurance’s (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS), National Quality Measures Clearinghouse (NQMC), the Physicians Consortium for Performance Impact (PCPI), the Center for Quality Assessment and Improvement in Mental Health (CQAIMH), Agency for Health Care Research and Quality (AHRQ), BHA Administrative Services Organization (ASO), and BHA Managing For Results (MFR) required measures.

Measures were identified across a number of behavioral health measure domains, including: service access and availability, utilization, quality and effectiveness, continuity of care, medication adherence, health risks, competitive employment, and criminal justice involvement. Once the comprehensive list of measures was identified, the following process was used to narrow the list to the final measures included in this report:

- A total of 52 measures were selected for further review and consideration based on the criteria outlined above.
- This measures list was further refined and categorized based on the availability and feasibility of the required data collection and measure development specifications. Measures were excluded if there was not a readily available data source or mechanism to accurately capture the data. As noted above, this resulted largely in measures that could be derived from administrative behavioral health service claims data.
- A total of 22 measures (18 measures to recommend; four measures to consider) were then presented to the BHA quality measure working group. This workgroup consisted of 15 data team members, senior management, and programmatic staff who further reviewed the list of measures for feasibility, usefulness, and clinical relevance for the PBHS. The group recommended adaptations to several measures that were presented and identified the final 16 measures for inclusion in the report.

III. Quality and Performance Measures

The quality measures table below include both process and outcome measures related to mental health and substance use services. As noted above, the selected measures cover a number of measure domains, including medication adherence, medication-assisted treatment (MAT) care and follow-up, unplanned behavioral health-related hospital readmissions, follow-

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1 PubMed® is a database of biomedical and life sciences literature citations and abstracts “maintained by the National Center for Biotechnology Information (NCBI), at the U.S. National Library of Medicine (NLM), located at the National Institutes of Health (NIH).” PubMed® is available online at https://pubmed.ncbi.nlm.nih.gov/ (as last visited Sep. 4, 2020).
up after emergency department (ED) visits for a mental health (MH) disorder or substance use disorder (SUD), continuity of pharmacotherapy, initiation and engagement in treatment for individuals with SUD, follow-up after treatment, criminal justice involvement, employment status and tele-health service utilization. The recommended quality measures are presented in the table below.

Table. Behavioral Health Quality Measures for Potential Use in the PBHS

<table>
<thead>
<tr>
<th>Quality Measure</th>
<th>Definition</th>
<th>Measure Goal and Rationale</th>
<th>Measure Population</th>
<th>Data Source</th>
<th>Steward Agency/Other BHA Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Behavioral Health ED Visits</td>
<td>Percent of PBHS MH or SUD service recipients who have three or more behavioral health related ED within the fiscal year.</td>
<td>Decrease. Indicates effectiveness of community based services and care coordination</td>
<td>Child Adolescent Adult</td>
<td>ASO/BHA Claims Data</td>
<td>ASO/BHA MFR Measure</td>
</tr>
<tr>
<td>2 Follow-up After Mental Health Hospitalization</td>
<td>Percent of PBHS mental health inpatient treatment recipients who receive follow-up mental health care within 7 days of discharge.</td>
<td>Increase. Indicates effective care coordination during care transitions</td>
<td>Child Adolescent Adult</td>
<td>ASO/BHA Claims Data</td>
<td>NCQA; ASO/BHA MFR Measure</td>
</tr>
<tr>
<td>3 Follow-up After SUD Residential Treatment</td>
<td>Percent of PBHS Substance Use Disorder (SUD) service recipients who received follow-up treatment within 7 days of discharge from a SUD Residential Treatment facility within the fiscal year.</td>
<td>Increase. Indicates effective care coordination during care transitions</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
<td>MFR Measure</td>
</tr>
<tr>
<td>4 30-day Readmission Following Inpatient Psychiatric Treatment</td>
<td>Percentage of PBHS service recipients readmitted to the same or different mental health inpatient treatment facility within 7 days and 30 days of discharge within the fiscal year; on a rolling 12-month calendar.</td>
<td>Decrease. Indicates effective discharge planning, care coordination and treatment engagement</td>
<td>Child Adolescent Adult</td>
<td>ASO/BHA Claims Data</td>
<td>Adapted from CMS/NQF; ASO/BHA MFR Measure</td>
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<td>5</td>
<td>30-day Readmission Following SUD Residential Treatment</td>
<td>Percent of PBHS SUD service recipients readmitted to the same or different SUD Residential Treatment facility within 7 days and 30 days of discharge within the fiscal year.</td>
<td>Decrease. Indicates effective discharge planning, care coordination and treatment engagement</td>
<td>Adult</td>
<td>ASO/BHA Claims Data MFR Measure</td>
</tr>
<tr>
<td>6</td>
<td>Antidepressant Medication Fill Post Discharge</td>
<td>Percent of PBHS service recipients diagnosed with Major Depression from an inpatient hospitalization and who are prescribed and had filled an antidepressant within 30 days of discharge.</td>
<td>Increase. Indicates treatment effectiveness by measuring adherence to antidepressant medication protocols</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
</tr>
<tr>
<td>7</td>
<td>Antipsychotic Medication Fill Post Discharge</td>
<td>Percentage of PBHS service recipients diagnosed with major depressive disorder (MDD), schizophrenia or bipolar disorder who are prescribed and had filled an antipsychotic medication within 30 days of discharge from a psychiatric inpatient hospitalization.</td>
<td>Increase. Indicates treatment effectiveness by measuring adherence antipsychotic medication protocols</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
</tr>
<tr>
<td>8</td>
<td>Medication Adherence to Antipsychotics (Youth)</td>
<td>Percent of PBHS service recipients diagnosed with first episode psychosis who are prescribed an antipsychotic medication and remain on the medication for 12-months Target: adherence of 80% or greater over a 12-month period.</td>
<td>Increase. Indicates treatment effectiveness for youth by measuring adherence to antipsychotic medication protocols</td>
<td>Adolescent</td>
<td>ASO/BHA Claims Data</td>
</tr>
<tr>
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<td>Definition</td>
<td>Measure Goal and Rationale</td>
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<td>Data Source</td>
<td>Steward Agency/Other BHA Use</td>
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<tr>
<td>9 Medication Adherence to Antipsychotics (Adult)</td>
<td>Percent of PBHS service recipients who are diagnosed with Schizophrenia and prescribed antipsychotic medication and remain on the medication over a 12-month period. <strong>Target:</strong> 80% adherence or greater over a 12-month period.</td>
<td>Increase. Indicates schizophrenia treatment effectiveness by measuring adherence to antipsychotic medication protocols</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
<td>Adapted from HEDIS, ASO/BHA</td>
</tr>
<tr>
<td>10 Participation in MAT</td>
<td>Percent of PBHS recipients receiving MAT services in the current fiscal year.</td>
<td>Increase. Indicates use of MAT to improve Opioid Use Disorder (OUD) outcomes</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
<td>MFR Measure</td>
</tr>
<tr>
<td>11 Opioid Treatment Program (OTP)/MAT Engagement and Retention</td>
<td>Percent of PBHS recipients admitted to OTP/MAT services in fiscal year who are still in care after 30 days over the fiscal year.</td>
<td>Increase. Indicates engagement in MAT</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
<td>Washington Circle/OTP Workgroup</td>
</tr>
<tr>
<td>12 Continuity of Pharmacotherapy for OUD</td>
<td>Percent PBHS adults 18 years of age and older who received pharmacotherapy for opioid use disorder and who have at least 180 days of continuous treatment over a 12-month period.</td>
<td>Increase. Indicates retention in MAT, Leads to improved outcomes</td>
<td>Adult</td>
<td>ASO/BHA Claims Data</td>
<td>CMS</td>
</tr>
<tr>
<td>13 Tobacco Use and Cessation</td>
<td>Percent of MH and SUD PBHS adolescent (11–17) and adult (18–64) outpatient service recipients who report smoking in the current fiscal year.</td>
<td>Decrease. Indicates reduced smoking to improve health</td>
<td>Child/Adolescent/Adult</td>
<td>ASO Data*</td>
<td>MFR Measure</td>
</tr>
<tr>
<td>Quality Measure</td>
<td>Definition</td>
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<td>Criminal Justice Involvement</td>
<td>Percent of individuals with a decrease in arrest 30 days prior to the service request based on the most recent MH or SUD service request in the fiscal year compared to the earliest MH/SUD service request within the same episode of care.</td>
<td>Decrease. Indicates less involvement with the Criminal Justice system</td>
<td>Child Adolescent Adult</td>
<td>ASO Data*</td>
<td>MFR Measure</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Percent of adult (18–64) PBHS service recipients gaining or maintaining competitive employment based on the most recent MH outpatient service request or SUD outpatient service request in the fiscal year compared to the earliest MH or SUD service request within the same episode of care.</td>
<td>Increase. Indicates competitive employment among PBHS service recipients</td>
<td>Adult</td>
<td>ASO Data*</td>
<td>MFR Measure</td>
</tr>
<tr>
<td>Telehealth Services</td>
<td>Percent of individuals receiving outpatient behavioral health services in rural areas via telehealth services.</td>
<td>Increase. Indicates use and effectiveness of telehealth services</td>
<td>Child Adolescent Adult</td>
<td>ASO Data*</td>
<td>MFR Measure</td>
</tr>
</tbody>
</table>

*Note: To be developed by the ASO

IV. Barriers to Collecting Behavioral Health Quality Measures

The development of quality measures for behavioral health has generally lagged behind those in the general physical health care arena. A number of factors contribute to this disparity, including: a lack of a sufficient evidence base to support the development of well-defined and reliable measures, inadequate data infrastructure to effectively capture essential process and outcome data across behavioral health systems and service settings, and lack of a consistent approach to implement behavioral health quality measurement across different behavioral health settings and populations. While a number of behavioral health measures have been developed and endorsed by federal agencies and other national measure groups over the past several years, they tend to (1) focus on (a) specific behavioral health conditions such as
schizophrenia, major depression, or opioid use disorder or (b) limited treatment or care practices (medication assisted treatment (MAT), medication compliance to antipsychotic medication) and (2) often rely on inconsistent, unstandardized, and imprecise data sources.

In addition to these general limitations, barriers for BHA’s data collection include the following:

- **ASO Transition Process.** As part of the transition to the new ASO, three performance measures (Criminal Justice Involvement, Employment Status, and Tobacco Use and Cessation) that were collected previously as part of the service authorization process and the Outcome Management System (OMS) may not be captured moving forward to ensure the Medicaid Program is in compliance with CMS parity requirements. Further, the claims data required for the development of those measures will not be available for analysis while the transition is in process.

- **Change to Voluntary Data Collection.** To comply with CMS behavioral health parity requirements, as noted above, MDH is no longer able to require the collection of data elements that are not essential to the authorization process. Therefore, service recipients may opt out of data collection, including information on client outcomes and social determinants of health, such as living arrangement, homelessness, employment, and criminal justice involvement. This voluntary collection will likely result in some gaps in the data and may limit BHA’s ability to generalize the results for these measures to the entire population of PBHS service recipients.

- **Limitations of Administrative Service Claims Data.** Widely used in the development of national health care quality metrics, the use of administrative service claims data provides a consistent, common source for quality measures, and can save time and resources in data collection and analysis. However, the use of administrative claims data is limited by the information that is available and reliably captured in the claims data, is largely focused on process-oriented service encounter measures, and lacks clinical and patient experience level data. In addition, this data does not include Medicare or private insurance claims, limiting the generalizability of the findings to Medicaid insured and uninsured individuals and potentially underrepresenting some service populations, especially older adults who receive Medicare and access behavioral health services through PBHS funded providers.

V. Conclusion

Measuring the quality of behavioral health care allows for the monitoring and benchmarking of performance, identification of gaps in care, and provides a mechanism to hold service providers accountable for improving the health and well-being of their clients. The measures presented in this report represent a cross section of behavioral health quality measures that are relevant, feasible, and generally applicable to a broad spectrum of the public behavioral health service population and treatment settings. These measures should be viewed as a starting point for
discussions of quality measurement in the PBHS to ensure that Marylanders are receiving high-quality specialty behavioral health services in the most appropriate settings.