

Colorado Medicaid  
Community Mental Health Services Program

**FY 2015–2016 Validation of  
Performance Measures**  
*for*  
**Behavioral Healthcare, Inc.**

April 2016

*This report was produced by Health Services Advisory Group, Inc. for the  
Colorado Department of Health Care Policy & Financing.*



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**ACKNOWLEDGMENTS AND COPYRIGHTS**

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### Validation Overview

The Centers for Medicare & Medicaid Services (CMS) requires that states, through their contracts with managed care organizations (MCOs), measure and report on performance to assess the quality and appropriateness of care and services provided to members. Validation of performance measures is one of three mandatory external quality review (EQR) activities required by the Balanced Budget Act of 1997 (BBA) described at 42 Code of Federal Regulations (CFR) §438.358(b) (2). The purpose of performance measure validation is to ensure that MCOs have sufficient systems and processes in place to provide accurate and complete information for calculating valid performance measure rates according to the specifications required by the state. The state, its agent that is not an MCO, or an external quality review organization (EQRO) can perform this validation. Health Services Advisory Group, Inc. (HSAG), the EQRO for the Colorado Department of Health Care Policy and Financing (the Department), conducted the validation activities as outlined in CMS' publication, *EQR Protocol 2: Validation of Performance Measures Reported by the MCO: A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 1, 2012.<sup>1</sup>

For fiscal year (FY) 2015–2016, the Department contracted with five behavioral health organizations (BHOs) to provide mental health services to Medicaid-eligible recipients. The Department identified a set of performance measures reported by the BHOs for validation for the measurement period of July 1, 2014, through June 30, 2015 (FY 2014–2015). Some of these measures were calculated by the Department using data submitted by the BHOs; other measures were calculated by the BHOs. The measures came from a number of sources, including claims/encounter and enrollment/eligibility data.

<sup>1</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 2: Validation of Performance Measures Reported by the MCO: A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html>.

## Behavioral Healthcare, Inc. Information

Information about **Behavioral Healthcare, Inc. (BHI)** appears in Table 1.

**Table 1—Behavioral Healthcare, Inc. Information**

<b>BHO Name:</b>	Behavioral Healthcare, Inc.
<b>BHO Location:</b>	1290 Chambers Road, Aurora, CO 80011
<b>BHO Site Visit Location:</b>	11100 E. Bethany Drive, Aurora, CO 80014
<b>BHO Contact:</b>	Sam Madden, Quality Improvement Coordinator
<b>Contact Telephone Number:</b>	303.361.8133
<b>Contact Email Address:</b>	smadden@bhiinc.org
<b>Site Visit Date:</b>	January 22, 2016

## Performance Measures for Validation

HSAG validated a set of performance measures that were selected by the Department. These measures represented HEDIS-like measures and measures developed by the Department and BHOs. The measures were calculated on an annual basis. Table 2 lists the performance measure indicators that HSAG validated and identifies who was responsible for calculating the rates. The indicators are numbered as they appear in the scope document.

**Table 2—List of Performance Measure Indicators for Behavioral Healthcare, Inc.**

	<b>Indicator</b>	<b>Calculated by:</b>
<b>1a</b>	<i>Hospital Readmissions Within 7, 30, and 90 Days Post-discharge (non-state and all facilities)</i>	BHO
<b>1b</b>	<i>Hospital Readmissions Within 180 Days (all facilities)</i>	BHO
<b>4</b>	<i>Mental Health Engagement</i>	BHO
<b>7</b>	<i>Initiation and Engagement of Alcohol and Other Drug Dependence Treatment*</i>	BHO
<b>8</b>	<i>Overall Penetration Rates</i>	Department
<b>8</b>	<i>Penetration Rates by Age Group</i>	Department
<b>8</b>	<i>Penetration Rates by Medicaid Eligibility Category</i>	Department
<b>12</b>	<i>Follow-up Appointments Within 7 and 30 Days After Hospital Discharge for a Mental Health Condition</i>	BHO
<b>13</b>	<i>Members With Physical Health Well-care Visits</i>	Department
<b>14</b>	<i>Inpatient Utilization (per 1,000 members)</i>	BHO
<b>15</b>	<i>Emergency Department Utilization for Mental Health Condition</i>	BHO
<b>16</b>	<i>Antidepressant Medication Management—Acute and Continuation Phases*</i>	BHO

\*For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.

## Description of Validation Activities

### Preaudit Strategy

HSAG conducted the validation activities as outlined in the CMS Performance Measure Validation Protocol. The Department provided a list of the indicators selected for validation, the indicator definitions (Appendix A) and the indicator specifications. The Department and BHOs worked together to develop this document, which was first used for performance measure validation purposes in FY 2007–2008. The Department and BHOs worked on additional improvements of these measures and the specification document in the Department’s Behavioral Health Quality Improvement Committee meeting, and a revised specification document was used for FY 2015–2016 reporting purposes.

HSAG prepared a documentation request, which included the Information Systems Capabilities Assessment Tool (ISCAT), Appendix V of the CMS Performance Measure Validation Protocol. In collaboration with the Department, HSAG customized the ISCAT to collect the necessary data consistent with Colorado’s mental health service delivery model. The ISCAT was forwarded to the BHOs with a timetable for completion and instructions for submission. When requested, HSAG fielded ISCAT-related questions directly from the BHOs during the pre-on-site phase.

HSAG prepared an agenda for each BHO, describing all on-site visit activities and indicating the type of staff needed for each session. The agendas were then forwarded to the respective BHOs prior to the on-site visit. When requested, HSAG conducted pre-on-site conference calls with the BHOs to discuss any outstanding ISCAT questions and on-site visit activities.

### Validation Team

The HSAG performance measure validation (PMV) team was assembled based on the full complement of skills required for the validation and requirements of the particular BHO. Some team members, including the lead auditor, participated in the on-site meetings; others conducted their work at HSAG offices. Table 3 describes each team member’s role and expertise.

**Table 3—Validation Team**

Name and Role	Skills and Expertise
Mariyah Badani, JD, MBA, CHCA <i>Director, Audits/State &amp; Corporate Services</i>	Management of audit department, multiple years of auditing experience, certified HEDIS compliance auditor, data integration, systems review, and analysis.
Timea Jonas, CHCA <i>Audit Specialist; Lead Auditor</i>	Claims processing and auditing experience; healthcare fraud analysis experience.
Tammy Gianfrancisco <i>Project Leader</i>	Project coordination and communication.

## Technical Methods of Data Collection and Analysis

The CMS Performance Measure Validation Protocol identifies key types of data that should be reviewed as part of the validation process. The list below provides information on how HSAG conducted an analysis of these data:

- ◆ *Information Systems Capabilities Assessment Tools (ISCATs)* were requested and received from the BHOs and the Department. Upon receipt by HSAG, the ISCATs underwent a cursory review to ensure each section was complete and all applicable attachments were present. HSAG then thoroughly reviewed all documentation, noting any potential issues, concerns, and items that needed additional clarification.
- ◆ *Source code (programming language) for performance measures* was requested and was submitted by the Department and the BHOs. HSAG completed line-by-line review of the supplied source code to ensure compliance with the State-defined performance indicator specifications. HSAG identified areas of deviation from the specifications, evaluating the impact to the indicator and assessing the degree of bias (if any).
- ◆ *Performance measure reports for FY 2015–2016* were reviewed by the validation team. The team also reviewed previous reports to assess trending patterns and rate reasonability.
- ◆ *Supporting documentation* included any documentation that provided additional information to complete the validation process, including policies and procedures, file layouts, system flow diagrams, system log files, and data collection process descriptions. HSAG reviewed all supporting documentation, with issues or clarifications flagged for follow-up.

## On-site Activities

HSAG conducted on-site visits with the Department and the BHOs. HSAG collected information using several methods including interviews, system demonstration, review of data output files, primary source verification, observation of data processing, and review of data reports. The on-site visit activities are described as follows.

- ◆ **Opening session**—included introductions of the validation team and key BHO and Department staff involved in the performance measure validation activities. Discussion during the session covered the review purpose, the required documentation, basic meeting logistics, and queries to be performed.
- ◆ **Evaluation of system compliance**—included a review of the information systems, focusing on the processing of claims, encounter, consumer, and provider data. HSAG performed primary source verification on a random sample of consumers, validating enrollment and encounter data for a given date of service within both the membership and claims/encounter data systems. Additionally, the review evaluated the processes used to collect and calculate performance measure data, including accurate numerator and denominator identification, and algorithmic compliance to determine if rate calculations were performed correctly.
- ◆ **Review of ISCAT and supportive documentation**—included a review of the processes used to collect, store, validate, and report performance measure data. This session was designed to be interactive with key BHO and Department staff. The goal of this session was to obtain a

complete picture of the degree of compliance with written documentation. HSAG used interviews to confirm findings from the documentation review, expand or clarify outstanding issues, and ascertain that written policies and procedures were used and followed in daily practice.

- ◆ **Overview of data integration and control procedures**—included discussion and observation of source code logic, a review of how all data sources were combined, and how the analytic file used for reporting the performance indicators was generated. HSAG performed primary source verification to further validate the output files. HSAG also reviewed any supporting documentation provided for data integration. This session addressed data control and security procedures as well.
- ◆ **Closing conference**—provided a summary of preliminary findings based on the review of the ISCAT and the on-site visit, and reviewed the documentation requirements for any post-on-site visit activities.

HSAG conducted several interviews with key **BHI** and Department staff members involved with any aspect of performance indicator reporting. Table 4 displays a list of **BHI** key interviewees.

**Table 4—List of Behavioral Healthcare, Inc. Participants**

Name	Title
Julie Salazar	Sr. Analyst III
Jeni Sargent	Director, Configuration and Enrollment
Kristin Brown	Coordinator, BH Operations
Michelle Tomsche	Operations Director, Behavioral Health Services, Colorado Access
Anne Martin	BH Decision Support Analyst, Colorado Access
Cynthia Jean	Business Analyst Manager, Colorado Access
Sam Madden	Coordinator, Quality Improvement
Jeff George	Director, Tech Services
Lisa Brody	Chief Operation Officer
Clara E. Cabanis	Director, Quality Improvement
Shelly J. Spalding	Chief Executive Officer
Robert Bremer	Executive Director
Julie McNamara	Director, System Performance, Colorado Access
Eric Manu	EDI Analyst, Colorado Access
Kevin Lawrence	Supervisor, Claims Authorization and Appeals
List of Department Observers	
Name	Title
Jerry Ware	Quality and Compliance Specialist

## Data Integration, Data Control, and Performance Measure Documentation

Several aspects involved in the calculation of performance indicators are crucial to the validation process. These include data integration, data control, and documentation of performance measure calculations. Each of the sections below describes the validation processes used and the validation findings. For more detailed information, please see Appendix B.

### Data Integration

Accurate data integration is essential to calculating valid performance measures. The steps used to combine various data sources, including encounter data and eligibility data, must be carefully controlled and validated. HSAG validated the data integration process used by the Department and the BHO. This validation included a comparison of source data to warehouse files and a review of file consolidations or extracts, data integration documentation, source code, production activity logs, and linking mechanisms. By evaluating linking mechanisms, HSAG was able to determine how different data sources (i.e., claims data and membership data) interacted with one another and how certain elements were consolidated readily and used efficiently. Overall, HSAG determined that the data integration processes used by the Department and the BHO were:

- Acceptable
- Not acceptable

### Data Control

The organizational infrastructure of **BHI** must support all necessary information systems. Each quality assurance practice and backup procedure must be sound to ensure timely and accurate processing of data, as well as provide data protection in the event of a disaster. HSAG validated the data control processes used by **BHI**, which included a review of disaster recovery procedures, data backup protocols, and related policies and procedures. Overall, HSAG determined that the data control processes in place at **BHI** were:

- Acceptable
- Not acceptable

### Performance Measure Documentation

Complete and sufficient documentation is necessary to support validation activities. While interviews and system demonstrations provided supplementary information, the majority of the validation review findings were based on documentation provided by **BHI** and the Department. HSAG reviewed all related documentation, which included the completed ISCAT, job logs, and computer programming code, output files, work flow diagrams, narrative descriptions of performance measure calculations, and other related documentation. Overall, HSAG determined that the documentation of performance measure data collection and calculations by **BHI** and the Department was:

- Acceptable
- Not acceptable



## Validation Results

HSAG identified overall strengths and areas for improvement for **BHI**. In addition, HSAG evaluated **BHI**'s data systems for the processing of each type of data used for reporting the performance indicators. General findings are indicated below.

### Strengths

As in prior years, **BHI** continued to have an excellent relationship with Colorado Access, the BHO's administrative service organization (ASO). Although COA went through organizational changes in the past year, all staff members had extensive experience and knowledge of processes related to behavioral health measures and their reporting requirements. The BHO and the Department continued to conduct monthly meetings addressing any issues with the 837 file submission. As a result of this, **BHI**'s file rejection rate was less than 10 percent for the current measurement year. **BHI** was able to continue to maintain its performance level throughout the year.

### Areas for Improvement

During the primary source verification process, a discrepancy was discovered in the numerator-positive case selections for Indicator #16 (*Antidepressant Medication Management—Acute and Continuation Phases*). The BHO may have considered the difference in service dates rather than days of supplied medication. The staff members were very responsive, investigated the issue, and resubmitted the corrected data prior to generation of this report.

In addition, **BHI** should continue to work with the Department and the other BHOs to clarify the definition of "New Members" in the scope document for Indicator #4.

### Eligibility Data System Findings

HSAG identified no concerns with how **BHI** received and processed enrollment data. Colorado Access continued to obtain the monthly eligibility full and daily change/update file from the Department via secure File Transfer Protocol (FTP) site in a flat file format. Eligibility information was loaded into a data scrubber where several business rules were applied to ensure that only accurate enrollment information was loaded into QNXT, the BHO's transactional system. Providers were able to log into the BHO's system and obtain eligibility information for members. Each member received a unique identification number. For measure production, enrollment information was reconciled with the monthly full file. In case of any discrepancy, real-time eligibility verification was available via the Department's portal.

## Claims/Encounter Data System Findings

HSAG identified no issues or concerns with how **BHI** received, processed, or reported claims and encounter data. No major system or process changes were noted for the current reporting year.

**BHI** used QNXT, operated by TriZetto, as its claims processing system. Providers submitted claims electronically or on paper. Electronic claims were submitted to COA in a Health Insurance Portability and Accountability Act of 1996 (HIPAA)-compliant 837 format. These files were loaded into QNXT via TriZetto's FTP site. Paper claims were scanned and posted on TriZetto's FTP site where, prior to being loaded into QNXT, they were converted into the 837 format using Optical Character Recognition (OCR) process. The affiliated Community Mental Health Center (CMHC) submitted encounter data via FTP. The files were then loaded into QNXT. Nightly, TriZetto audited 2.5 percent of auto-adjudicated and 5 percent of manually-adjudicated claims. ABC added an additional validation to further ensure data accuracy by auditing 7 percent of claims previously verified by TriZetto. ABC performed audits on 100 percent of facility claims exceeding the \$10,000 threshold and professional claims exceeding the \$5,000 threshold. In addition to claims/encounter data, **BHI** received pharmacy and inpatient data from the Department via FTP and loaded them all into the data warehouse.

The BHO submitted 837 and flat files to the Department and received error files, within a few days of submission.

**BHI** had adequate validation and reconciliation processes in place at each point where data transfer took place, to ensure data completeness and data accuracy.

The BHO had sufficient oversight of its processing vendor, TriZetto. Monthly meetings were in place to address any upcoming issues and collaboratively discuss solutions.

**BHI** used the same processes as last year to manage data flow and calculate performance indicator rates. All cases were identified based on the description provided in the *BHO-HCPF Annual Performance Measure Scope Document*. Several verification processes in place ensured that only accurate data were used for measure reporting.

## Actions Taken as a Result of the Previous Year's Recommendations

**BHI** worked closely with the Department to resolve discrepancies with the flat files not matching 837 files in the Department's Medicaid Management Information System (MMIS). Accordingly, the BHO received less than 10 percent file rejection for the current reporting period.

**Performance Indicator Specific Findings and Recommendations**

Based on all validation activities, HSAG determined results for each performance indicator. The CMS Performance Measure Validation Protocol identifies three possible validation finding designations for performance indicators, which are defined in Table 5.

**Table 5—Designation Categories for Performance Indicators**

<b>Report (R)</b>	Indicator was compliant with the Department’s specifications and the rate can be reported.
<b>Not Reported (NR)</b>	This designation is assigned to indicators for which (1) the BHO rate was materially biased or (2) the BHO was not required to report.
<b>No Benefit (NB)</b>	Indicator was not reported because the BHO did not offer the benefit required by the indicator.

According to the protocol, the validation finding for each indicator is determined by the magnitude of the errors detected for the audit elements, not by the number of audit elements determined to be not compliant based on the review findings. Consequently, an error for a single audit element may result in a designation of NR because the impact of the error biased the reported performance indicator by more than 5 percentage points. Conversely, it is also possible that several audit element errors may have little impact on the reported rate, and the measure could be given a designation of R.

Table 6 through Table 17 below display the review findings and key recommendations for **BHI** for each validated performance measure. For more detailed information, please see Appendix D.

**Table 6—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 1a: Hospital Readmissions Within 7, 30, and 90 Days Post-discharge**

Findings
<p><b>BHI</b> calculated this rate. Programming code used for calculation of this rate was reviewed by HSAG. No concerns were identified. The result of the source code review was provided to the BHO prior to the on-site visit.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ Data monitoring for rate calculation is crucial. <b>BHI</b> should continue its monitoring process to ensure accuracy for the next measurement year.</li> </ul>

**Table 7—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 1b: Hospital Readmissions Within 180 Days (all facilities)**

Findings
<p><b>BHI</b> calculated this rate. Programming code used for calculation of this rate was reviewed by HSAG. No concerns were identified. The result of the source code review was provided to the BHO prior to the on-site visit.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ Data monitoring for rate calculation is crucial. <b>BHI</b> should continue its monitoring process to ensure accuracy for the next measurement year.</li> </ul>

**Table 8—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 4: Mental Health Engagement**

Findings
<p><b>BHI</b> calculated this rate. Programming code used for calculation of this rate was reviewed by HSAG. No concerns were identified. The result of the source code review was provided to the BHO prior to the on-site visit.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ Data monitoring for rate calculation is crucial. <b>BHI</b> should continue its monitoring process to ensure accuracy for the next measurement year.</li> </ul>

**Table 9—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 7: *Initiation and Engagement of Alcohol and Other Drug Dependence Treatment\****

Findings
<p><b>BHI</b> calculated this rate. HSAG reviewed the programming code used for calculation of this performance indicator and identified no concerns. Source code review result was provided to the BHO.</p> <p>HSAG performed primary source verification on-site and determined both that no discrepancies were identified and that <b>BHI</b> is fully capable of reporting this measure.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ For the next measurement year, <b>BHI</b> should continue its data monitoring process to ensure accuracy and completeness.</li> </ul>

\* For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.

**Table 10—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 8: *Overall Penetration Rates***

Findings
<p>This rate was calculated by the Department based on encounter data received from <b>BHI</b>. Encounter data were submitted to the Department in a flat file format. Based on HSAG’s interviews with key staff members from the Department and <b>BHI</b>, it was determined that all processes used to collect data met standards.</p> <p>Prior to the site visit, HSAG reviewed the programming code and the member month figures used by the Department to calculate penetration rates and identified no issues or concerns.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ <b>BHI</b> should continue to inspect accuracy and completeness of the encounter/claims data received from the CMHCs and providers to ensure that only accurate and complete data are submitted to the Department for measure calculation.</li> </ul>

**Table 11—Key Review Findings for Behavioral Healthcare, Inc.  
Performance Indicator 8: Penetration Rates by Age Group**

Findings
<p>This rate was calculated by the Department based on encounter data received from <b>BHI</b>. Encounter data were submitted to the Department in a flat file format. Based on HSAG’s interviews with key staff members from the Department and <b>BHI</b>, it was determined that all processes used to collect data met standards.</p> <p>Prior to the site visit, HSAG reviewed the programming code and the member month figures used by the Department to calculate penetration rates and identified no issues or concerns.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ <b>BHI</b> should continue to inspect accuracy and completeness of the encounter/claims data received from the CMHCs and providers to ensure that only accurate and complete data are submitted to the Department for measure calculation.</li> </ul>

**Table 12—Key Review Findings for Behavioral Healthcare, Inc.  
Performance Indicator 8: Penetration Rates by Medicaid Eligibility Category**

Findings
<p>This rate was calculated by the Department based on encounter data received from <b>BHI</b>. Encounter data were submitted to the Department in a flat file format. Based on HSAG’s interviews with key staff members from the Department and <b>BHI</b>, it was determined that all processes used to collect data met standards.</p> <p>Prior to the site visit, HSAG reviewed the programming code and the member month figures used by the Department to calculate penetration rates and identified no issues or concerns.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ <b>BHI</b> should continue to inspect accuracy and completeness of the encounter/claims data received from the CMHCs and providers to ensure that only accurate and complete data are submitted to the Department for measure calculation.</li> </ul>

**Table 13—Key Review Findings for Behavioral Healthcare, Inc.  
Performance Indicator 12: *Follow-up Appointments Within 7 and 30 Days After Hospital Discharge for a Mental Health Condition***

Findings
<p><b>BHI</b> calculated this rate. Programming code used for calculation of this rate was reviewed by HSAG. No concerns were identified. The result of the source code review was provided to the BHO prior to the on-site visit.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ Data monitoring for rate calculation is crucial. <b>BHI</b> should continue its monitoring process to ensure accuracy for the next measurement year.</li> </ul>

**Table 14—Key Review Findings for Behavioral Healthcare, Inc.  
Performance Indicator 13: *Members with Physical Health Well-care Visits***

Findings
<p>This rate was calculated by the Department based on encounter data received from <b>BHI</b>. Encounter data were submitted to the Department in a flat file format. Based on HSAG’s interviews with key staff members from the Department and <b>BHI</b>, it was determined that all processes used to collect data met standards.</p> <p>Prior to the site visit, HSAG reviewed the programming code and the member month figures used by the Department to calculate penetration rates and identified no issues or concerns.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ <b>BHI</b> should continue to inspect accuracy and completeness of the encounter/claims data received from the CMHCs and providers to ensure that only accurate and complete data are submitted to the Department for measure calculation.</li> </ul>

**Table 15—Key Review Findings for Behavioral Healthcare, Inc.  
Performance Indicator 14: *Inpatient Utilization (per 1,000 members)***

Findings
<p><b>BHI</b> calculated this rate. Programming code used for calculation of this rate was reviewed by HSAG. No concerns were identified. The result of the source code review was provided to the BHO prior to the on-site visit.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ Data monitoring for rate calculation is crucial. <b>BHI</b> should continue its monitoring process to ensure accuracy for the next measurement year.</li> </ul>

**Table 16—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 15: *Emergency Department Utilization for Mental Health Condition***

Findings
<p><b>BHI</b> calculated this rate. Programming code used for calculation of this rate was reviewed by HSAG. No concerns were identified. The result of the source code review was provided to the BHO prior to the on-site visit.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ Data monitoring for rate calculation is crucial. <b>BHI</b> should continue its monitoring process to ensure accuracy for the next measurement year.</li> </ul>

**Table 17—Key Review Findings for Behavioral Healthcare, Inc.**  
**Performance Indicator 16: *Antidepressant Medication Management—Acute and Continuation Phases\****

Findings
<p><b>BHI</b> calculated this rate. HSAG reviewed the programming code used for calculation of this performance indicator and identified no concerns. Source code review result was provided to the BHO. During the primary source verification process, a discrepancy was discovered in the numerator-positive case selections for Indicator #16 (<i>Antidepressant Medication Management—Acute and Continuation Phases</i>). The BHO may have considered difference in service dates rather than supplied days of the medication. The staff members were very responsive, investigated the issue, and found this to be an isolated case. The corrected data were resubmitted prior to the generation of this report.</p> <p>HSAG performed primary source verification on-site and identified no discrepancies. It was determined that <b>BHI</b> is fully capable of reporting this measure.</p>
Key Recommendations
<ul style="list-style-type: none"> <li>◆ For the next measurement year, to ensure accuracy for measure reporting, <b>BHI</b> should continue its pharmacy data verification process.</li> </ul>

\* For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.



Table 18 lists the validation result for each performance measure indicator for **BHI**.

**Table 18—Summary of Results**

Performance Indicator		Validation Result
<b>1a</b>	<i>Hospital Readmissions Within 7, 30, and 90 Days Post-discharge (non-state and all facilities)</i>	<b>Report</b>
<b>1b</b>	<i>Hospital Readmissions Within 180 Days (all facilities)</i>	<b>Report</b>
<b>4</b>	<i>Mental Health Engagement</i>	<b>Report</b>
<b>7</b>	<i>Initiation and Engagement of Alcohol and Other Drug Dependence Treatment*</i>	<b>Report</b>
<b>8</b>	<i>Overall Penetration Rates</i>	<b>Report</b>
<b>8</b>	<i>Penetration Rates by Age Category</i>	<b>Report</b>
<b>8</b>	<i>Penetration Rates by Medicaid Eligibility Category</i>	<b>Report</b>
<b>12</b>	<i>Follow-up Appointments Within 7 and 30 Days After Hospital Discharge for a Mental Health Condition</i>	<b>Report</b>
<b>13</b>	<i>Members With Physical Health Well-care Visits</i>	<b>Report</b>
<b>14</b>	<i>Inpatient Utilization (per 1,000 members)</i>	<b>Report</b>
<b>15</b>	<i>Emergency Department Utilization for Mental Health Condition</i>	<b>Report</b>
<b>17</b>	<i>Antidepressant Medication Management—Acute and Continuation Phases*</i>	<b>Report</b>

\* For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.


*Appendix A.* **BHO Performance Measure Definitions**  
for Behavioral Healthcare, Inc.

**Indicators**

Indicator		Calculated by:
1a	Hospital Readmissions Within 7, 30, and 90 Days Post-discharge (non-state and all facilities)	BHOs
1b	Hospital Readmissions Within 180 Days (all facilities)	BHOs
4	Mental Health Engagement	BHOs
7	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment*	BHOs
8	Overall Penetration Rates	Department
8	Penetration Rates by Age Group	Department
8	Penetration Rates by Medicaid Eligibility Category	Department
12	Follow-up Appointments Within 7 and 30 Days After Hospital Discharge for a Mental Health Condition	BHOs
13	Members With Physical Health Well-care Visits	Department
14	Inpatient Utilization (per 1,000 members)	BHOs
15	Emergency Department Utilization for Mental Health Condition	BHOs
16	Antidepressant Medication Management—Acute and Continuation Phases*	BHOs

\*For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.

The Department collaborated with the BHOs to create a scope document that serves as the specifications for the performance measures being validated. Following is the *FY 2015 BHO-HCPF Annual Performance Measures Scope Document, Created: March 5, 2015, Last Revised: September 23, 2015*. Please note that the complete scope document is not listed in this appendix. The table of contents and corresponding page numbers have been modified for use in this report; however, the verbiage for the measures validated under the scope of the review is reproduced in its entirety.



# BHO-HCPF Annual Performance Measures Scope Document

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## *Fiscal Year 2015 (FY15)*

This document includes the details for calculations of the BHO-HCPF Annual Performance Measures for the five Colorado Behavioral Health Organizations (BHOs) according to the Behavioral Health Services Program Contract. Some of the measures are calculated by HCPF using eligibility data and encounter data submitted by the BHOs, other measures are calculated by the BHOs. With the exception of Penetration Rates, all measures are calculated using paid claims/encounters data.

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*Created: March 5, 2015*

*Last Revised: September 23, 2015*

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# Definitions

**24 Hour Treatment Facility:** A residential facility that has 24-hr professional staffing and a program of treatment services and includes PRTF and TRCCFs. Does not include Nursing Facilities or Alternative Care Facilities (ACF) defined as an assisted living residence licensed by the State to provide alternative care services and protective oversight to Medicaid clients.

**Age Category:** Unless otherwise specified, aged categories are based on HEDIS age categories: 0-12 (Child), 13-17 (Adolescent), 18-64 (Adult), and 65+ (Older Adult). Age category determination will be based upon the client’s age on the date of service for all performance indicators except for inpatient hospitalization and penetration rates. For inpatient hospitalization, age category determination will be based upon the client’s age on the date of discharge. For penetration rates, age category determination will be based upon the age of the client on the last day of the fiscal year.

**Covered Mental Health Diagnoses:** The BHO Colorado Medicaid Community Mental Health Services Program contract specifies that certain mental health diagnoses are covered. These specific diagnoses can be found below or in the BHO Medicaid BHO contract Exhibit D, Part 1. Only those services that cover mental health, with the exception of services related to Assessment, Prevention, and Crisis procedure coding as a diagnosis may have yet to be ascribed, will be included in the calculations of performance measures.

Covered Mental Health Diagnoses Codes			
295.00-298.99	300.00-301.99	307.10-309.99	311-314.99

**Covered Substance Use Disorder Diagnosis:** Starting January 1, 2014, the BHO Colorado Medicaid Community Mental Health Services Program contract specifies that certain substance use disorder diagnoses be covered. These diagnoses can be found below or in the Medicaid BHO Contract in Exhibit D Part 2. For purposes of the performance measures calculations, the following diagnosis codes are acceptable.

Substance Use Disorder Covered Diagnoses
291; 291.1; 291.3; 291.5; 291.81; 291.89; 291.9; 292; 292.11-.12; 292.81; 292.83-.85; 292.89; 292.9
303; 304; 305; 303.0; 303.9; 304.0-304.6; 305.0; 305.1; 305.2; 305.3; 305.4; 305.5; 305.7; 305.9
303.00-303.03; 303.90; 304.00-.03; 304.10-.13; 304.20-.23; 304.30-.33; 304.40-.43; 304.50-.53; 304.60-.63
305.00-03; 305.10-.13; 305.20-.23; 305.30-.33; 305.40-.43; 305.50-.53; 305.60-.63; 305.70-.73; 305.90-.93

**Fiscal Year (FY) or State Fiscal Year (SFY):** Based on the state fiscal year July 1-June 30 of the measurement year

**HCPE:** The Department of Health Care Policy and Financing for the State of Colorado.

**HEDIS:** Healthcare Effectiveness Data and Information Set

**Hospital Admit:** An admission to a hospital (non-residential) for an episode of treatment for a covered mental health diagnosis. There can be multiple admits during the specified fiscal year period. The admission must result in a paid claim for the hospital episode, except where the admission is from a State Hospital for ages 21-64.

**Hospital Discharge:** A discharge from a hospital (non-residential) for an episode of treatment for a covered mental health diagnosis that does not result in a re-hospitalization within 24 hrs (transfer). There can be multiple discharges during the specified fiscal year period. The discharge must result in a paid claim for the hospital episode, except where the discharge is from a State Hospital for ages 21-64. Adult members on the list of discharges from the State hospital who are not eligible at the time of hospital admission should be included in the measure if eligibility is discontinued 1 day before the admission date. Adult members on the list of discharges from the State hospital who are eligible at the time of hospital admission, but who lose eligibility during the hospital stay should also remain on the hospital discharge list.

**Hospitalization:** Revenue codes for hospitalization are 100-219 or 0100-0219

**Members:** Individuals eligible for Medicaid assigned to a specific BHO. Membership is calculated by the number of member months during a 12-month period divided by 12, which gives equivalent members or the average health plan enrollment during the 12-month reporting period.

**Member Months:** Member months are determined by counting number of clients with an enrollment span covering at least one day in the month, i.e., total member months per month as: enrollment begin date  $\leq$  last day of the month AND enrollment end date  $\geq$  first day of the month. Thus, if the client is enrolled for the full month the member month is equal to one and if enrolled for less than the full month the member month is a fraction between 0 and 1.

**Penetration Rate:** The number of members who received at least one service (paid or denied claim) divided by the number of FTE enrolled in the Medicaid mental health managed care program.

**Per 1000 members:** A measure based on total eligible members per 1000.

**Quarter:** Based on fiscal year quarters (Jul-Sep, Oct-Dec, Jan-Mar, Apr-Jun)

# Indicator 1: Hospital Readmissions

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## Indicator 1a: Hospital Readmissions, 7, 30 and 90 Days

**Description:** Proportion of BHO member discharges from a hospital episode for treatment of a covered mental health diagnosis and readmitted for another hospital episode for treatment of a covered mental health diagnosis within 7, 30, 90 days by age group and overall (recidivism rates). Age for this indicator is determined at first hospital discharge. Two indicators are submitted:

- **Non-State Hospital:** Recidivism rates for member discharges from a non-State hospital episode for treatment of a covered mental health disorder during the specific fiscal year, July 1 through June 30.
- **All hospital:** Recidivism rates for member discharges from all hospital episodes for a covered mental health disorder during the specific fiscal year, July 1 through June 30.

**Denominator:** Total number of BHO member discharges during the reporting period. The population is based on discharges (e.g., one member can have multiple discharges).

- **Non-State Hospital:** Total number of member discharges from a non-State hospital during the specified fiscal year, July 1 through June 30
- **All Hospitals:** Total number of member discharges from all hospitals during the specified fiscal year, July 1 through June 30

**Numerator:** Number of BHO member discharges with an admission within 7, 30, and 90 days of the discharge, reported cumulatively.

- **Non-State Hospital:** Total number of member discharges from a non-State hospital, during the specified fiscal year, July 1 through June 30, and then admitted to any hospital (non-state or state) 7, 30, and 90 days after the discharge.
- **All Hospitals:** Total number of Member discharges from all hospitals, during the specified fiscal year, July 1 through June 30, and then admitted to all hospitals 7, 30, and 90 days after the discharge.

**Data Source:** *Denominator:* Number of member discharges, from private hospitals and State hospital, for ages through 20 years and 65+, provided by each BHO based on paid claims in the BHO transaction system. Number of discharges from the State hospital system, ages 21 through 64 years, is provided by HCPF. *Numerator:* Admissions from non-state hospitals and State hospital, for ages through 20 years and 65+, provided by each BHO based on paid claims in the BHO transaction system. Admissions from the State hospital system, ages 21 through 64 years, are provided by the HCPF.

**Calculation of Measure:** BHOs, with some data provided by HCPF

**Ratios:** Child 7 day readmit/Non-state Child discharges; Child 30 day readmit/Non-state Child discharges; Child 90 day readmit/Non-state Child discharges; Child 7 day readmit/All Hospital Child discharges; Child 30 day readmit/All Hospital Child Discharges; Child 90 day readmit/All Hospital Child discharges; Adolescent 7 day readmit/Non-state Adolescent discharges; Adolescent 30 day readmit/Non-state Adolescent discharges; Adolescent 90 day readmit/Non-state Adolescent discharges; Adolescent 7 day readmit/All Hospital Adolescent discharges; Adolescent 30 day readmit/All Hospital Adolescent

Discharges; Adolescent 90 day readmit/All Hospital Adolescent discharges; Adult 7 day readmit/Non-state Adult discharges; Adult 30 day readmit/Non-state Adult discharges; Adult 90 day readmit/Non-state Adult discharges; Adult 7 day readmit/All Hospital Adult discharges; Adult 30 day readmit/All Hospital Adult Discharges; Adult 90 day readmit/All Hospital Adult discharges; Older Adult 7 day readmit/Non-state Older Adult discharges; Older Adult 30 day readmit/Non-state Older Adult discharges; Older Adult 90 day readmit/Non-state Older Adult discharges; Older Adult 7 day readmit/All Hospital Older Adult discharges; Older Adult 30 day readmit/All Hospital Older Adult Discharges; Older Adult 90 day readmit/All Hospital Older Adult discharges; All ages 7 day readmits/All ages All hospital discharges; All 30 day readmits/All ages all hospital discharges; All 90 day readmits/All ages hospital discharges; All 7 day readmits/Non-state hospital discharges; All 30 day readmits/Non-state hospital discharges; All 90 day discharges/Non-state hospital discharges

**Benchmark:** Weighted average of all BHOs.

## Indicator 1b: Hospital Readmissions, 180 days

**Description:** Proportion of BHO member admitted from a hospital episode for treatment of a covered mental health diagnosis with a previous discharge for another hospital episode for treatment of a covered mental health diagnosis in the past 180 days by age group and overall (recidivism rates). Age for this indicator is determined at last hospital admission. One indicator is submitted: (note: non-state hospital is not calculated for 1b)

- **All hospital:** Recidivism rates for member discharges from all hospital episodes for a covered mental health disorder during the specific fiscal year, July 1 through June 30.

**Denominator:** Total number of BHO member admissions during the reporting period. The population is based on admissions (e.g., one member can have multiple admissions).

- **All Hospitals:** Total number of member admissions from all hospitals during the specified fiscal year, July 1 through June 30

**Numerator:** Number of BHO member admissions with a discharge within 180 days prior to the admission.

- **All Hospitals:** Total number of Member discharges from all hospitals, during the specified fiscal year, July 1 through June 30, with a discharge within 180 days prior to the admission.

**Data Source:** *Denominator:* Number of member admissions, from private hospitals and State hospital, for ages through 20 years and 65+, provided by each BHO based on paid claims in the BHO transaction system. Number of admissions from the State hospital system, ages 21 through 64 years, is provided by HCPF. *Numerator:* Admissions from non-state hospitals and State hospital, for ages through 20 years and 65+, provided by each BHO based on paid claims in the BHO transaction system. Admissions from the State hospital system, ages 21 through 64 years, are provided by the HCPF.

**Calculation of Measure:** BHOs, with some data provided by HCPF

**Ratios:** Child 180 day readmit/All Hospital; Adolescent 180 day readmit/All Hospital; Adult 180 day readmit/All Hospital; Older Adult 180 day readmit/All Hospital

**Benchmark:** Weighted average of all BHOs.



## Indicator 4: Mental Health Engagement

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**Description:** The percentage of new members diagnosed with a covered mental health diagnosis (see “definitions”, page 2) who were engaged by the behavioral health organization, as defined below:

- New members who received at least four engagement services within 45 days of the initial visit or episode. The initial visit may be counted as the first engagement service.

**Definitions:**

**Intake Period:** July 1, 2014 to May 16, 2015

**Intake Date:** Used to capture new episodes the intake date is the earliest visit during the intake period with one of the selected covered diagnosis, identified by the following codes:

- CPT – 90791 & 90792

**Denominator:**

**Step 1:** Identify all members with an intake date

**Step 2:** Calculate continuous enrollment. Members must be continuously enrolled without any enrollment gaps from the intake date through 45 days after the intake date.

**Numerator:** Four or more engagements (see table below for engagement codes) within 45 days after the intake date. The initial visit on the date of intake may count as one engagement service. Services can occur on the same day.

The intent of this measure is to ensure members receive ongoing engagement within the first 45 days of an initial visit. Therefore, engagement services for monthly supported housing (H0044) may only count as one service during the 45-day period, however, the “per day” supported housing (H0043) can be counted multiple times within the 45 day period.

**Examples:**

- A member receiving two monthly supported housing services (H0044) in the 45-day period should count as one service.
- A member receiving two supported housing services (H0043) in the 45-day period may count as two services.

**Data Source:** BHO claims/encounter systems

**Calculation of Measure:** BHOs

**Ratios:** Reporting is the percentage of members who received four or more services within the 45 days from the intake period. Rates are reported by age category.

**Benchmark:** Weighted average of all BHOs

Numerator Codes to Identify Engagement Services	
CPT	HCPCS
90791-90792; 90832-90834; 90836-90840 90846-90847; 90849; 90853; 90875-90876 90887; 96101-96103; 96116; 96118-96120 96372; 97535; 97537; 99201-99205; 99212-99215; 99211; 99304-99310; 99324-99328 99334-99337; 99341-99345; 99347-99350 99441-99443	G0176-G0177; H0001-H0002; H0004-H0006; H0020; H0031-H0034 H0036-H0040; H0043; H0044; H2000-H2001; H2011-H2012; H2014-H2018; H2021-H2027; H2030-H2033; M0064; S5150-S5151; S9445; S9453-S9454; S9480; S9485; T1016-T1017

# Indicator 7: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

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**Description:** The percentage of adolescent and adult members with a new episode of alcohol or other drug (AOD) dependence who received the following.

- **7a) Initiation of AOD Treatment.** The percentage of members who initiate treatment through an outpatient visit or intensive outpatient encounter within 14 days of the diagnosis.
- **7b) Engagement of AOD Treatment.** The percentage of members who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.

**Definitions:**

**Intake Period:** July 1, 2014 to May 16, 2015

**Intake Date:** Used to capture new episodes, the intake date is the earliest date of service during the intake period for one of the following:

- An outpatient visit or intensive outpatient visit with a diagnosis of AOD (*use date of service to determine the intake date*)
- A detoxification visit (*see below for intake date*)

**Detoxification Notes:** An episode of detoxification is determined by consecutive days of detox codes from the same provider. For a detoxification visit, use the last date of the detox episode to determine the intake date.

**General Notes:** For members with more than one episode of AOD, use the first episode.

**Negative Diagnosis History:** A period of 60 days (2 months) before the intake date when the member had no claims/ encounters with a diagnosis of AOD dependence. For detoxification count 60 days back from the first date of the detox episode.

**Denominator:**

**Step 1:** Identify all members with an intake date

**Step 2:** Exclude members with a negative diagnosis history

**Step 3:** Calculate continuous enrollment. Members must be continuously enrolled for 60 days (2 months) before the intake date through 44 days after the intake date, with no gaps.

**Numerator:**

**7a) Initiation of AOD Treatment:** Initiation of AOD treatment through an outpatient visit or intensive outpatient encounter within 14 days of diagnosis.

- If the initial service was an outpatient, intensive outpatient, or detoxification visit the member must have an outpatient visit or intensive outpatient encounter with a diagnosis of AOD, within 14 days of the intake date (inclusive).

**Notes:** Do not count events that include inpatient detoxification or detoxification codes (see table below) when identifying initiation of treatment.

**7b) Engagement of AOD Treatment:** Initiation of AOD treatment and two or more outpatient visits or intensive outpatient encounters with any AOD diagnosis within 30 days after the date of the initiation encounter (inclusive). Multiple engagement visits may occur on the same day.

**Notes:** Do not count events that include inpatient detoxification or detoxification codes (see table below) when identifying engagement of AOD treatment.

**Data Source:** BHO claims/encounter systems

**Calculation of Measure:** BHOs

**Ratios:** Report two age groups (13-17 years & 18+ years), and a total rate

**Benchmark:** HEDIS and all BHOs

\*Note: The specification presented here for the Initiation & Engagement of AOD Treatment performance indicator is closely based upon HEDIS specifications.

<b>Codes to Identify an Outpatient or Intensive Outpatient Visit</b>				
<b>HCPCS</b>			<b>ICD9PCS</b>	
G0155, G0176, G0177, G0396, G0397, G0409, G0410, G0411, G0443, G0463, H0001, H0002, H0004, H0005, H0007, H0015, H0016, H0020, H0022, H0031, H0034, H0035, H0036, H0037, H0039, H0040, H2000, H2001, H2010, H2011, H2012, H2013, H2014, H2015, H2016, H2017, H2018, H2019, H2020, H2035, H2036, M0064, S0201, S9480, S9484, S9485, T1006, T1012, T1015			<b>WITH</b>	Diagnosis of AOD (see below)
<b>CPT</b>			<b>ICD9PCS</b>	
98960-98962, 99078, 99202-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99408-99412, 99510			<b>WITH</b>	Diagnosis of AOD (see below)
<b>UBREV</b>			<b>ICD9PCS</b>	
0510, 0513, 0515-1517, 0519-0523, 0526-0529, 0900, 0902-0907, 0911-0919, 0944, 0945, 0982, 0983			<b>WITH</b>	Diagnosis of AOD (see below)
<b>CPT</b>		<b>POS</b>		<b>ICD9PCS</b>
90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90875, 90876	<b>WITH</b>	03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 33, 49, 50, 52, 53, 57, 71, 72	<b>AND</b>	Diagnosis of AOD (see below)
<b>CPT</b>		<b>POS</b>		<b>ICD9PCS</b>
99221-99223, 99231-99233, 99238, 99239, 99251-99255	<b>WITH</b>	52, 53	<b>AND</b>	Diagnosis of AOD (see below)
<b>Codes to Identify Detoxification</b>				
<b>HCPCS</b>				
S3005, T1007, T1019, T1023				
<b>Codes to Identify AOD</b>				
<b>ICD9PCS</b>				
<b>Diagnosis of AOD</b>	291.00, 291.10, 291.20, 291.30, 291.40, 291.50, 291.81, 291.82, 291.89, 291.90, 303.00-303.02, 303.90-303.92, 304.00-304.02, 304.10-304.12, 304.20-304.22, 304.30-304.32, 304.40-304.42, 304.50-304.52, 304.60-304.62, 304.70-304.72, 304.80-304.82, 304.90-304.92, 305.00-305.02, 305.20-305.22, 305.30-305.32, 305.40-305.42, 305.50-305.52, 305.60-305.62, 305.70-305.72, 305.80-305.82, 305.90-305.92, 535.30, 535.31, 571.1			
<b>AOD Procedure</b>	94.61, 94.63, 94.64, 94.66, 94.67, 94.69			

## Indicator 8: Penetration Rates

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**Description:** Percent BHO Members with one contact (paid or denied) in a specified fiscal year (12-month period) by HEDIS age group, Medicaid eligibility category (**refer to the table below**), race (**refer to the table below**), and service category (**refer to the table below for HEDIS specs and additional place of service (POS) and service codes.**)

- Medicaid eligibility category is the eligibility category on the member's most recent Medicaid eligibility span during the fiscal year.
- Race/ethnic group is the race category on the member's most recent Medicaid eligibility span during the fiscal year.
- Service category is defined any paid or denied MH service grouped as inpatient, intensive outpatient/partial hospital, and ambulatory care in a specified fiscal year 12-month period. POS category 53 will be excluded for the intensive outpatient and partial hospitalization service category.
- Mental health managed care enrollment spans with at least one day of enrollment during the fiscal year are analyzed.
- All enrollment spans identified as: enrollment begin date  $\leq$  the last date of the fiscal year (6/30) AND enrollment end date  $\geq$  the first date of the fiscal year (7/1).
- Member months are determined by counting number of clients with an enrollment span covering at least one day in the month, i.e., total member months per month as: enrollment begin date  $\leq$  last day of the month AND enrollment end date  $\geq$  first day of the month. Thus, if the client is enrolled for the full month the member month is equal to one and if enrolled for less than the full month the member month is a fraction between 0 and 1.

**Notes:** The Data Analysis Section tailors data to specific internal and external customer needs that are not met through existing reporting. Thus, calculations may differ from existing published figures due to several factors that may include, but are not limited to: the specificity of the request, retroactivity in eligibility determination, claims processing and dollar allocation differences between MMIS and COFRS.

**Denominator:** Number of FTE Enrollees

**Numerator:** Members with any MH service in the specified fiscal year (12-month period) in each age group, Medicaid eligibility category, race/ethnic group, and by service category grouped as inpatient, intensive outpatient/partial hospitalization, and ambulatory care.

**Data Source:** BHO claims/encounter file (both paid and denied claims/encounters will be used).

**Calculation of Measure:** HCPF (by Overall, HEDIS age, eligibility category, cultural/ethnic [% total missing])

**Benchmark:** Overall BHO

**Medicaid Eligibility Categories**

Medicaid Eligibility Category is determined by the member's most recent Medicaid eligibility span during the fiscal year.

Eligibility Type Code	Description
001	AND/AB-SSI
002	BC CHILDREN
003	BCCP—WOMEN BREAST & CERVICAL CAN
004	BUYIN: Working Adult Disabled
005	FOSTER CARE
006	OAP-A
007	OAP-B-SSI
008	MAGI ADULTS
020	BUYIN: CHILDREN W/DISABILITIES
030	MAGI PARENTS/CARETAKERS
031	MAGI CHILDREN
032	MAGI PREGNANT

**Race / Ethnicity Categories**

Medicaid Race Category is determined by the member's most recent Medicaid eligibility span during the fiscal year.

Race Code	Description
1	SPANISH AMERICAN
2	OTHER – WHITE
3	BLACK
4	AMERICAN INDIAN
5	ASIAN
6	OTHER
7	UNKNOWN
8	NATV HAWAIIAN OTH PACIFIC ISL

**Penetration Rates by Service Category**

**Description:** The number and percentage of members receiving the following mental health services during July 1 and June 30 of the fiscal year.

- Any service
- Inpatient
- Intensive outpatient or partial hospitalization
- Outpatient or ED
- Substance Use Disorder

**Calculations**

<b>Counts</b>	Members who received inpatient, intensive outpatient, partial hospitalization, and outpatient and ED mental health services in each column. Count members only once in each column, regardless of number of visits  Count members in the Any Services column for any service during the measurement year is defined any paid or denied MH service grouped as inpatient, intensive outpatient/partial hospital, and ambulatory care in a specified fiscal year 12-month period. POS category 53 will be excluded for the intensive outpatient and partial hospitalization service category
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<p><b>Age</b></p>	<p>Members should be reported in the respective age category as of the last date of the fiscal year</p>
<p><b>Denominator</b></p>	<ol style="list-style-type: none"> <li>1. Mental health managed care enrollment spans with at least one day of enrollment during the fiscal year are pulled from the DSS. The data are pulled after the end of the prior fiscal year thus allowing for retroactive enrollment to be captured</li> <li>2. The enrollment spans are converted to a number of days enrolled by taking the enrollment end date minus the enrollment begin date plus one. The days are then summed and divided by 365 (366 in leap years). This creates a member year or FTE calculation</li> <li>3. Each client's age group, race, and eligibility type are determined using the most recent data stored in MMIS client demographic and eligibility records</li> </ol>
<p><b>Numerator</b></p>	<ol style="list-style-type: none"> <li>1. Encounter data submitted by the BHOs are analyzed in the Colorado Medicaid decision support system (DSS)</li> <li>2. The encounters are grouped by Medicaid managed care mental health provider (BHO) number, and the number of unique client IDs are summed to obtain the number of clients served</li> <li>3. For unique client IDs by age, race, and eligibility type the client's demographic information is pulled and then joined to the encounter information, by Medicaid client ID, so that each BHO encounter is associated with an age group, race code and eligibility type</li> </ol>
<p><b>Member Months</b></p>	<p>Report all member months during the measurement year for members with the benefit. Refer to Specific Instructions for Use of Services Tables. Because some organizations may offer different benefits for inpatient and outpatient mental health services, denominators in the columns of the member months table may vary. The denominator in the Any column should include all members with any mental health benefit. Member months are determined by counting number of clients with an enrollment span covering at least one day in the month, i.e., total member months per month as: enrollment begin date &lt;= last day of the month AND enrollment end date &gt;= first day of the month. Thus, if the client is enrolled for the full month the member month is equal to one and if enrolled for less than the full month the member month is a fraction between 0 and 1.</p>
<p><b>Substance Use Disorder</b></p>	<p>Client receiving SUD treatment will be counted in the overall BHO Penetration rate. In addition, Clients receiving SUD treatment will be shown separately in the breakout by service category.</p> <ul style="list-style-type: none"> <li>• Include all encounters with an approved SUD diagnosis</li> <li>• <b>291.XX, 292.XX, 303.XX, 304.XX, 305.XX</b></li> </ul> <p>Also include encounters with covered SUD procedure code</p> <ul style="list-style-type: none"> <li>• <b>H0001, H0004, H0005, H0006, H0020, H0038</b></li> <li>• <b>S3005, S9445, T1007, T1019, T1023</b></li> </ul>



<b>Inpatient</b>	<p>Includes inpatient care at either a hospital or treatment facility with a covered mental health diagnosis as the principal diagnosis:</p> <ul style="list-style-type: none"> <li>• 295.00-298.99</li> <li>• 300.00-301.99</li> <li>• 307.00-309.99</li> <li>• 311.00-314.99</li> </ul> <p>One of the following criteria should be used to identify inpatient services:</p> <ul style="list-style-type: none"> <li>• An Inpatient Facility code in conjunction with a covered mental health diagnosis or</li> <li>• DRGs (Table MPT-B)</li> </ul> <p>Includes discharges associated with residential care and rehabilitation</p>
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**Codes to Identify Inpatient Service**

<b>Inpatient Facility Codes</b>	100, 101, 110, 114, 124, 134, 144, 154, 204
<b>Sub-Acute Codes</b>	0919
<b>ATU Codes</b>	190, H2013, H0018AT, H0017
<b>RTC Codes</b>	0191, 0192, 0193, H0018, H0019,

**Table MPT-B Codes to Identify Inpatient Services**

<b>MS-DRG</b>	876, 880-887
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**Codes to Identify Intensive Outpatient and Partial Hospitalization Services:**

HCPCS	UB Revenue	
<i>Visits identified by the following HCPCS, UB Revenue, and CPT/POS codes may be with a mental health or non-mental health practitioner (the organization does not need to determine practitioner type).</i>		
H0035, H2001, H2012, S9480	0905, 0907, 0912, 0913, 0906	
CPT	POS	
90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838, 90840, 90847, 90849, 90853, 90870, 90875, 90876	<b>WITH</b>	52
<i>Visits identified by the following CPT/POS codes must be with a mental health practitioner.</i>		
99221-99223, 99231-99233, 99234-99236, 99238, 99239, 99251-99255, 99201-99205, 99211-99215, 99217-99219, 99242-99245, 99304-99310, 99315-99316, 99318, 99324-99328, 99334-99337, 99341-99345, 99347-99350, 99366-99368, 99441-99443	<b>WITH</b>	52

<b>Codes to Identify Outpatient and ED Services: Additional BHO codes &amp; POS</b>		
<b>CPT</b>	<b>HCPCS</b>	<b>UB Revenue</b>
<i>Visits identified by the following CPT, HCPCS, UB Revenue and CPT/POS codes may be with a mental health or non-mental health practitioner (the organization does not need to determine practitioner type).</i>		
90832, 90834, 90837, 90839, 90887, 96101-96103, , 96116, 96118-20,	G0176, G0177, H0002, H0004, H0023, H0025, H0031- H0034, H0036- H0040, H0043, H0044, H0045, H1011, H2000, H2011, H2012, H2014-H2018, H2021-H2026, H2027, H2030-H2032, H2033, M0064, S5150, S5151, S9453, S9454, S9485, T1005, T1016, T1017	0513, 0900-0904, 0911, 0914-0919, 0762, 0769, 045x
<b>CPT</b>	<b>POS</b>	
90791, 90792, 90785, 90846, 90847, 90849, 90853, 90870, 90875, 90876	<b>WITH</b>	03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 23, 33, 49, 50, 53*, 71, 72, 19, 26, 32, 34, 41, 99
<b>CPT</b>	<b>UB Revenue</b>	
<i>Visits identified by the following CPT and UB Revenue codes must be with a mental health practitioner.</i>		
96372, 97535, 97537, 98966-98968, 99201-99205, 99211-99215, 99217-99220, 99224-99226, 99241-99245, 99281-99285, 99341-99345, 99347-99350,	045x, 0510, 0515-0517, 0519,-0523, 0526-0529, 0762, 0981-0983	

\*POS 53 identifies visits that occur in an outpatient, intensive outpatient, or partial hospitalization setting. If the organization elects to use POS 53 for reporting, it must have a system to confirm the visit was in an outpatient setting.

Note: The specifications presented here for the Penetration Rates by Service Category performance indicator is closely based upon HEDIS specifications.

# Indicator 12: Follow-up appointments within 7 and 30 days after hospital discharge for a mental health condition

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**Description:** The percentage of member discharges from an inpatient hospital episode for treatment of a covered mental health diagnosis to the community or a non-24-hour treatment facility and were seen on an outpatient basis (excludes case management) with a mental health provider by age group and overall within 7 or 30 days (follow-up rates). Two indicators are provided: 1) **Non-State:** Follow-up rates for member discharges from a non-State hospital episode for treatment of a covered mental health diagnosis during the specific fiscal year, July 1 through June 30) **All hospital:** Follow-up rates for member discharges from all hospital episodes for a covered mental health diagnosis during the specific fiscal year, July 1 through June 30.

**Denominator:** The population based on discharges during the specified fiscal year July 1 through June 30 (can have multiple discharges for the same individual). Discharges for the whole fiscal year are calculated because the use of 90 day run out data provides the time to collect 30 day follow-up information.

**Non-state Hospital:** All discharges from a non-state hospital during the specified fiscal year.

**All Hospitals:** All discharges from any inpatient facility for the specified fiscal year.

**Numerator:** Total number of discharges with an outpatient service (see table below) within 7 and 30 days (the 30 days includes the 7-day number also). For each denominator event (discharge), the follow-up visit must occur after the applicable discharge. An outpatient visit on the date of discharge should be included in the measure. See codes in table below for follow-up visit codes allowed.

**Non-state Hospital:** All discharges from a non-state hospital during the specified fiscal year with an outpatient service within 7 and 30 days.

**All Hospitals:** All discharges from any inpatient facility for a specified fiscal year with an outpatient service within 7 and 30 days.

**Data Source:** Denominator: Number of Member discharges, from non-State hospitals, ages 6-20 and 65+, provided by each BHO based on paid claims in the BHO transaction system. Number of discharges from the State hospital system, ages 21 through 64 years, will be provided by the State. Numerator: An outpatient visit, intensive outpatient encounter or partial hospitalization provided by each BHO based on paid claims in the BHO transaction system.

**Calculation of Measure:** BHO

**Benchmark:** HEDIS and all BHOS

<b>Description</b>	
<p>The percentage of discharges for members 6-20 years of age and 21-64, and 65+ who were hospitalized for treatment of a covered mental health diagnosis and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner. Two rates for each age group are reported.</p> <ol style="list-style-type: none"> <li>1. The percentage of members who received follow-up within 30 days of discharge</li> <li>2. The percentage of members who received follow-up within 7 days of discharge</li> </ol>	
<b>Eligible Population</b>	
<b>Ages</b>	Two age categories are identified, ages 6-20, 21-64, and 65+
<b>Continuous Enrollment</b>	Date of discharge through 30 days after discharge.
<b>Allowable Gap</b>	No gap in enrollment except for State hospital stays (ages 22-64) which allow gaps at 1 day prior to admission through 1 day after discharge.
<b>Event / Diagnosis</b>	Discharged from an acute inpatient setting (including acute care psychiatric facilities) with a covered mental health diagnosis during July1 and June 30 of the fiscal year. The denominator for this measure is based on discharges, not members. Include all discharges for members who have more than one discharge during July1 and June 30 of the fiscal year.
<b>Mental health readmission or direct transfer</b>	<p>If readmission or direct transfer to an acute facility follows the discharge for any covered mental health diagnosis within the 30-day follow-up period, count only the readmission discharge or the discharge from the facility to which the member was transferred. Although re-hospitalization might not be for a selected mental health diagnosis, it is probably for a related condition.</p> <p>In some cases, data associated with member transfers from inpatient care to less acute 24-hour care that are initiated by the Department of Youth Corrections, the Department of Human Services, or similar organizations are not available to the BHO. In these cases, an affected member may be included in the denominator, even though the transfer prevents a follow-up visit from occurring. Thus, the lack of available data reflecting these transfers will result in a lower percentage of completed follow-up visits for the BHO. Exclude both the initial discharge and the readmission/direct transfer discharge if the readmission/direct transfer discharge occurs after June 30 of the fiscal year. Exclude discharges followed by readmission or direct transfer to a <i>non-acute facility</i> for any covered mental health diagnosis within the 30-day follow-up period. These discharges are excluded from the measure because readmission or transfer may prevent an outpatient follow-up visit from taking place. Refer to the following table for codes to identify non-acute care.</p>
<b>Exclusion</b>	Because residential treatment for Foster Care members is paid under fee-for-service, the BHOs cannot easily determine if a Foster Care member was discharged to residential treatment. Therefore, prior to official rate reporting, the HCPF Business Analysis Section will forward each BHO a list of foster care members who were discharged from an inpatient setting to a residential treatment facility, in order to assist the BHOs in removing these members from this measure.

Codes to Identify Non-Acute Care				
Description	HCPCS	UB Revenue	UB Type of Bill	POS
Hospice		0115, 0125, 0135, 0145, 0155, 0650, 0656, 0658, 0659	81x, 82x	34
SNF		019x	21x, 22x	31, 32
Hospital transitional care, swing bed or rehabilitation			18x, 28x	
Rehabilitation		0118, 0128, 0138, 0148, 0158		
Respite		0655		
Intermediate care facility				54
Residential substance abuse treatment facility		1002		55
Psychiatric residential treatment center	T2048, H0017-H0019	1001		56
Comprehensive inpatient rehabilitation facility				61

Other non-acute care facilities that do not use the UB Revenue or type of bill codes for billing (e.g. ICF, SNF)

**Administrative Specification**

<b>Denominator</b>	The eligible population.
<b>Numerator: 30-day follow-up</b>	An outpatient visit, intensive outpatient encounter or partial hospitalization with a mental health practitioner within 30 days after discharge. Include outpatient visits, intensive outpatient encounters or partial hospitalizations that occur on the date of discharge. Refer to the following table for appropriate codes.
<b>Numerator: 7-day follow-up</b>	An outpatient visit, intensive outpatient encounter or partial hospitalization with a mental health practitioner within 7 days after discharge. Include outpatient visits, intensive outpatient encounters or partial hospitalizations that occur on the date of discharge. Refer to the following table for appropriate codes.

**Codes to Identify Visits**

CPT	HCPCS
<i>Follow-up visits identified by the following CPT or HCPCS codes must be with a mental health practitioner.</i>	
, 99201-99205, 99211-99215, 99217-99220, 99242-99245, 99341-99345, 99347-99350, 90839	G0176, G0177, H0002, H0004, H0031, H0034-H0037, H0039, H0040, H2000, H2001, H2011, H2022, H2014-H2019, M0064, S9480, S9485

CPT		POS
<i>Follow-up visits identified by the following CPT/POS codes must be with a mental health practitioner.</i>		
90847, 90849, 90853, , 90870, 90875, 90876, 90791, 90792, 90832, 90834, 90837, 90791, 90792	<b>WITH</b>	03, 04, 05, 07, 11, 12, 13, 14, 15, 16, 20, 22, 33, 49, 50, 52, 53, 71, 72
99221-99223, 99231-99233, 99238, 99239, 99251-99255	<b>WITH</b>	52, 53
<b>UB Revenue</b>		
<i>The organization does not need to determine practitioner type for follow-up visits identified by the following UB Revenue codes.</i>		
0513, 0900-0905, 0907, 0911-0917, 0919		
<i>Visits identified by the following Revenue codes must be with a mental health practitioner or in conjunction with any covered diagnosis code.</i>		
0510, 0515-0517, 0519-0523, 0526-0529, 0982, 0983		

\*Note: The specification presented here for the Follow up Post Discharge performance indicator is closely based upon HEDIS specifications.

# Indicator 13: Members with physical health well-care visits

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**Description:** The total number of Members who received outpatient mental health treatment during the measurement period and also had a qualifying physical healthcare visit during the measurement period

**Denominator:** Total number of unduplicated members who had at least one BHO outpatient service claim/encounter during the measurement period. Members must be Medicaid eligible and enrolled at least 10 months with the same BHO during the 12-month measurement period (Outpatient services are defined using the same code criteria as the Penetration Rates performance measure (Indicator 8) Outpatient category excluding ED services).

**Numerator:** Total number of members in the denominator with at least one preventive or ambulatory medical visit as defined using the service codes in the table below during the measurement period, excluding those services provided by rendering provider type codes identified in the table below.

**Data Source:** The encounter/claims files (BHO, MCO, Fee for Service) for the fiscal year, including paid claims, provided by HCPF

**Calculation of Measure:** HCPF

**Ratios:** Rates are reported by age group (0-17; 18+). Report the percentage of members who received a BHO service and a qualifying physical health visit during the fiscal year.

**Benchmark:** Overall BHO

<b>Preventative or Ambulatory Medical Visits Table AAP-A: Codes to Identify Preventive/Ambulatory Health Services (HEDIS)</b>				
<b>Description</b>	<b>CPT</b>	<b>HCPCS</b>	<b>ICD-9-CM Diagnosis</b>	<b>UB Revenue</b>
Office or other outpatient services	99201-99205, 99211-99215, 99241-99245	T1015		0510-0519, 0520-0529, 0982, 0983
Home Services	99341-99345, 99347-99350			
Nursing Facility Care	99304-99310, 99315, 99316, 99318			
Domiciliary, Rest Home or Custodial Care Services	99324-99328, 99334-99337,			
Preventative Medicine	99381-99387, 99391-99397, 99401-99404, 99411, 99412, 99420, 99429	G0402, G0438, G0439, G0463		
Ophthalmology and Optometry	92002, 92004, 92012, 92014	S0620, S0621		
General Medical Examination			V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9	
<b>Rendering Provider Type Code Exclusions</b>				
<b>Rendering Provider Type Code</b>	<b>Rendering Provider Type Description</b>			
<b>06</b>	Podiatrist			
<b>11</b>	Case Manager			
<b>27</b>	Speech Therapist			
<b>12</b>	Independent Laboratory			



# Indicator 14: Inpatient Utilization

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**Description:** The total number of BHO member discharges from a hospital episode for treatment of a covered mental health diagnosis per 1000 members, by age group (see “definitions”, page 2) and total population. The discharge must occur in the period of measurement. Two indicators are provided: 1) Number of member discharges from a non-State hospital and 2) Number of member discharges from all hospitals (non-State and State hospitals). Age for this indicator is determined at hospital discharge. Please note: For members transferred from one hospital to another within 24 hours, only one discharge should be counted and it should be attributed to the hospital with the final discharge.

**Denominator:** Total number of members during the specified fiscal year (12-month period) per HEDIS age group.

**Numerator:** All discharges from a hospital episode for treatment of a covered mental health diagnosis per HEDIS age group

**Non-State Hospitals:** All discharges from a non-State hospital episode for treatment of a covered mental health diagnosis during the specific fiscal year, July 1 through June 30.

**All Hospitals:** All discharges from a hospital episode for treatment of a covered mental health diagnosis during the specific fiscal year, July 1 through June 30.

**Data Source:** *Denominator:* Members by BHO provided by HCPF. *Numerator:* Discharge dates from non-State hospitals and State hospital, for ages through 20 years and 65+, provided by each BHO based on paid claims in the BHO transaction system. Discharge dates from the State hospital system, ages 21 through 64 years, will be provided by the State.

**Calculation of Measure:** BHO; Calculation: Numerator (non-state hospital)/Denominator x 1000;  
Numerator (all hospital)/Denominator x 1000

See “definitions”, page 3 for revenue codes for hospitalization

**Benchmark:** HEDIS for all hospital and Overall BHOs for all hospital and non-State hospital

# Indicator 15: Emergency Department Utilization for mental health condition

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**Description:** Number of BHO Member emergency room visits for a covered behavioral health diagnosis (include mental health and substance use diagnoses found on page 2) per 1,000 Members by age group and overall for the specified fiscal year 12-month period. For this measure, include only paid encounters. Age for this indicator is determined on date of service.

**Denominator:** Total number of Members during the specified fiscal year (12-month period).

**Numerator:** ED visits that don't result in an inpatient admission within 24 hours of the day of the ED visit. ED visit codes include CPT 99281-99285 and 99291-99292 and revenue code 45x.

**Data Source:** Denominator: HCPF; Numerator: BHO encounter claim file.

**Calculation of Measure:** BHO; Calculation: Numerator/Denominator x 1,000

**Benchmark:** Overall BHO

# Indicator 16: Antidepressant medication management acute and continuation phases

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**Description:** Percent of members 18 years of age and older with a diagnosis of major depression, treated with antidepressant medication and who remained on an antidepressant medication treatment. Two rates are reported:

- *Effective Acute Phase Treatment.* The percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).
- *Effective Continuation Phase Treatment.* The percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

Refer to the table below for specific criteria on calculating this measure.

**Definitions:**

**Intake Period:** The 12-month window starts on April 1, 2014 and ends on March 31, 2015 with a run out to Sept 30, 2015

**Index Prescription Start Date:** The earliest prescription dispensing date for an antidepressant medication during the Intake Period.

**Negative Medication History:** A period of 105 days prior to the IPSD when the member had no pharmacy claims for either new or refill prescriptions for an antidepressant medication (Table AMM-C).

**Treatment Days:**

- *Effective Acute Phase Treatment:* the actual number of days covered with prescriptions within the specified 84-day measurement interval.
- *Effective Continuation Phase Treatment:* the actual number of days covered with prescriptions within the 180-day measurement interval.

**Denominator:** Members 18 years and older who were diagnosed with major depressive disorder and treated with antidepressant medication.

**Numerator:** The number of members in the denominator who remained on antidepressant medication treatment for 84 days (12 weeks) for acute phase treatment and 180 days (6 months) for continuation phase treatment.

**Data Source:** HCPF quarterly pharmacy file; BHO encounter data

**Calculation of Measure:** BHOs

**Benchmark:** Weighted average of BHOs and HEDIS

<b>Eligible Population</b>	
<b>Product Lines</b>	Medicaid
<b>Ages</b>	18 years and older as of June 30 of the measurement year.
<b>Continuous Enrollment</b>	105 days prior to the IPSD through 114 days after the IPSD.
<b>Allowable Gap</b>	One gap in enrollment of up to 45 days. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
<b>Anchor date</b>	IPSD.
<b>Benefits</b>	Medical, pharmacy (HCPF)
<b>Event/diagnosis</b>	<p>The organization should follow the steps below to identify the eligible population, which should be used for both rates.</p> <p><b>Step 1:</b> Determine the IPSD. Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period.</p> <p><b>Step 2:</b> Exclude members who did not have a diagnosis of major depression in an inpatient, outpatient, ED, intensive outpatient, or partial hospitalization setting during the 60 days prior to the IPSD (inclusive) through 60 days after the IPSD (inclusive). Members who meet the following criteria remain in the eligible population:</p> <ul style="list-style-type: none"> <li>• An outpatient visit, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria <ul style="list-style-type: none"> <li>○ AMM Stand Alone Visits Value Set with Major Depression Value Set</li> <li>○ AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set</li> </ul> </li> <li>• An ED visit (ED Value Set) with any diagnosis of Major Depression (Major Depression Value Set)</li> <li>• An inpatient (acute or non-acute) encounter with any diagnosis of major depression (Major Depression Value Set)</li> </ul> <p>For inpatient (acute or non-acute) encounter, use the date of discharge. For direct transfer, use the discharge date from the facility where the member was transferred.</p> <p><b>Step 3:</b> Test for Negative Medication History. Exclude members who filled a prescription for an antidepressant medication 105 days prior to the IPSD.</p> <p><b>Step 4:</b> Calculate continuous enrollment. Members should be continuously enrolled for 105 days prior to the IPSD to 114 days after the IPSD.</p>

<b>Administrative Specification</b>	
<b>Denominator</b>	The eligible population.
<b>Effective Acute Phase Treatment</b>	<p>At least 84 days (12-weeks) of continuous treatment with antidepressant medication) during the 114-day period following the IPSD (inclusive). The continuous treatment allows gaps in medication treatment up to a total of 30 days during the 114-day period. Allowable medication changes or gaps include:</p> <ul style="list-style-type: none"> <li>• Washout period gaps to change medication</li> <li>• Treatment gaps to refill the same medication</li> </ul> <p>Regardless of the number of gaps, there may be no more than 30 gap days. The organization may count any combination of gaps (e.g., two washout gaps of 15 days each, or two washout gaps of 10 days each and one treatment gap of 10 days).</p>
<b>Effective Continuation Phase Treatment</b>	<p>At least 180 days (6 months) of continuous treatment with antidepressant medication during the 231-day period following the IPSD (inclusive). Continuous treatment allows gaps in medication treatment up to a total of 30 days during the 231-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication. Allowable medication changes or gaps include:</p> <ul style="list-style-type: none"> <li>• Washout period gaps to change medication</li> <li>• Treatment gaps to refill the same medication</li> </ul> <p>Regardless of the number of gaps, there may be no more than 51 gap days. The organization may count any combination of gaps (e.g., two washout gaps of 25 days each, or two washout gaps of 10 days each and one treatment gap of 10 days).</p>
<b>Codes to Identify Antidepressant Medications</b>	
<b>Description</b>	<b>Prescription</b>
Miscellaneous antidepressants	Bupropion, Vilazodone
Monoamine oxidase inhibitors	Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine
Phenylpiperazine antidepressants	Nefazodone, Trazodone
Psychotherapeutic combinations	Amitriptyline-chlordiazepoxide, Amitriptyline-perphenazine, Fluoxetine-olanzapine
SSNRI antidepressants	Desvenlafaxine, Duloxetine, Venlafaxine
SSRI antidepressants	Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline
Tetracyclic antidepressants	Maprotiline, Mirtazapine
Tricyclic antidepressants	Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6 mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine
<b>Major Depression Value Set</b>	
<b>Description</b>	<b>ICD-9-CM Diagnosis</b>
Major depression	296.20-296.25, 296.30-296.35, 298.0, 311

<b>Codes to Identify Outpatient, Intensive Outpatient and Partial Hospitalization</b>		
<b>CPT</b>	<b>HCPCS</b>	<b>UB Revenue</b>
98960-98962, 99078, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99510, 90839	G0155, G0176, G0177, G0409-G0411, G0463, H0002, H0004, H0031, H0034-H0037, H0039, H0040, H2000, H2001, H2010-H2020, S0201, S9480, S9484, S9485, T1015	0510, 0513, 0515-0517, 0519-0523, 0526-0529, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983
<b>CPT</b>	<b>WITH</b>	<b>POS</b>
90845, 90847, 90849, 90853, , 90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 90791, 90792, 90832, 90834, 90837		03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 33, 49, 50, 52, 53, 71, 72

\*Note: Organizations may have different methods for billing intensive outpatient encounters and partial hospitalizations. Some methods may be comparable to outpatient billing, with separate claims for each date of service; others may be comparable to inpatient billing, with an admission date, a discharge date and units of service. Organizations whose billing methods are comparable to inpatient billing may count each unit of service as an individual visit. The unit of service must have occurred during the time frame specified (e.g., during the Intake Period).

*Appendix B.* **Data Integration and Control Findings**  
for Behavioral Healthcare, Inc.

### Documentation Work Sheets

<b>BHO Name:</b>	Behavioral Healthcare, Inc.
<b>On-Site Visit Date:</b>	January 22, 2016
<b>Reviewer:</b>	Timea Jonas

Data Integration and Control Element	Met	Not Met	N/A	Comments
<b>Accuracy of data transfers to assigned performance measure data repository.</b>				
◆ The Department and the BHO accurately and completely process transfer data from the transaction files (e.g., membership, provider, encounter/claims) into the repository used to keep the data until the calculations of the performance measures have been completed and validated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Samples of data from the repository are complete and accurate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Accuracy of file consolidations, extracts, and derivations.</b>				
◆ The Department's and the BHO's processes to consolidate diversified files and to extract required information from the performance measure data repository are appropriate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Actual results of file consolidations or extracts are consistent with results expected from documented algorithms or specifications.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Procedures for coordinating the activities of multiple subcontractors ensure the accurate, timely, and complete integration of data into the performance measure database.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Computer program reports or documentation reflect vendor coordination activities, and no data necessary to performance measure reporting are lost or inappropriately modified during transfer.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Data Integration and Control Element	Met	Not Met	N/A	Comments
<b>If the Department and the BHO use a performance measure data repository, the structure and format facilitate any required programming necessary to calculate and report required performance measures.</b>				
◆ The repository’s design, program flow charts, and source codes enable analyses and reports.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Proper linkage mechanisms have been employed to join data from all necessary sources (e.g., identifying a member with a given disease/condition).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Assurance of effective management of report production and reporting software.</b>				
◆ Documentation governing the production process, including Department and BHO production activity logs and staff review of report runs, is adequate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Prescribed data cutoff dates are followed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ The Department and the BHO retain copies of files or databases used for performance measure reporting in the event that results need to be reproduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ The reporting software program is properly documented with respect to every aspect of the performance measure data repository, including building, maintaining, managing, testing, and report production.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ The Department’s and the BHO’s processes and documentation comply with standards associated with reporting program specifications, code review, and testing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



*Appendix C.* **Denominator and Numerator Validation Findings**  
for Behavioral Healthcare, Inc.

### Reviewer Work Sheets

<b>BHO Name:</b>	Behavioral Healthcare, Inc.
<b>On-Site Visit Date:</b>	January 22, 2016
<b>Reviewer:</b>	Timea Jonas

**Denominator Elements for Behavioral Healthcare, Inc.**

Audit Element	Met	Not Met	N/A	Comments
◆ For each of the performance measures, all members of the relevant populations identified in the performance measure specifications are included in the population from which the denominator is produced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Adequate programming logic or source code exists to appropriately identify all relevant members of the specified denominator population for each of the performance measures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ The Department and the BHO have correctly calculated member months and years, if applicable to the performance measure.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ The Department and the BHO have properly evaluated the completeness and accuracy of any codes used to identify medical events, such as diagnoses, procedures, or prescriptions, and these codes have been appropriately identified and applied as specified in each performance measure.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Parameters required by the specifications of each performance measure are followed (e.g., cutoff dates for data collection, counting 30 calendar days after discharge from a hospital, etc.).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Exclusion criteria included in the performance measure specifications have been followed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Systems or methods used by the Department and the BHO to estimate populations when they cannot be accurately or completely counted (e.g., newborns) are valid.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Populations were not estimated.

Numerator Elements for Behavioral Healthcare, Inc.				
Audit Element	Met	Not Met	N/A	Comments
◆ The Department and the BHO have used appropriate data, including linked data from separate data sets, to identify the entire at-risk population.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Qualifying medical events (such as diagnoses, procedures, prescriptions, etc.) are properly identified and confirmed for inclusion in terms of time and services.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ The Department and the BHO have avoided or eliminated all duplication of counted members or numerator events.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
◆ Any nonstandard codes used in determining the numerator have been mapped to a standard coding scheme in a manner that is consistent, complete, and reproducible, as evidenced by a review of the programming logic or a demonstration of the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	BHI used only standard codes.
◆ Parameters required by the specifications of the performance measure are adhered to (e.g., the measured event occurred during the time period specified or defined in the performance measure).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BHI should work with the Department and the other BHOs to clarify the definition of “New Members” in the scope document for Indicator #4.

*Appendix D.* **Performance Measure Results Tables**  
for Behavioral Healthcare, Inc.

## Encounter Data

The measurement period for these performance measures is July 1, 2014, through June 30, 2015 (FY 2014–2015).

### Indicator 1a—Hospital Readmissions Within 7, 30, and 90 Days Post-discharge

**Table D-1—Hospital Readmissions Within 7, 30, and 90 Days Post-discharge  
for Behavioral Healthcare, Inc.**

Population	Time Frame	Non-state Hospitals			All Hospitals		
		Denominator (Discharges)	Numerator (Readmissions)	Rate	Denominator (Discharges)	Numerator (Readmissions)	Rate
Child 0–12 Years of Age	7 Days	85	2	2.35%	86	2	2.33%
	30 Days	85	6	7.06%	86	6	6.98%
	90 Days	85	11	12.94%	86	11	12.79%
Adolescent 13–17 Years of Age	7 Days	172	1	0.58%	176	1	0.57%
	30 Days	172	11	6.40%	176	11	6.25%
	90 Days	172	20	11.63%	176	20	11.36%
Adult 18–64 Years of Age	7 Days	553	12	2.17%	638	13	2.04%
	30 Days	553	38	6.87%	638	42	6.58%
	90 Days	553	67	12.12%	638	76	11.91%
Adult 65 Years of Age and Older	7 Days	1	0	0.00%	1	0	0.00%
	30 Days	1	0	0.00%	1	0	0.00%
	90 Days	1	0	0.00%	1	0	0.00%
All Ages	7 Days	811	15	1.85%	901	16	1.78%
	30 Days	811	55	6.78%	901	59	6.55%
	90 Days	811	98	12.08%	901	107	11.88%

### Indicator 1b—Hospital Readmissions Within 180 Days (all facilities)

Table D-2—Hospital Readmissions Within 180 Days for Behavioral Healthcare, Inc.

Population	Time Frame	All Hospitals		
		Denominator (Discharges)	Numerator (Readmissions)	Rate
Child 0–12 Years of Age	180 Days	86	12	13.95%
Adolescent 13–17 Years of Age	180 Days	177	25	14.12%
Adult 18–64 Years of Age	180 Days	644	97	15.06%
Adult 65 Years of Age and Older	180 Days	1	0	0.00%
All Ages	180 Days	908	134	14.76%

### Indicator 4—Mental Health Engagement

Table D-3—Mental Health Engagement for Behavioral Healthcare, Inc.

Population	Denominator	Numerator	Rate
Child 0–12 Years of Age	2,623	1,573	59.97%
Adolescent 13–17 Years of Age	2,089	1,147	54.91%
Adult 18–64 Years of Age	6,674	3,517	52.70%
Adult 65 Years of Age and Older	84	48	57.14%
All Ages	11,470	6,285	54.80%

## Indicator 7—Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

**Table D-4—Initiation and Engagement of Alcohol and Other Drug (AOD) Dependence Treatment\* for Behavioral Healthcare, Inc.**

Population	Initiation of AOD Treatment			Engagement of AOD Treatment		
	Denominator	Numerator	Rate	Denominator	Numerator	Rate
13–17 Years of Age	151	53	35.10%	151	34	22.52%
18+ Years of Age	1,964	978	49.80%	1,964	721	36.71%
Combined Ages	2,115	1,031	48.75%	2,115	755	35.70%

\* For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.

## Indicator 8—Penetration Rates

The penetration rate is a calculation of the percentage of consumers served by the respective BHO out of all Medicaid-eligible individuals within the BHO service area.

**Table D-5—Overall Penetration Rates for Behavioral Healthcare, Inc.**

Population	Enrollment*	Members Served	Rate
Overall	276,508	35,371	12.79%

\* Expressed as full time equivalent (FTE), rounded to the nearest integer.

**Table D-6—Penetration Rates by Age Category for Behavioral Healthcare, Inc.**

Population	Enrollment*	Members Served	Rate
Children 12 Years of Age and Younger	103,981	6,883	6.62%
Adolescents Between 13 and 17 Years of Age	31,741	5,469	17.23%
Adults Between 18 and 64 Years of Age	131,655	22,299	16.94%
Adults 65 Years of Age or Older	9,131	720	7.88%
Overall	276,508	35,371	12.79%

\* Expressed as full time equivalent (FTE), rounded to the nearest integer.

**Table D-7—Penetration Rates by Medicaid Eligibility Category for Behavioral Healthcare, Inc.**

Population	Enrollment*	Members Served	Rate
AND/AB-SSI	14,094	4,797	34.03%
BC Children	4,980	71	1.43%
BCCP-Women Breast & Cervical Cancer	40	6	15.01%
Buy-In: Working Adult Disabled	915	249	27.23%
Foster Care	4,812	1,635	33.98%
OAP-A	8,513	657	7.72%
OAP-B-SSI	1,694	433	25.57%
MAGI Adults	68,171	10,274	15.07%
Buy-In: Children With Disabilities	1,002	157	15.67%
MAGI Parents/Caretakers	41,259	5,787	14.03%
MAGI Children	127,788	10,652	8.34%
MAGI Pregnant	3,241	468	14.44%

\* Expressed as full time equivalent (FTE), rounded to the nearest integer.

Note: Values from the Enrollment and Rate columns are copied directly from the spreadsheets provided by the Department. Since the values in the Enrollment column were rounded to the nearest integer, the percentages listed in the Rate column may not equal actual percentages calculated using the Enrollment and Members Served values

## Indicator 12—Follow-up Appointments Within 7 and 30 Days After Hospital Discharge for a Mental Health Condition

**Table D-8—Follow-up Appointments Within 7 and 30 Days After Hospital Discharge for a Mental Health Condition for Behavioral Healthcare, Inc.**

Population	Time Frame	Non-state Hospitals			All Hospitals		
		Denominator (Discharges)	Numerator (Seen Within Date Criteria)	Rate	Denominator (Discharges)	Numerator (Seen Within Date Criteria)	Rate
6–20 Years of Age	7 Days	230	128	55.65%	237	130	54.85%
	30 Days	230	179	77.83%	237	184	77.64%
21–64 Years of Age	7 Days	406	230	56.65%	462	272	58.87%
	30 Days	406	290	71.43%	462	337	72.94%
65+ Years of Age	7 Days	1	0	0.00%	1	0	0.00%
	30 Days	1	0	0.00%	1	0	0.00%
Combined Ages	7 Days	637	358	56.20%	700	402	57.43%
	30 Days	637	469	73.63%	700	521	74.43%

### Indicator 13—Members With Physical Health Well-care Visits

Table D-9—Members With Physical Health Well-care Visits for Behavioral Healthcare, Inc.

Population	Denominator	Numerator	Rate
0–17 Years of Age	9,695	8,525	87.93%
18+ Years of Age	13,899	12,025	86.52%

### Indicator 14—Inpatient Utilization (per 1,000 members)

Table D-10—Inpatient Utilization for Behavioral Healthcare, Inc.

Population	Non-state Hospitals			All Hospitals		
	Denominator*	Numerator	Rate per 1,000 Members	Denominator*	Numerator	Rate per 1,000 Members
Child 0–12 Years of Age	103,981	85	0.82	103,981	86	0.83
Adolescent 13–17 Years of Age	31,741	172	5.42	31,741	176	5.54
Adult 18–64 Years of Age	131,655	553	4.20	131,655	638	4.85
Adult 65 Years of Age and Older	9,131	1	0.11	9,131	1	0.11
All Ages	276,508	811	2.93	276,508	901	3.26

\* Expressed as full time equivalent (FTE), rounded to the nearest integer.

## Indicator 15—Emergency Department Utilization for Mental Health Condition

Table D-11—Emergency Department Utilization for Mental Health Condition for Behavioral Healthcare, Inc.

Population	Denominator*	Numerator	Rate per 1,000 Members
Child 0–12 Years of Age	103,981	468	4.50
Adolescent 13–17 Years of Age	31,741	910	28.67
Adult 18–64 Years of Age	131,655	2,997	22.76
Adult 65 Years of Age and Older	9,131	9	0.99
All Ages	276,508	4,384	15.85

\* Expressed as full time equivalent (FTE), rounded to the nearest integer.

## Indicator 16—Antidepressant Medication Management—Acute and Continuation Phases

Table D-12—Antidepressant Medication Management—Acute and Continuation Phases\* for Behavioral Healthcare, Inc.

Effective Acute Phase Treatment			Effective Continuation Phase Treatment		
Denominator (Members 18+ Years Old)	Numerator	Rate	Denominator (Members 18+ Years Old)	Numerator	Rate
748	371	49.60%	748	336	44.92%

\* For the FY 2015–2016 Colorado BHO PMV activity, the measure will be validated, but no penalties will be associated with this measure.