

Colorado Medicaid
Community Mental Health Services Program

**FY 2009-2010 Validation of
Performance Measures**
for
Colorado Health Partnerships, LLC

April 2010

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



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Validation of Performance Measures

for Colorado Health Partnerships, LLC

Validation Overview

The Colorado State Medicaid agency, the Department of Health Care Policy & Financing (the Department) requires external quality review (EQR) activities as per the Balanced Budget Act of 1997 (BBA), 42 Code of Federal Regulations (CFR) §438.358. One of these activities is the validation of performance measures. The Department has contracted with Health Services Advisory Group, Inc. (HSAG), an external quality review organization (EQRO), to conduct the validation of performance measures for five Colorado behavioral health organizations (BHOs) for the measurement period, which was fiscal year (FY) 2008–2009. The BHOs provide mental health services to Medicaid-eligible recipients.

The Department identified a number of performance measures for validation. Some of these measures were calculated by the Department using data submitted by the BHOs; other measures were calculated by the BHOs. HSAG conducted the validation activities as outlined in the Centers for Medicare & Medicaid Services (CMS) publication, *Validating Performance Measures: A Protocol for Use in Conducting External Quality Review Activities*, final protocol, Version 1.0, May 1, 2002 (CMS Performance Measure Validation Protocol). This report uses three sources—the BHO and Department versions of the Information Systems Capabilities Assessment Tool (ISCAT), site reviews, and source code—to tabulate findings for each BHO.

Colorado Health Partnerships, LLC Information

Information about **Colorado Health Partnerships, LLC (CHP)**, a BHO in the western and southern regions of Colorado, appears in Table 1.

Table 1—Colorado Health Partnerships, LLC Information	
BHO Name:	Colorado Health Partnerships, LLC
BHO Location:	7150 Campus Drive, Suite 300, Colorado Springs, CO 80920
BHO Contact:	Erica Arnold-Miller, Director of Quality Management
Contact Telephone Number:	719.538.1450
Contact E-Mail Address:	Erica.arnold-miller@valueoptions.com
Site Visit Date:	January 7, 2010

Performance Measures for Validation

HSAG validated a set of performance measures developed by the Department and BHOs and selected by the Department, as shown in Table 2. These measures represented five HEDIS-like measures, and three measures developed by the Department. The performance measures were calculated on an annual basis.

Table 2—List of Performance Measures for Colorado Health Partnerships, LLC	
1.	Inpatient Utilization
2.	Hospital Average Length of Stay
3.	Follow-up After Hospitalization for Mental Illness (7 and 30-day follow-up)
4.	Emergency Department Utilization
5.	Hospital Recidivism
6.	Overall Penetration Rates
7.	Penetration Rates by Service Category
8.	Penetration Rates by Age Category

Description of Validation Activities

Preaudit Strategy

HSAG conducted the validation activities outlined in the CMS Performance Measure Validation Protocol. The Department provided the performance measure definitions for review by the HSAG validation team (Appendix A). 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 specifications document in the Department’s Behavioral Health Quality Improvement Committee meeting, and a revised specifications document was used for FY 2008–2009 performance measure reporting purposes. Based on the measure definitions and reporting guidelines, HSAG developed the following:

- Measure-specific worksheets based on Attachment I of the CMS Performance Measure Validation Protocol.
- A documentation request, which consisted of the ISCAT or Appendix Z of the CMS Performance Measure Validation Protocol.
- A customized ISCAT to collect the necessary data consistent with Colorado’s mental health service delivery model. The ISCAT was forwarded to **CHP** with a timetable for completion and instructions for submission. HSAG fielded ISCAT-related questions directly from **CHP** during the pre-on-site phase. HSAG prepared an agenda describing all on-site visit activities and indicating the type of staff needed for each session. The agendas were forwarded to **CHP** approximately one month prior to the on-site visit. HSAG also conducted pre-on-site conference calls with **CHP** to discuss any outstanding ISCAT questions and on-site visit activities.

Validation Team

The HSAG performance measure validation team was assembled based on the full complement of skills required for the validation and requirements of this particular BHO. The team consisted of a lead auditor and validation team members, as described in Table 3.

Table 3—HSAG Validation Team		
Name	Team Position	Skills and Expertise
Patience Hoag, RHIT, CHCA, CCS, CCS-P	Lead Auditor	Coding expertise, performance measure validation, encounter data validation
Peggy Ketterer, RN, BSN, CHCA	Secondary Auditor Executive Director, EQRO Services	Auditing expertise, compliance with performance measure specifications
Tammy Gianfrancesco	Administrative Assistant III	Communications

The HSAG lead auditor and secondary auditor participated in the on-site review at the BHO. The remaining team members conducted their work at their respective HSAG offices.

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. Below is a list of the types of data collected and how HSAG conducted an analysis of this data:

- ◆ *Information Systems Capabilities Assessment Tools (ISCATs)* were requested and received from each BHO and the Department. Upon receipt by HSAG, the ISCATs were reviewed to ensure that all sections were completed. The ISCATs were then forwarded to the validation team for review. The review identified issues or items that needed further follow-up.
- ◆ *Source code (programming language) for performance measures* was requested and was submitted by the Department and the BHOs. The validation team completed query review and observation of program logic flow to ensure compliance with performance measure definitions during the site visit. Areas of deviation were identified and shared with the lead auditor to evaluate the impact of the deviation on the measure and assess the degree of bias (if any).
- ◆ *Performance measure reports for FY 2008–2009* were reviewed by the validation team. The team also reviewed previous reports for trends and rate reasonability.
- ◆ *Supportive documentation* included any documentation that provided reviewers with additional information to complete the validation process, including policies and procedures, file layouts, system flow diagrams, system log files, and data collection process descriptions. All supportive documentation was reviewed by the validation team, with issues or clarifications flagged for further follow-up.

On-Site Activities

HSAG conducted a one-day on-site visit with both the Department and **CHP**. HSAG used several methods to collect information, 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 below.

- ◆ **Opening meeting**—included introductions of the validation team and key **CHP** and Department staff involved in the performance measure activities. The review purpose, required documentation, basic meeting logistics, and queries to be performed were discussed.
- ◆ **Evaluation of system compliance**—included a review of the information systems assessment, focusing on the processing of claims, encounter, member, and provider data. Reviewers performed primary source verification on a random sample of members, validating enrollment and encounter data for a given date of service within both the membership and 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 **CHP** 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 and a review of how all data sources were combined. The data file used to report the selected performance measures was produced. HSAG performed primary source verification to further validate the output files, and reviewed backup documentation on data integration. HSAG also addressed data control and security procedures during this session.
- ◆ **Closing conference**—provided a summary of preliminary findings based on the review of the ISCAT and the on-site visit, and a review of the documentation requirements for any post-on-site visit activities.

HSAG conducted several interviews with key **CHP** and Department staff members involved with performance measure reporting. Table 4 lists these key interviewees from **CHP**.

Table 4—List of Colorado Health Partnerships, LLC Participants	
Name	Title
Scott Jones	Manager of Reporting
Tina McCrory	Chief Financial Officer
Chet Phelps	Vice President IT and Reporting
Erica Arnold-Miller	Vice President Quality Management

Data Integration, Data Control, and Performance Measure Documentation

The calculation of performance measures includes several crucial aspects: data integration, data control, and documentation of performance measure calculations. Each section 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, the data integration processes used by the Department and the BHO were determined by the audit team to be:

☒ Acceptable

☐ Not acceptable

Data Control

The organizational infrastructure of **CHP** 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 **CHP**, which included a review of disaster recovery procedures, data backup protocols, and related policies and procedures. Overall, the data control processes in place at **CHP** were determined by the audit team to be:

☒ 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 **CHP** and the Department. HSAG reviewed all related documentation, which included the completed ISCAT, job logs, computer programming code, output files, work flow diagrams, narrative descriptions of performance measure calculations, and other related documentation. Overall, the documentation of performance measure data collection and calculations by **CHP** and the Department was determined by the audit team to be:

☒ Acceptable

☐ Not acceptable

Validation Findings

Through the validation process, the review team identified overall strengths and areas for improvement for **CHP**. In addition, the team evaluated **CHP**'s data systems for the processing of each type of data used for reporting the performance measures. General findings are indicated below.

Strengths

The BHO supplied thorough documentation pre-on-site, facilitating the review process. Numerous processes were implemented to increase encounter data accuracy, including additional encounter edits, and the community mental health centers (CMHCs) are given comprehensive information regarding their encounter submissions. The BHO staff continues to demonstrate its commitment to data quality and data completeness by implementing new processes to monitor these data, and continues to keep CMHCs accountable and involved in this endeavor.

Areas for Improvement

CHP should continue to develop the documentation related to its encounter file submission process. HSAG understands that this is a work in progress, but it has not been completed as yet. The BHO should continue to work toward preparing for ICD-10 implementation; discussions internally and with the Department should be considered in order to successfully migrate to this code set. Also, the BHO should continue efforts to move toward using 834 eligibility files and 820 capitation files as sources for eligibility data, once reconciliation between them and the PHP file shows no issues. The BHO should continue to collaborate with the other BHOs and the Department to update the scope document to include reference to the covered mental health diagnosis codes. The BHO should work with the other BHOs and the Department to consider updating the exclusion criteria for the follow-up measure to exclude non-acute readmissions within 30 days in order to mirror HEDIS more closely. In addition, the BHO should work with the other BHOs and the Department to consider revising the document so that Attachments A and B are either incorporated into the main document or Attachment A contains all penetration rate criteria, and Attachment B contains all follow-up criteria.

Eligibility Data System Findings

The auditors had no concerns regarding the BHO's eligibility data system or processes. Real time eligibility can be checked via the State portal. The BHO's finance department monitors and pulls files once per month and are kept in an archive locally. As noted in areas for improvement, **CHP** is working toward utilization of the 834 eligibility file and the 820 capitation file as sources for eligibility data.

Claims/Encounter Data System Findings

The auditors had no concerns with the BHO's claims and encounter data systems or processes. Excellent monitoring practices are in place to monitor encounter submission volumes. Optical Character Recognition technology for paper claims data mitigates any concerns regarding data entry accuracy.

Actions Taken as a Result of Previous Year's Recommendations

The BHO did work with the other BHOs and the Department to refine the scope document. Although the BHO did not complete the recommended action related to creating documentation of the encounter file submission process, it was a work in progress during the site review. The BHO did demonstrate sufficient oversight of the CMHCs transitioning to Unicare in the past year, holding regular meetings with the CMHCs during the transition process. **CHP** also ran encounter data volume comparison reports and performed other checks to ensure no data were lost during that time frame. These activities helped to ensure the transition was successful, and no data were lost.

Performance Measure Specific Findings and Recommendations

Based on all validation activities, the HSAG team determined results for each performance measure. The CMS Performance Measure Validation Protocol identifies four separate validation results for each performance measure, which are defined in Table 5.

Table 5—Validation Results Definitions	
Fully Compliant (FC)	Indicates that the performance measure was fully compliant with Department specifications.
Substantially Compliant (SC)	Indicates that the performance measure was substantially compliant with Department specifications and had only minor deviations that did not significantly bias the reported rate.
Not Valid (NV)	Indicates that the performance measure deviated from Department specifications such that the reported rate was significantly biased. This designation is also assigned to measures for which no rate was reported, although reporting of the rate was required.
Not Applicable (NA)	Indicates that the performance measure was not reported because the BHO did not have any Medicaid consumers who qualified for that denominator.

According to the protocol, the validation finding for each measure is determined by the magnitude of the errors detected for the audit elements, not by the number of audit elements determined to be *Not Met*. Consequently, it is possible that an error for a single audit element may result in a designation of NV because the impact of the error biased the reported performance measure by more than five 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 SC.

Table 6 below displays the review findings, validation results, and key recommendations for **CHP** for each performance measure. For more detailed information, please see Appendix D.

Table 6—Key Review Findings for Colorado Health Partnerships, LLC			
Performance Measures	Findings	Validation Results	Key Recommendations
1. Inpatient Utilization	<p>The BHO calculated this rate. A review of the BHO's programming code used for calculation of this rate identified no concerns.</p> <p>In reviewing the updated measure specification scope document, it was found that covered mental health diagnosis codes were not explicitly identified or referenced within it for this measure.</p> <p>Primary source verification on-site did not identify any concerns with the BHO's calculation of this measure.</p> <p>After rates were submitted, the BHO noted an error in its rate submission, which affected this measure. The Department and HSAG agreed to allow the BHO to submit corrected rates.</p>	Fully Compliant	<p>The BHO should continue to collaborate with the other BHOs and the Department to update the scope document to include the covered mental health diagnosis codes or a reference to an official contract listing.</p> <p>The BHO should thoroughly validate rates for each measure prior to official reporting deadlines.</p>

Table 6—Key Review Findings for Colorado Health Partnerships, LLC

Performance Measures	Findings	Validation Results	Key Recommendations
2. Hospital Average Length of Stay	<p>The BHO calculated this rate. A review of the BHO's programming code used for calculation of this rate identified no concerns.</p> <p>In reviewing the updated measure specification scope document, it was found that covered mental health diagnosis codes were not explicitly identified or referenced within it for this measure.</p> <p>Primary source verification on-site did not identify any concerns with the BHO's calculation of this measure.</p> <p>After rates were submitted, the BHO noted an error in its rate submission, which affected this measure. The Department and HSAG agreed to allow the BHO to submit corrected rates.</p>	Fully Compliant	<p>The BHO should continue to collaborate with the other BHOs and the Department to update the scope document to include the covered mental health diagnosis codes or a reference to an official contract listing.</p> <p>The BHO should thoroughly validate rates for each measure prior to official reporting deadlines.</p>

Table 6—Key Review Findings for Colorado Health Partnerships, LLC

Performance Measures	Findings	Validation Results	Key Recommendations
3. Follow-up After Hospitalization for Mental Illness (7 and 30-day follow-up)	<p>The BHO calculated this rate. A review of the BHO's programming code used for calculation of this rate identified no concerns.</p> <p>In reviewing the updated measure specification scope document, it was found that covered mental health diagnosis codes were not explicitly identified or referenced within it for this measure.</p> <p>Primary source verification on-site did not identify any concerns with the BHO's calculation of this measure.</p> <p>After rates were submitted, the BHO noted an error in its rate submission, which affected this measure. The Department and HSAG agreed to allow the BHO to submit corrected rates.</p>	Fully Compliant	<p>The BHO should continue to collaborate with the other BHOs and the Department to update the scope document to include the covered mental health diagnosis codes or a reference to an official contract listing.</p> <p>The BHOs and the Department may wish to consider updating the exclusion criteria for the follow-up measure to exclude non-acute readmissions within 30 days to mirror HEDIS more closely.</p> <p>In addition, the BHOs and the Department should consider revising the scope document so that Attachment B is either incorporated into the main document or it contains all follow-up criteria.</p> <p>The BHO should thoroughly validate rates for each measure prior to official reporting deadlines.</p>
4. Emergency Department Utilization	<p>The BHO calculated this rate. A review of the BHO's programming code used for calculation of this rate identified no concerns.</p> <p>In reviewing the updated measure specification scope document, it was found that covered mental health diagnosis codes were not explicitly identified or referenced within it for this measure.</p> <p>Primary source verification on-site did not identify any concerns with the BHO's calculation of this measure.</p>	Fully Compliant	<p>The BHO should continue to collaborate with the other BHOs and the Department to update the scope document to include the covered mental health diagnosis codes or a reference to an official contract listing.</p>

Table 6—Key Review Findings for Colorado Health Partnerships, LLC

Performance Measures	Findings	Validation Results	Key Recommendations
5. Hospital Recidivism	<p>The BHO calculated this rate. A review of the BHO's programming code used for calculation of this rate identified no concerns.</p> <p>In reviewing the updated measure specification scope document, it was found that covered mental health diagnosis codes were not explicitly identified or referenced within it for this measure.</p> <p>Primary source verification on-site did not identify any concerns with the BHO's calculation of this measure.</p> <p>After rates were submitted, the BHO noted an error in its rate submission, which affected this measure. The Department and HSAG agreed to allow the BHO to submit corrected rates.</p>	Fully Compliant	<p>The BHO should continue to collaborate with the other BHOs and the Department to update the scope document to include the covered mental health diagnosis codes or a reference to an official contract listing.</p> <p>The BHO should thoroughly validate rates for each measure prior to official reporting deadlines.</p>
6. Overall Penetration Rates	<p>The Department calculated this rate. HSAG conducted interviews with key BHO staff members and reviewed the ISCAT. The processes in place to receive and collect claims/encounter data met standards.</p> <p>At the Department level, a review of the programming code used by the Department for calculation of this rate identified no concerns.</p>	Fully Compliant	<p>HSAG recommends that the BHO continue to oversee and monitor the receipt of encounter data from the CMHCs as well as submissions of encounter data to the Department.</p> <p>HSAG recommends that the Department work with the BHOs to refine the scope document as it relates to penetration rate calculation, incorporating all steps necessary for this calculation within the main document or adding all steps into Attachment A. This would make reviewing and updating this document much more straightforward.</p>

Table 6—Key Review Findings for Colorado Health Partnerships, LLC

Performance Measures	Findings	Validation Results	Key Recommendations
<p>7. Penetration Rates by Service Category</p>	<p>The Department calculated this rate. HSAG conducted interviews with key BHO staff members and reviewed the ISCAT. The processes in place to receive and collect claims/encounter data met standards.</p> <p>At the Department level, a review of the programming code used by the Department for calculation of this rate identified no concerns.</p>	<p>Fully Compliant</p>	<p>HSAG recommends that the BHO continue to oversee and monitor the receipt of encounter data from the CMHCs as well as submissions of encounter data to the Department.</p> <p>HSAG recommends that the Department work with the BHOs to refine the scope document as it relates to penetration rate calculation, incorporating all steps necessary for this calculation within the main document or adding all steps into Attachment A. This would make reviewing and updating this document much more straightforward.</p>
<p>8. Penetration Rates by Age Category</p>	<p>The Department calculated this rate. HSAG conducted interviews with key BHO staff members and reviewed the ISCAT. The processes in place to receive and collect claims/encounter data met standards.</p> <p>At the Department level, a review of the programming code used by the Department for calculation of this rate identified no concerns.</p>	<p>Fully Compliant</p>	<p>HSAG recommends that the BHO continue to oversee and monitor the receipt of encounter data from the CMHCs as well as submissions of encounter data to the Department.</p> <p>HSAG recommends that the Department work with the BHOs to refine the scope document as it relates to penetration rate calculation, incorporating all steps necessary for this calculation within the main document or adding all steps into Attachment A. This would make reviewing and updating this document much more straightforward.</p>

Table 7—Overall Results	
Validation Results	Number of Performance Measures
Fully Compliant	8
Substantially Compliant	0
Not Valid	0
Not Applicable	0

Appendix A. **BHO Performance Measure Definitions** *for Colorado Health Partnerships, LLC*

Indicators

- ◆ Inpatient Utilization
- ◆ Hospital Length of Stay
- ◆ Overall Penetration Rates*
- ◆ Penetration Rates by Service Category*
- ◆ Penetration Rates by Age Category*
- ◆ Hospital Recidivism
- ◆ Emergency Department Utilization
- ◆ Follow-Up after Hospitalization for Mental Illness

***Calculated by the Department**

The Department collaborated with the BHOs to create a scope document that serves as the specifications for measures being validated. The following verbiage from the scope document is reproduced in its entirety through page A-14; however, the table of contents and page numbers have been modified for use in this report.

Definitions

FY08-09 BHO-HCPF Annual Performance Measures Scope Document

This document includes the details for calculations of the BHO-HCPF Annual Performance Measures for the five Colorado Behavioral Health Organizations (BHOs). Some of these 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. Penetration Rates are calculated using paid and denied claims/encounters data.

The Annual Performance Measures include:

- **Calculated by the BHO:**
 - Inpatient Utilization
 - Hospital Length of Stay
 - Hospital Recidivism
 - Emergency Department Utilization
 - Follow-up After Hospitalization for Mental Illness (7 and 30-day follow-up)
- **Calculated by HCPF:**
 - Overall Penetration Rates
 - Penetration Rates by Service Category

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Version control: Version 3

Update process:

- Update field on the footer to update to current file name.
- Update field on the Table of Contents to update page numbers.

Definitions

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.

Covered Mental Health Disorder: Only Mental Health Diagnoses data from paid claims/encounters will be included in the calculations of performance measures; however penetration rates will be calculated using both paid and denied claims/encounters.

Per 1000 members – A measure based on total eligible members per 1000.

Fiscal Year – Based on the State fiscal year July to June

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

Age Category – 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.

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 ACFs (defined as an assisted living residence licensed by the State to provide alternative care services and protective oversight to Medicaid clients).

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 dropped from the hospital discharge list. Adult members who lose eligibility during the hospital stay may remain on the hospital discharge list.

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.

HCPF— The Department of Health Care Policy and Financing for the State of Colorado.

HEDIS—Healthcare Effectiveness Data and Information Set

Indicators

1. Inpatient Utilization

Description: The total number of BHO member discharges from a hospital episode for treatment of a covered mental health disorder per 1000 members, by age group (see above for age categories) 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).

Numerator: All discharges from a hospital episode for treatment of a covered mental health disorder

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

Data Source(s): 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: $\text{Numerator (non-state hospital) / Denominator} \times 1000$; Numerator (all hospital) / Denominator $\times 1000$

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

2. Hospital Length of Stay

Description: The average length of stay (in days) for BHO members discharged from a hospital episode for treatment of a covered mental health disorder, by age group and total population. Two indicators are provided: 1) Average length of stay for members discharged from a non-State hospital episode for treatment of a covered mental health disorder during the specific fiscal year, July 1 through June 30 and 2) Average length of stay for members discharged from all hospital episodes for a covered mental health disorder during the specific fiscal year, July 1 through June 30. Age for this indicator is determined at hospital discharge. Please note: For members transferred from one hospital to another within 24 hours, total length of stay for both hospitals should be attributed to the hospital with the final discharge. For final discharges from a State hospital, all days in the hospital episode will be included if the member was Medicaid eligible at the time of admission.

Denominators: Number of Members discharged from a hospital episode. The discharge day must occur within the specified fiscal year, July 1 through June 30.

Non-State Hospital: Total number of Members discharged from a non-State hospital during the specified fiscal year

All Hospitals: Total number of Members discharged from all hospitals during the specified fiscal year.

Numerators: Total days for all hospital episodes resulting in a discharge. Discharge day is not counted. The discharge day must occur within the specified fiscal year, July 1 through June 30. If the admit date and the discharge date are the same then the number of days for the episode is one.

Non-State Hospitals: Total days= Discharge date from the non-State hospital-Admit date

All Hospitals: Total days=Discharge date from all hospitals-Admit date

Data Source(s): Denominator: Number of Members discharged, from non-State hospitals and State hospitals, 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, will be provided by the state hospital data file. Numerator: Hospital days (discharge date – admit date) 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. Hospital days (discharge date – admit date) 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 (non-State hospital); Numerator (all hospital)/Denominator (all hospital)

Benchmark: BHO for all hospital and non-State hospital

3. **Overall Penetration Rates**

Description: Percent BHO Members with one contact (paid or denied) in a specified fiscal year (12-month period) by eligibility category, age, cultural/ethnic group (race).

- Age is determined by the member's age on the last day of the fiscal year.
- Medicaid eligibility category is the eligibility category on the member's most recent Medicaid eligibility span during the fiscal year.
- Cultural/ethnic group (race) is the race category on the member's most recent Medicaid eligibility span during the fiscal year.
- Mental health managed care enrollment spans with at least one day of enrollment during FY 2007-08 are analyzed.
- All enrollment spans identified as: enrollment begin date <= 6/30/2008 AND enrollment end date >= 7/1/2007.
- 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 <= last day of the month AND enrollment end date >= 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.
- BHO - Behavioral Health Organization
- FY - fiscal year
- FTE - full time equivalent
- MM - member months
- * NOTE: The Business 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.

Medicaid Eligibility Categories:

Eligibility Type Code	Description
001	OAP-A
002	OAP-B-SSI
003	AND/AB-SSI
004	AFDC/CWP Adults
005	AFDC/CWP CHILDREN
006	FOSTER CARE
007	BC WOMEN
008	BC CHILDREN
013	OAP STATE ONLY
020	BCCP-WOMEN BREAST&CERVICAL CAN
999	UNSPECIFIED

Medicaid Race Categories:

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

Denominator: Total BHO membership for the specified fiscal year (12-month period)

Numerator: Members with one contact in the specified fiscal year (12-month period) in each eligibility category, age group, and cultural/ethnic group

Data Source(s): 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

4. Penetration Rates by Service Category

Description: Percent BHO Members with any paid or denied MH service grouped as inpatient, intensive outpatient/partial hospital, and ambulatory care in a specified fiscal year 12-month period. Initially, the ambulatory care rate will be calculated twice; the first rate will be calculated using HEDIS specifications only, and the second rate will be calculated using HEDIS specifications plus additional place of service and service codes specified by the BHOs that are used to encounter services not included in the original HEDIS specifications. See Attachment A for HEDIS specs and additional POS and service codes. Place of Service category 53 will be excluded for the intensive outpatient and partial hospitalization service category.

Denominator: Total BHO membership for the specified fiscal year (12-month period)

Numerator: Members with any MH service, grouped as inpatient, intensive outpatient/partial hospitalization, and ambulatory care in a 12-month period (see Attachment A).

Data Source(s): Denominator: HCPF; Numerator: Paid and denied claims/encounters

Calculation of Measure: HCPF; Calculation: Numerator (inpatient)/Denominator; Numerator (intensive outpatient/partial hospitalization)/Denominator; Numerator (ambulatory care)/Denominator

Benchmark: HEDIS and Overall BHO

Problems/Issues/Questions:

For ambulatory penetration rate see Description above and Attachment A for specifications for calculating the HEDIS and non-HEDIS rates.

5. **Hospital Recidivism**

Description: Proportion of BHO Member discharges from a hospital episode for treatment of a covered mental health disorder 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). Two indicators are provided: 1) **Non-State:** 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 and 2) **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. Age for this indicator is determined at first hospital discharge.

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

All Hospitals: Total number of Member discharges from all hospitals during the specified fiscal year

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(s): 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, will be 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, will be provided by the State.

Calculation of Measure: BHO; Calculation (6 ratios): Numerator (7 days, non-state hospital)/Denominator (non-State hospital); Numerator (30 days, non-state hospital)/Denominator (non state hospital), Numerator (90 days, non state hospital)/Denominator (non state hospital); etc

Benchmark: Overall BHOs.

6. Emergency Department Utilization

Description: Number of BHO Member emergency room visits for a covered mental health disorder 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 hrs of the day of the ED visit. ED visit codes include: CPT 99281-99285 and 99291-99292; and revenue code 45x.

Data Source(s): Denominator: HCPF; Numerator: BHO encounter claim file.

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

Benchmark: Overall BHO

7. Follow-up after hospitalization for mental illness

Description: The percentage of member discharges from an inpatient hospital episode for treatment of a covered mental health disorder 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 disorder during the specific fiscal year, July 1 through June 30 and 2) **All hospital:** Follow-up rates for member discharges from all hospital episodes for a covered mental health disorder during the specific fiscal year, July 1 through June 30. Age group is defined as 6 years and older as of the date of discharge.

Numerators: Total number of discharges with an outpatient service (see Attachment B) 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 CPT, UB-92, HCPCS codes in Attachment B 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.

Denominators: 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.

Exclusions:

- Exclude those individuals who were readmitted within 30 days to an inpatient setting for all calculations
- Exclude discharges followed by admission to any 24 hr. treatment facility (see definition) within 24 hours of hospital discharge when the BHO is not financially responsible for members' mental health services, from the time of hospital discharge, through the members' stay at the 24 hour treatment facility. Compare using residential treatment per diem code. Prior to official rate reporting, the HCPF Business Analysis Section will forward each BHO a list of foster care members receiving services for which the BHO was financially responsible, in order to assist the BHOs in determining whether or not to include or exclude them from this measure.

Data Source(s): Denominator: Number of Member discharges, from non-State hospitals, all ages, 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, will be provided by the State. Numerator: Follow-up provided by each BHO based on paid claims in the BHO transaction system.

Calculation of Measure: BHO; Calculation: Includes 4 ratios: Numerator (7 days, non-state hospital)/Denominator (non-State hospital); Numerator (30 days, non-state hospital)/Denominator (non state hospital), Numerator (7 days, all hospital)/Denominator (all hospital), Numerator (30 days, all hospital)/Denominator (all hospital)

Benchmark: HEDIS and all BHOS

Attachment A

Penetration Rates by Service Category

For calculating the penetration rates by service category performance measure

Description

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

- Any services
- Inpatient
- Intensive outpatient or partial hospitalization
- Outpatient or ED

Calculations

Count members who received inpatient, intensive outpatient, partial hospitalization, 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 only if they had at least one inpatient, intensive outpatient, partial hospitalization, outpatient and ED visit during the measurement year.

For members who have had more than one encounter, count in each column the first visit in the measurement year and report the member in the respective age category as of the date of service or discharge.

Member months 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.

Inpatient Include inpatient care at either a hospital or treatment facility with a covered mental health disorder as the principal diagnosis: 290, 293-302, 306-316.

Use one of the following criteria to identify inpatient services.

An Inpatient Facility code in conjunction with a covered mental health diagnosis. Include discharges associated with residential care and rehabilitation.

Codes to Identify Inpatient Service

Inpatient Facility codes : 100, 101, 110, 114, 124, 134, 144, 154, 204
Sub-acute codes : 0919
ATU codes : 190, H2013, H0018AT
RTC codes : H2013, 0191, 0192, 0193, H0018, H0019, S5135

Codes to Identify Intensive Outpatient and Partial Hospitalization Services:

HCPCS		UB Revenue	
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).			
H0035, H2001, H2012, S0201, S9480		0905, 0907, 0912, 0913,	
CPT			POS
90801, 90802, 90816-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875, 90876		WITH	52
Visits identified by the following CPT/POS codes must be with a mental health practitioner.			
99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263		WITH	52

Outpatient and ED

Codes to Identify Outpatient and ED Services: Additional BHO codes & POS for Indicator B: Outpatient & ED Services

CPT	HCPCS	UB Revenue
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).		
90804-90815, 96101, 96110, 96111, 96116, 96118	G0155, G0176, G0177, H0002, H0004, H0031, H0034, H0036, H0037, H0039, H0040, H2000, H2010, H2011, H2013-H2020, M0064, S9484, S9485, T1005, T1016, T1017, H0033, H0038, H0043, H0046, H2012, H2021, H2022, H2023, H2024, H2025, H2026, H2030, H2031, H2032, S0220, S0221, S9449, S9451, S9452, S9453, S9454, S9470	0513, 0900-0904, 0911, 0914-0919, 0762, 0769, 045x
CPT		POS
90801, 90802, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875, 90876	WITH	05, 07, 11, 12, 15, 20, 22, 23, 49, 50, 53*, 71, 72, 19, 26, 32, 34, 41, 99
CPT	UB Revenue	
Visits identified by the following CPT and UB Revenue codes must be with a mental health practitioner.		
98960-98962, 99078, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99281-99285, 99341-99345, 99347-99350, 99381-99387, 99391-99397, 99401-99404, 99411, 99412, 99420, 99510, 90772, 97535, 97537	045x, 0510, 0515-0517, 0519,-0523, 0526-0529, 0762, 077x, 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 are closely based upon HEDIS 2009 specifications.

Attachment B

HEDIS Follow-Up After Hospitalization for Mental Illness (FUH)

For calculating Follow-up after hospitalization for mental illness performance measure

Description

The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of a covered mental health disorder and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner. Two rates are reported.

1. The percentage of members who received follow-up within 30 days of discharge
2. The percentage of members who received follow-up within 7 days of discharge

Eligible Population

Ages	6 years and older as of the date of discharge.
Continuous enrollment	Date of discharge through 30 days after discharge.
Allowable gap	No gaps in enrollment.
Event/diagnosis	<p>Discharged alive 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.</p> <p>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.</p>
<i>Mental health readmission or direct transfer</i>	<p>If the discharge is followed by readmission or direct transfer to an <i>acute facility</i> for any covered mental health disorder 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 disorder, it is probably for a related condition.</p> <p>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.</p> <p>Exclude discharges followed by readmission or direct transfer to a <i>nonacute facility</i> for any covered mental health disorder 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 nonacute care.</p>

Codes to Identify Nonacute 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	
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 nonacute care facilities that do not use the UB Revenue or Type of Bill codes for billing (e.g., ICF, SNF)				

*Deleted "DRG" column per 2009 HEDIS

Administrative Specification

Denominator	The eligible population.
Numerators	
30-day follow-up	An outpatient visit, intensive outpatient encounter or partial hospitalization with a mental health practitioner within 30 days after discharge. Refer to the following table for appropriate codes.
7-day follow-up	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	
Follow-up visits identified by the following CPT or HCPCS codes must be with a mental health practitioner.			
90804-90815, 98960-98962, 99078, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99383-99387, 99393-99397, 99401-99404, 99411, 99412, 99510		G0155, G0176, G0177, H0002, H0004, H0031, H0034-H0037, H0039, H0040, H2000, H2001, H2010-H2020, M0064, S0201, S9480, S9484, S9485	
CPT		POS	
Follow-up visits identified by the following CPT/POS codes must be with a mental health practitioner.			
90801, 90802, 90816-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90871, 90875, 90876	WITH	05, 07, 11, 12, 15, 20, 22, 49, 50, 52, 53, 71, 72	
99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263	WITH	52, 53	
UB Revenue			
The organization does not need to determine practitioner type for follow-up visits identified by the following UB Revenue codes.			
0513, 0900-0905, 0907, 0911-0917, 0919			
Visits identified by the following Revenue codes must be with a mental health practitioner or in conjunction with any diagnosis code from Table FUH-A.			
0510, 0515-0517, 0519-0523, 0526-0529, 077x, 0982, 0983			

- Note: The specification presented here for the Follow up Post Discharge performance indicator are closely based upon HEDIS 2009 specifications.

Appendix B. Data Integration and Control Findings for Colorado Health Partnerships, LLC

Documentation Worksheet

BHO Name:	Colorado Health Partnerships, LLC
On-Site Visit Date:	January 7, 2010
Reviewer:	Patience Hoag and Peggy Ketterer

Data Integration and Control Element	Met	Not Met	N/A	Comments
Accuracy of data transfers to assigned performance measure data repository.				
◆ 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"/>	
Accuracy of file consolidations, extracts, and derivations.				
◆ 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
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.				
◆ 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"/>	
Assurance of effective management of report production and reporting software.				
◆ 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 Colorado Health Partnerships, LLC

Reviewer Worksheets

BHO Name:	Colorado Health Partnerships, LLC
On-Site Visit Date:	January 7, 2010
Reviewer:	Patience Hoag and Peggy Ketterer

Denominator Elements for Colorado Health Partnerships, LLC				
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"/>	The BHO and the Department are encouraged to include diagnosis codes in contract language within the scope document, where applicable.
◆ 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"/>	Population estimates were not necessary for calculating the performance measures.

Numerator Elements for Colorado Health Partnerships, LLC				
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"/>	Nonstandard codes were not used or reported by the BHO.
◆ 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"/>	

Appendix D. Performance Measure Results Tables for Colorado Health Partnerships, LLC

Encounter Data

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-1—Penetration Rate by HEDIS Age Group: FY 2008–2009 for Colorado Health Partnerships, LLC			
	Enrollment	Members Served	Rate
Children 12 years of age and younger as of June 30, 2009	70,830	4,740	6.69%
Adolescents between 13 and 17 years of age as of June 30, 2009	16,812	3,175	18.89%
Adults between 18 and 64 years of age as of June 30, 2009	54,762	11,057	20.19%
Adults 65 years of age or older as of June 30, 2009	13,433	914	6.80%
Overall	155,836	19,886	12.76%

Table D-2—Penetration Rate by Service Category: FY 2008–2009 for Colorado Health Partnerships, LLC			
	Enrollment	Members Served	Rate
Inpatient Care	155,836	1,038	0.67%
Intensive Outpatient or Partial Hospitalization	155,836	120	0.08%
Ambulatory Care	155,836	19,554	12.55%

Hospital Recidivism

Table D-3—Hospital Recidivism: FY 2008–2009 for Colorado Health Partnerships, LLC							
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	87	7	8%	146	9	6%
	30 Days	87	11	13%	146	21	14%
	90 Days	87	26	30%	146	41	28%
Adolescent 13–17 Years of Age	7 Days	159	2	1%	266	5	2%
	30 Days	159	9	6%	266	20	8%
	90 Days	159	18	11%	266	35	13%
Adult 18–64 Years of Age	7 Days	148	4	3%	328	4	1%
	30 Days	148	17	11%	328	17	5%
	90 Days	148	24	16%	328	27	8%
Adult 65 Years of Age and Older	7 Days	4	0	0%	16	0	0%
	30 Days	4	2	50%	16	3	19%
	90 Days	4	3	75%	16	4	25%
All Ages	7 Days	398	13	3%	756	18	2%
	30 Days	398	39	10%	756	61	8%
	90 Days	398	71	18%	756	107	14%

Average Length of Stay

Table D-4—Hospital Average Length of Stay (ALOS): FY 2008–2009 for Colorado Health Partnerships, LLC						
Population	Non-State Hospitals			All Hospitals		
	Denominator	Numerator	ALOS	Denominator	Numerator	ALOS
Child 0–12 Years of Age	87	743	8.54	146	1,849	12.66
Adolescent 13–17 Years of Age	159	1,134	7.13	266	2,238	8.41
Adult 18–64 Years of Age	148	1,203	8.13	328	7,210	21.98
Adult 65 Years of Age and Older	4	33	8.25	16	1,391	86.94
All Ages	398	3,313	8.32	756	12,688	16.78

Emergency Room Utilization

Table D-5—Emergency Room Utilization: FY 2008–2009 for Colorado Health Partnerships, LLC			
	Denominator	Numerator	Rate per 1,000 Members
Child 0–12 Years of Age	70,830	144	2.03
Adolescent 13–17 Years of Age	16,812	288	17.13
Adult 18–64 Years of Age	54,762	1,338	24.43
Adult 65 Years of Age and Older	13,433	4	0.30
All Ages	155,836	1,774	11.38

Inpatient Utilization

Table D-6—Inpatient Utilization: FY 2008–2009 for Colorado Health Partnerships, LLC						
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	70,830	87	1.23	70,830	146	2.06
Adolescent 13–17 Years of Age	16,812	159	9.46	16,812	266	15.82
Adult 18–64 Years of Age	54,762	148	2.70	54,762	328	5.99
Adult 65 Years of Age and Older	13,433	4	0.30	13,433	16	1.19
All Ages	155,836	398	2.55	155,836	756	4.85

Follow-Up Postdischarge

Table D-7—Follow-Up Postdischarge: FY 2008–2009 for Colorado Health Partnerships, LLC			
	Denominator (Discharges)	Numerator (Seen Within Date Criteria)	Follow-Up Rate
7–Day (Non-State Hospital)	344	164	47.67%
30–Day (Non-State Hospital)	344	238	69.19%
7–Day (All Hospitals)	649	323	49.77%
30–Day (All Hospitals)	649	447	68.88%