



Commonwealth of Pennsylvania  
Department of Public Welfare  
Office of Mental Health and Substance Abuse Services

2016 Encounter Data Onsite  
Performance Measure Review

Community Care Behavioral Health

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## Introduction

HealthChoices Behavioral Health (BH) is the mandatory managed care program which provides Medical Assistance recipients with BH services in the Commonwealth of Pennsylvania (PA). The PA Department of Human Services (DHS) Office of Mental Health and Substance Abuse Services (OMHSAS) contracted with IPRO as its external quality review organization (EQRO) to conduct the 2016 Encounter Data Validation (EDV) onsite reviews and webinars for the HealthChoices BH managed care organizations (BH-MCOs).

Encounter data validation is an ongoing process, involving the MCOs, the state encounter data unit and the EQRO. It includes both a baseline evaluation and ongoing monitoring of submission patterns. The purpose of this monitoring is to identify and resolve issues that arise in the encounter data submission process. In 2013, BH-MCO onsite reviews were conducted as a baseline evaluation of the BH-MCO encounter data units. In the third quarter of 2016 and the first and second quarters of 2017, BH-MCO's onsite visits and webinars were conducted as a part of the ongoing monitoring of submission of encounter data to the DHS's claim processing and management information system, Provider Reimbursement and Operations Management Information System (in electronic format; PROMISe).

Since 2005, on a weekly basis, IPRO receives encounter data extracts from PROMISe and loads the files to IPRO's Statistical Analysis Software (SAS) data warehouse (DW). For physical health (PH) encounter data, IPRO loads the PROMISe paid/accepted dental, professional, institutional and pharmacy extracts (Table 1). For BH encounter data, IPRO loads the PROMISe paid/accepted professional and institutional data extracts to its DW. Since January 1, 2012, IPRO also loads the PROMISe denied BH encounter data to its DW. As the weekly PH and BH encounter data extracts are loaded into IPRO's DW, IPRO conducts checks on the data elements and volumes received (Table 1).

Table 1: Physical and Behavioral Health Encounter Data Volume

Encounter Type	Claim Volume
<b>Physical Health<sup>1</sup></b>	
Institutional	62,622,327
Professional	208,985,522
Dental	9,586,305
Pharmacy	368,870,836
<b>Behavioral Health<sup>1</sup></b>	
Institutional	1,593,010
Professional	183,497,799

<sup>1</sup>Claim header volume stored in IPRO's data warehouse as of 1/23/2017.

In addition, on a quarterly basis, IPRO receives the PH and BH eligibility slice files from DHS and loads them into IPRO's SAS DW. The BH eligibility slice file typically contains demographic and eligibility information about members, such as date of birth, county, gender, race, ethnicity, recipient ID#, assistance/aid categories, effective and expiration dates.

On a monthly basis, IPRO attends the Encounter Action Team (EAT) technical meetings with DHS, DXC Technology (formally known as HP), which provides technical discussions on encounter data submission issues, change orders and defect statuses. On a monthly basis, IPRO also attends the technical PROMISe call with DXC Technology, Office of Medical Assistance Programs (OMAP), Mercer and the PH MCOs to discuss encounter data submission status and issues regarding the PH encounter data submissions. IPRO also participates on weekly PH calls with DHS and bi-weekly calls with OMHSAS to discuss BH encounter data validation activities.

The BH-MCOs were requested to complete and return the information systems capabilities assessment (ISCA) tool to IPRO prior to the EDV onsite visit and webinar. IPRO modified the 5/1/2002 version 1.0 ISCA found in CMS's appendix section of the External Quality Review Activity Protocol. IPRO tailored the questions for the BH-MCO, DHS and PROMISe submission process. IPRO also included a section on the BH-MCOs annual performance measure (PM) development activities and processes. The purpose of the assessment was to specify the capabilities of the BH-MCO's information systems (IS) and to pose standard questions to be used to assess the strengths of the BH-MCO with respect to these

capabilities. The ISCA assisted IPRO to assess the extent to which the BH-MCO's information system is capable of producing valid encounter data, PM member-level data, tracking PROMISe encounter data submissions and other data necessary to support quality assessment and improvement and PM improvement programs.

The ISCA completion was followed by an encounter data onsite visit or a 4-hour webinar. IPRO conducted a 4-hour webinar of CCBH. The purpose of the onsite visits/webinar was:

1. To be able to review the ISCA findings with the appropriate BH-MCO staff, and discuss any outstanding questions regarding the BH-MCO's ISCA responses;
2. To review the BH-MCO's production enrollment, claim/encounter, and PROMISe submission and PM development processes; and
3. To view member and claim examples selected from the 2016 BH Performance Measure HEDIS® Follow-up After Hospitalization for Mental Illness (FUH) member-level data files submitted on the BH-MCO's system screens.

OMHSAS required the BH-MCOs to submit the following 2016 Annual Performance Measures for measurement year 2015:

- Follow-up After Hospitalization for Mental Illness (FUH) PM. This 2016 BH PM assesses the percentage of discharges for members six years of age and older who were hospitalized for treatment of selected mental health disorders, who were seen on an ambulatory basis or who were in day/night treatment with a mental health provider on the date of discharge up to seven, and 30 days after hospital discharge. BH-MCOs are required to submit data files and source code to IPRO. For this measure two separate versions are requested: HEDIS specifications and PA-specific specifications.
- Readmission Within 30 Days of Inpatient Psychiatric Discharge (REA) PM. This 2016 BH PM assessed the percentage of discharges for enrollees from inpatient acute psychiatric care that were subsequently followed by an inpatient acute psychiatric care readmission within seven, and 30 days of the previous discharge. BH-MCOs are required to submit data files and source code to IPRO.

## General Information

Community Care Behavioral Health (CCBH) has participated in the BH HealthChoices contract since 1999. CCBH went live with Allegheny County in 1999. In 2016, CCBH continued to service 11 contracts which include 38 counties for the HealthChoices product line. Their total average enrollment in 2015 was 820,845 members (Table 2).

The 2016 EDV four-hour webinar was held on March 13, 2017. OMHSAS and IPRO attended the webinar. CCBH also attended the webinar.

Table 2 lists the PA BH contractors where CCBH enrolled members during 2015 and the average monthly number of HealthChoices members enrolled for the period from January 1, 2015 to December 31, 2015:

Table 2: Average Monthly HealthChoices Enrollment by BH MCO Contractors

BH-MCO Contractor	Average Monthly Enrollment in 2015
Adams	11,886
Allegheny	183,756
Berks	73,110
Chester	41,265
Erie	60,089
York	65,765
Northeast	113,113
Carbon, Monroe and Pike (CMP)	45,183
North Central	174,479
Blair	25,430
Lycoming/Clinton	26,769
Total	820,845

## Performance Measure Development

CCBH utilizes an Enterprise Data Warehouse (EDW) and a data mart that is built from the EDW for PM development. The data mart contains tables with all the data elements required for PM development. CCBH develops the PM source code using Statistical Analysis System (SAS) programming language. CCBH's data reporting repository includes MCO-paid, MCO-denied and alternate payment arrangements (APA) claims.

CCBH's EDW that is used to calculate the BH PMs is refreshed weekly with membership and enrollment data from the PsychConsult®. PsychConsult® is CCBH's member enrollment system that is offered by Askesis Development Group. CCBH's EDW is refreshed weekly and monthly with claims data from MC400 system. MC400 is CCBH's proprietary claims processing system. The data mart is rebuilt with data from EDW after each EDW refresh. When extracting claims for the PMs, tables in the data mart are linked by unique identifiers from each table to extract claims and member enrollment data. CCBH verifies the accuracy of the data merges by comparing the data counts prior to and after merging the tables. CCBH utilizes internal controls to ensure that members that are not eligible and duplicate claims are not included in the PM process.

CCBH's Decision Support group is responsible for the PMs and utilizes a peer review process to ensure the accuracy and completeness of the PM SAS program code. During the review process, if discrepancies are identified with the SAS program code, then the SAS program code is modified and reviewed again.

CCBH updates the PM SAS program code once a year as per the PM specifications. CCBH archives the PM specifications and the final version of the SAS program code every year. CCBH reviews the archived versions of the PM specifications and SAS program code prior to the development of the current year PM.

During the EDV webinar, CCBH indicated that the UB type of bill codes found in Table 1.4 of the 2016 FUH PM Specifications do not include valid codes found in their claim system. FUH Table 1.4 includes UB type of bill codes included in the HEDIS 2016 FUH measure specifications and Nonacute Inpatient Stay value set. CCBH does not utilize the UB type of bill codes to identify non-acute inpatient stays, CCBH uses the revenue codes found in Table 1.4 of the specifications to identify non-acute inpatient stays to exclude.

As part of EDV, IPRO compared the 2016 FUH PM member-level data to the BH paid/accepted PROMISe DW tables maintained by IPRO. IPRO also compared the enrollment information of the members included on the 2016 FUH PM member-level file to IPRO's BH eligibility DW.

### Enrollment

Prior to the EDV webinar, IPRO compared the members included in the 2016 FUH PM member-level data file to IPRO's BH eligibility DW. IPRO utilized the enrollment data to verify and flag any member that was not enrolled with CCBH on the discharge date or were enrolled with a different BH-MCO on the discharge date. The following data elements were reviewed during the EDV webinar on CCBH's enrollment system: Recipient ID, date of birth, last and first name and enrollment and disenrollment dates for 2015. There were 15,072 internal control numbers (ICNs) submitted and accepted to PROMISe (Table 3). Of these, 14,258 (99.82%) were enrolled with CCBH on discharge date, two were enrolled with another BH-MCO, and 24 were not enrolled in HealthChoices at discharge date (Table 3).

IPRO identified four member records from the 2016 FUH PM member-level data file to review during the webinar review (Table 3). The following observations were made during the EDV webinar review of the four member records, discrepancies were found with all four records reviewed:

- Member last and first name: IPRO was not able to confirm member last and first name in IPRO’s DW, since the information is not available in the quarterly BH Eligibility Slice File. The name on the 2016 FUH PM member-level data file matched the name in CCBH’s enrollment system for all four records.
- Date of birth: IPRO was able to confirm that the date of birth on CCBH’s enrollment system matched the date of birth on IPRO’s BH Eligibility DW for all four members.
- Enrollment history: For the four members, the effective and expiration dates from CCBH’s enrollment system did not match the dates on IPRO’s BH Eligibility DW. The discrepancy was attributed to retroactive disenrollment of the members. One of the four members was enrolled in a different BH-MCO based on IPRO’s BH Eligibility DW. The discrepancy was attributed to retroactive disenrollment of the member from CCBH. After further review, it has been determined the discrepancy to be associated with the different eligibility source files and a certain number of mismatches are expected.

Table 3: Enrollment Denominator Comparison to the BH Eligibility Slice File

Denominator Type	Formula Description	Number or Percent of Members
BH-MCO PM denominator	M1	15,072
BH-MCO ICN submitted and accepted in PROMISE	PD3	14,284
<b>BH Eligibility Slice File</b>		
Enrolled with BH-MCO on discharge date	E1	14,258
Enrolled with other BH-MCO on discharge date	E2	2
Not enrolled in HealthChoices on discharge date	E3	24
<b>Total</b>	<b>E1 + E2 + E3 = DA</b>	<b>14,284</b>
Percent of PROMISE submitted and accepted ICNs with member enrolled with BH-MCO	E1/DA	99.82%
Percent of PROMISE submitted and accepted ICNs with member not enrolled with BH-MCO	(E2 + E3)/DA	0.18%

BH: behavioral health; MCO: managed care organization; PROMISE: Provider Reimbursement and Operations Management Information System (in electronic format); ICN: internal control number.

## PM FUH Denominator Comparison

Prior to the EDV webinar, IPRO compared the denominator PROMISE ICNs included in the 2016 FUH PM member-level data file to IPRO's BH PROMISE institutional DW. IPRO identified PROMISE ICN records with discrepancies to review during the EDV webinar. The following data elements were reviewed during the webinar on CCBH's claim system: recipient ID, admission and discharge dates, dates of service, diagnosis codes, revenue codes, UB type of bill code, hospital/provider ID number, place of service (POS), patient discharge status codes.

Appendix A presents the 2016 PM FUH denominator comparison. IPRO selected a sample of two PROMISE ICNs from the PM FUH denominator comparison report to review during the EDV webinar on CCBH's claim system. The two FUH denominator PROMISE ICNs were found on the paid/accepted PROMISE institutional inpatient extract. The values of the data elements in the 2016 PM FUH member-level data file and CCBH's claim system were identical.

The following discrepancies were noted between the 2016 FUH PM member-level data and IPRO's BH PROMISE paid/accepted DW during the review:

- **Admission Date:** for one of the two FUH denominator PROMISE ICNs, the PROMISE admission date did not match CCBH's claim system. The discrepancy was attributed to CCBH concatenating three institutional encounters and using the admission date of the last encounter during the development of the PM; the PM data file only allows for the identification of one PROMISE ICN and CCBH included the PROMISE ICN of the last of the three institutional encounters.
- **Discharge Date:** for one of the two FUH denominator PROMISE ICNs, the PROMISE discharge date did not match CCBH's claim system. The discrepancy was attributed to CCBH concatenating two institutional encounters and using the discharge date of the last encounter during the development of the PM; the PM data file only allows for the identification of one PROMISE ICN and CCBH included the PROMISE ICN of the first of the two institutional encounters.
- **Type of Bill:** for the two FUH denominator PROMISE ICNs, the PROMISE type of bill did not match CCBH's claim system. The discrepancy was attributed to CCBH deriving the type of bill code, prior to submission of institutional encounters to PROMISE using the following logic:
  - Type of bill code submitted on the claim is used without any modification when the patient discharge status code is '30', indicating that the patient was not discharged and the claim frequency type code, which represents the third digit of the type of bill code is either '2' or '3'.
  - Type of bill code is set to '113' when the patient discharge status code is '30', indicating that the patient was not discharged and the claim frequency type code is '3' or the type of bill submitted on the claim is missing.
  - Type of bill code is set to the first two digits of the type of bill submitted on the claim with a claim frequency type code '1' when the patient discharge status code is not '30', indicating that the patient was discharged and the claim frequency type code is either '2' or '3' and the date of admission and date of service are the same.
  - Type of bill code is set to the first two digits of the type of bill submitted on the claim with a claim frequency type code '4' when the patient discharge status is not '30', indicating that the patient was discharged and the claim frequency type code is either '2' or '3'.
  - Type of bill is set to '111' when the type of bill on the claim is missing.
- **Revenue code:** for one of the two FUH denominator PROMISE ICNs, the PROMISE revenue code did not match CCBH's claim system. The discrepancy was attributed to CCBH's mapping of the revenue code to align with the BHSRCC grid prior to PROMISE submission.
- **Discharge Status code:** for one of the two FUH denominator PROMISE ICNs, the PROMISE patient discharge status code did not match CCBH's claim system. The discrepancy was attributed to CCBH concatenating two institutional encounters and utilizing the patient discharge status code on the final claim during the development of the PM; the PM data file only allows for the identification of one PROMISE ICN and CCBH included the PROMISE ICN of the first of the two institutional encounters.

## Numerator Comparison

Prior to the EDV webinar review, IPRO compared the numerator PROMISE ICNs included in the 2016 FUH PM member-level data file to IPRO's BH PROMISE professional DW. IPRO identified PROMISE ICN records with discrepancies to review during the EDV webinar. The following data elements were reviewed during the webinar on CCBH's claim

system: Recipient ID, dates of service, diagnosis codes, hospital/provider ID number, POS and Current Procedural Terminology (CPT) codes.

Appendix B presents the 2016 PM FUH numerator comparison. IPRO selected a sample of two PROMISe ICNs from the PM FUH numerator comparison report to review during the EDV webinar on CCBH's claim system. The two FUH numerator PROMISe ICNs were found on the paid/accepted PROMISe professional extract. The values of the data elements in the 2016 PM FUH member-level data file and CCBH's claim system were identical.

The following discrepancies were noted between the 2016 PM FUH member-level data and IPRO's BH PROMISe paid/accepted DW during the review:

- POS: for the two FUH numerator PROMISe ICNs, the outpatient POS code did not match the value on CCBH's claim system. The discrepancy was attributed to CCBH's mapping of the POS code to align with the BHSRCC grid prior to PROMISe submission.
- CPT code: for one of the two FUH numerator PROMISe ICNs, the CPT code did not match the value on CCBH's claim system. The discrepancy was attributed to CCBH's mapping of the CPT code to align with the BHSRCC grid prior to PROMISe submission.
- Provider ID: for one of the two FUH numerator PROMISe ICNs, the Provider ID did not match the value on CCBH's claim system. The discrepancy was attributed to CCBH mapping the Provider ID to '888888888' for providers that are not enrolled in Pennsylvania's Medicaid program.
- Provider Type: for one of the two FUH numerator PROMISe ICNs, the provider type did not match the value on CCBH's claim system. The discrepancy was attributed to CCBH mapping the provider type to '34' for providers that are not enrolled in Pennsylvania's Medicaid program.

## Strengths and Opportunities for Improvement

The review of CCBH's data systems, source code and quality assurance processes with regards to the 2016 PM development identified the following process strengths and opportunities for improvement:

### Strengths

- CCBH staff is knowledgeable and understands the HealthChoices product, business needs and the PM process.

### Opportunities for Improvement

- It is recommended that CCBH communicates to IPRO any issues that arise while developing the FUH PM measure. CCBH and IPRO can then work together to enhance specifications to pull in appropriate services.
- In developing the BH PM files, CCBH should utilize data prior to any BHSRCC grid mapping or defaulting. CCBH has indicated that they are mapping and/or defaulting the POS, provider identification number, revenue and procedure codes. In the 2017 PM specifications, IPRO has added the following language: BH-MCOs must use the provider-submitted revenue codes, UB type of bill, POS codes and procedure codes when calculating this measure. BH-MCOs should not use any cross walked codes or BHSRCC mapping for this measure.

## Appendix A: 2016 FUH PM Denominator Comparison to PROMISE

Table A1: 2016 FUH PM Denominator Comparison to PROMISE

Denominator Type	Formula Description	Number or Percent of Members
BH-MCO PM denominator	M1	15,072
BH-MCO ICN submitted and accepted in PROMISE	PD3	14,284
BH-MCO PM PROMISE denominator ICN submitted and PROMISE accepted, matched to PROMISE DW	DA2	14,284
BH-MCO recipient ID matches PROMISE	DM1	14,284
Percent of BH-MCO recipient ID matches PROMISE	DM1/DA2	100%
BH-MCO hospital/provider ID matches PROMISE	DM2	14,284
Percent of BH-MCO hospital/provider ID matches PROMISE	DM2/DA2	100%
BH-MCO admission date matches PROMISE	DM3	13,410
Percent of BH-MCO admission date matches PROMISE	DM3/DA2	93.9%
BH-MCO discharge date matches PROMISE	DM4	14,283
Percent of BH-MCO discharge date matches PROMISE	DM4/DA2	100%
BH-MCO discharge status code matches PROMISE	DM8	14,187
Percent of BH-MCO discharge status code matches PROMISE	DM8/DA2	99.3%

FUH: Follow-up After Hospitalization for Mental Illness; PM: performance measure; PROMISE: Provider Reimbursement and Operations Management Information System (in electronic format); BH: behavioral health; MCO: managed care organization; ICN: internal control number; DW: data warehouse.

## Appendix B: 2016 FUH PM Numerator Comparison to PROMISE

Table B1: 2016 FUH PM Numerator Comparison to PROMISE

Numerator Type	Formula Description	Number or Percent of Members
BH-MCO PM numerator	M2	11,348
BH-MCO ICN submitted and accepted in PROMISE	PD3	14,284
BH-MCO PM PROMISE numerator ICN submitted and PROMISE accepted, matched to PROMISE DW	NA2	10,179
BH-MCO provider ID matches PROMISE	NM1	10,178
Percent of BH-MCO recipient ID matches PROMISE	NM1/NA2	100%
BH-MCO provider type matches PROMISE	NM2	10,163
Percent of BH-MCO provider type matches PROMISE	NM2/NA2	99.8%
BH-MCO POS matches PROMISE	NM3	3,689
Percent of BH-MCO POS matches PROMISE	NM3/NA2	36.2%
BH-MCO service date matches PROMISE	NM4	10,179
Percent of BH-MCO service date matches PROMISE	NM4/NA2	100%
BH-MCO primary diagnosis matches PROMISE	NM5	10,178
Percent of BH-MCO primary diagnosis matches PROMISE	NM5/NA2	100%
BH-MCO CPT/HCPCS/revenue code matches PROMISE	NM6	7,140
Percent of BH-MCO CPT/HCPCS/revenue code matches PROMISE	NM6/NA2	70.1%

FUH: Follow-up After Hospitalization for Mental Illness; PM: performance measure; PROMISE: Provider Reimbursement and Operations Management Information System (in electronic format); BH: behavioral health; MCO: managed care organization; ICN: internal control number; DW: data warehouse; CPT: Current Procedural Terminology; HCPCS: Healthcare Common Procedure Coding System.

## Appendix C: 2016 Performance Measure Rates

Table C1: 2016 Performance Measure Rates

Measurement Year 2016 Performance Measures	CCBH			HealthChoices Population			
	Numerator	Denominator	Rate	Numerator	Denominator	Average Rate	Weighted Average Rate
Readmission After Psychiatric Discharge	2,670	19,038	14.0%	6,737	48,239	14.0%	14.0%
Follow-up After Hospitalization - HEDIS 7 Day	7,151	15,072	47.4%	17,076	37,505	45.5%	44.9%
Follow-up After Hospitalization - HEDIS 30 Day	10,209	15,072	67.7%	24,662	37,505	65.8%	65.4%
Follow-up After Hospitalization - PA 7 Day	9,005	15,072	59.7%	21,216	37,505	56.6%	55.8%
Follow-up After Hospitalization - PA 30 Day	11,348	15,072	75.3%	27,371	37,505	73.0%	72.7%