Arizona Department of Health Services
Division of Behavioral Health Services

Quarter 4, Fiscal Year 2009
Quarterly Performance Improvement Report

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Table of Contents

TABLE OF CONTENTS **2**

EXECUTIVE SUMMARY **3**

INTRODUCTION **5**

POPULATIONS 5
DATA 5

ACCESS TO CARE **5**

7-DAY MEASURE 5
23-DAY MEASURE 8

COORDINATION OF CARE **13**

COC 1 (REFERRAL) 13
COC 2 (COMMUNICATION) 14

APPROPRIATENESS OF SERVICES **17**

SUFFICIENCY OF ASSESSMENTS **20**

CONCLUSION **22**

ATTACHMENT A **1**

ATTACHMENT B **1**

Executive Summary

The Quarter 4, FY09 (Q409) Adult Quarterly Performance Improvement Report presents an analysis of Regional Behavioral Health Authority (RBHA) specific and statewide performance on the following Arizona Health Care Cost Containment System (AHCCCS) performance measures:

- Access to Care
- Coordination of Care
- Appropriateness of Services
- Sufficiency of Assessments

Performance measures data is compared to existing data sources for identification of systemic areas for improvement and include member complaints, Quality of Care issues, and RBHA specific corrective actions. The following table provides a snapshot of Adult Performance Measures scores for Q409. Performance measures data is trended over FY08 to the current reporting quarter within the analysis sections of this report.

RBHA	Access to Care 7 Day	Access to Care 23 Day	Coordination of Care 1	Coordination of Care 2	Appropriate-ness of Services	Sufficiency of Assessments
	MPS: 90%	MPS 90%	MPS: 80%	MPS: 70%	MPS: 85%	MPS: 85%
CBH AZ 2	99%	95%	100%	94%	88%	100%
CBH AZ 4	96%	96%	100%	86%	100%	99%
CPSA 3	99%	87%	100%	44%	93%	100%
CPSA 5	100%	95%	91%	79%	83%	100%
Magellan	80%	93%	100%	71%	71%	99%
NARBHA	95%	86%	94%	97%	62%	99%
SW RBHA	86%	92%	96%	79%	78%	99%
Gila River	99%	NA	NA	NA	NA	NA
Pascua Yaqui	100%	NA	NA	NA	NA	NA
White Mtn	100%	NA	NA	NA	NA	NA
SW TRBHA	99%	NA	NA	NA	NA	NA

Strengths

- Statewide performance exceeded the Minimum Performance Standard (MPS) on both Coordination of Care (COC) indicators for the second consecutive quarter;
- Statewide performance exceeded the MPS on the Access to Care 23 Day measure;
- Statewide performance exceeded the MPS on the Sufficiency of Assessments Measure; and
- ADHS/DBHS improvement in performance on both COC indicators, the Access to Care 23 Day measure, Appropriateness of Services and Sufficiency of Assessments are statistically significant.

Areas for Improvement

- Provision of clinically appropriate services to continuously enrolled recipients, including timely updates to service plans and assessments; and
- Increased clinical supervision to front line staff coordinating care, assessing and developing service plans for behavioral health recipients.

The following report includes detailed analysis of the performance measures and includes supporting data from the functional areas within ADHS/DBHS. RBHA specific and statewide improvement activities are included in the body of the report and tracked through the ADHS/DBHS Quality Management (QM) Committee and sub-committees to drive systems improvement.

Introduction

This report presents an analysis of statewide performance on the following AHCCCS performance measures: Access to Care, Coordination of Care, Sufficiency of Assessments, and Appropriateness of Services. Performance measures data is trended over multiple reporting quarters and supported by data from existing QM data feeds, including consumer complaints, Quality of Care (QOC) concerns and other monitoring activities.

Populations

TXIX adult behavioral health recipients (age >=21) enrolled in Seriously Mentally Ill (SMI); Substance Abuse (SA) and General Mental Health (GMH) Programming.

Data

Data is aggregated as "Adults" for the performance measures and reported by Regional Behavioral Health Authority (RBHA), Geographic Service Area (GSA) and Statewide. Data is collected by Arizona Department of Health Services/Division of Behavioral Health Services (ADHS/DBHS) Quality Management (QM) staff from the ADHS/DBHS Client Information System (CIS); RBHA submitted documentation; and chart reviews. Data validation activities are conducted per the ADHS/DBHS Performance Improvement Specifications Manual and are reported within the methodology for each measure. Performance measures data is analyzed for statistical significance in either gains or declines in performance by comparing Q109 scores to Q409 scores using a chi-square test. Tables containing the raw numbers showing the Q409 numerators and denominators for all measures are provided in Attachment A. Statistical analysis was conducted on the performance measures using a chi-square test to determine if change from Q109 to Q409 was significant. The results of the chi-square tests are provided in Attachment B.

Two of the performance measures, Access to Care, 23 Day and Appropriateness of Services are reported on a quarter lag. For consistency in reporting, data shown in this report are labeled as Quarter 4, Fiscal Year 2009 (Q409) but the review period is Q309.

Due to the nature of the Intergovernmental Agreements (IGAs) with the Tribal Behavioral Health Authorities (TRBHAs), not all performance measures are mandated for quarterly review by these entities as with the RBHAs. Only performance measures data consistent with the TRBHA IGA requirements is presented in this report.

Access to Care

Access to Care consists of two measures evaluating compliance with required timeframes for providing behavioral health services upon referral.

7-Day Measure

Definition

Appointments for routine assessments are available to TXIX/XXI individuals referred for/requesting services within 7 days of the referral.

Methodology

T/RBHAs submit electronic referral logs to ADHS/DBHS via the Sherman server using a prescribed format. Referrals that contain a "Yes" in the "Title XIX/XXI" field and contain no errors in the following fields are used to calculate compliance with this measure:
a. Referral Date

b. First Appointment Offered Date
c. Program Type
d. TXIX/XXI Field

ADHS/DBHS QM staff calculates the number of days between Referral Date and First Appointment Offered Date to determine the rate of compliance. ADHS/DBHS programmatically reviews T/RBHA submitted referral logs for completeness and accuracy of Access to Care data. Errors are identified as erroneous or missing data in any of the referral log fields, except BHS Client ID. Error rates cannot exceed 5% per GSA, per reporting quarter. T/RBHAs are subject to corrective action, up to and including sanctions, if the error rate exceeds 5% for two consecutive quarters. Please see Attachment A. for the referral log error rate calculations for each RBHA and Statewide.

Calculation:

Number of TXIX Referrals with <=7 days from Referral Date to
First Appointment Offered Date
____
Total Number of TXIX Referrals Submitted by T/RBHA
= Percent in Compliance

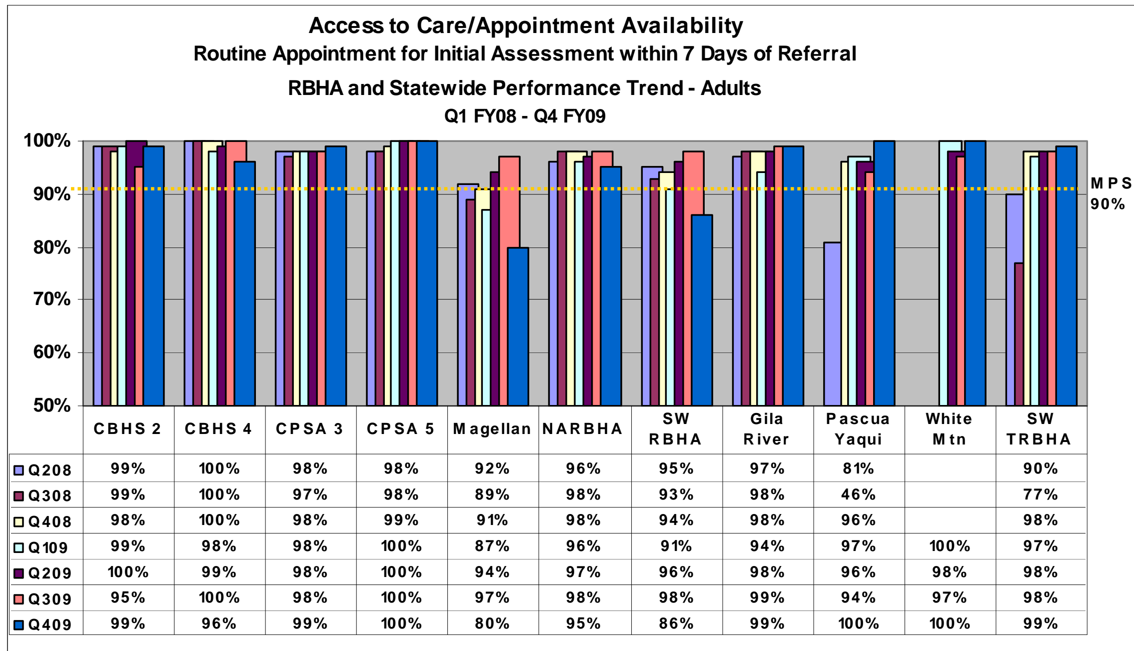
Performance Standards:
Minimum Performance Standard: 90%
Goal: 95%
Benchmark: 100%

Q409 RBHA Performance:
Numerator: 11,803
Denominator: 13,659
Percent Compliance: 86%

Q409 TRBHA Performance:
Numerator: 184
Denominator: 186
Percent Compliance: 99%

Figure A depicts statewide performance on this measure over FY08 and FY09.

Figure A.



	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	SW RBHA	Gila River	Pascua Yaqui	White Mtn	SW TRBHA
Q208	99%	100%	98%	98%	92%	96%	95%	97%	81%		90%
Q308	99%	100%	97%	98%	89%	98%	93%	98%	46%		77%
Q408	98%	100%	98%	99%	91%	98%	94%	98%	96%		98%
Q109	99%	98%	98%	100%	87%	96%	91%	94%	97%	100%	97%
Q209	100%	99%	98%	100%	94%	97%	96%	98%	96%	98%	98%
Q309	95%	100%	98%	100%	97%	98%	98%	99%	94%	97%	98%
Q409	99%	96%	99%	100%	80%	95%	86%	99%	100%	100%	99%

Statewide performance for the Adult population did not meet the MPS this reporting quarter with a score of 86%. Statistical analysis of the statewide data comparing Q109 to Q409 indicates the decline from Q109 is statistically significant. Statewide performance for the Tribes remained consisted at 99%.

Magellan specific issues pertaining to compliance with this performance measure include problems with timely and accurate encounter submissions used to calculate this measure as well as ongoing training needs with Magellan providers. Magellan is addressing these barriers through a Corrective Action Plan (CAP) that is monitored by ADHS/DBHS quarterly. Please see the barriers section below for barriers to improvement as identified by the RBHAs and ADHS/DBHS.

To date, all RBHAs have demonstrated low numbers of errors in their referral logs that could potentially impact performance on this measure as calculated. White Mountain is the only T/RBHA above the error rate this reporting quarter (14%), decreasing the referrals reviewed from 22 to 19. Of note is that the remaining White Mountain files were at 100% compliance.

The Access to Care 7 Day measure will no longer be an AHCCS performance measure in FY10. However, ADHS/DBHS utilizes the referral logs submitted by the RBHAs in the methodology for the Coordination of Care 1 (Referral) measure (see below). To that end, ADHS/DBHS will continue to require the T/RBHAs to submit the referral logs monthly and calculate error rates. ADHS/DBHS will provide increased technical assistance to White Mountain, including the opportunity to correct referral log submissions, to assist in improved performance. ADHS/DBHS continues to provide technical assistance to Magellan pertaining to the timely processing of referrals.

23-Day Measure

Definition

A behavioral health service is provided within 23 days of the initial assessment for newly-enrolled TXIX/XXI behavioral health recipients.

Methodology

ADHS/DBHS retrieves T/RBHA enrollment data from its CIS. The performance measure has a minimum encounter data submission requirement consistent with those set by the Bureau of Financial Operations. The accuracy and completeness of data submitted by the RBHAs to the CIS is ensured through pre processor edits and random data validation reviews of behavioral health recipient medical charts. In the event that the prevalence of unusable data (intakes without an assessment encounter within 45 days of intake date) prevents assessment of compliance with this performance measure, ADHS/DBHS may require documentation from medical chart audits to substantiate the provision of services. The TRBHA IGAs do not require participation on this measure. A quarter lag time is applied to this measure to accommodate the submission of assessment and encounter data to CIS.

Calculation:

Number of TXIX behavioral health recipients with an intake during the quarter and a corresponding assessment encounter within 45 days of the intake date and with an ongoing service encounter within 23 days after the assessment

Total number of TXIX behavioral health recipients with an intake during the quarter and a corresponding assessment encounter within 45 days of the intake date ("usable" intakes)

= Percent in Compliance

Performance Standards:

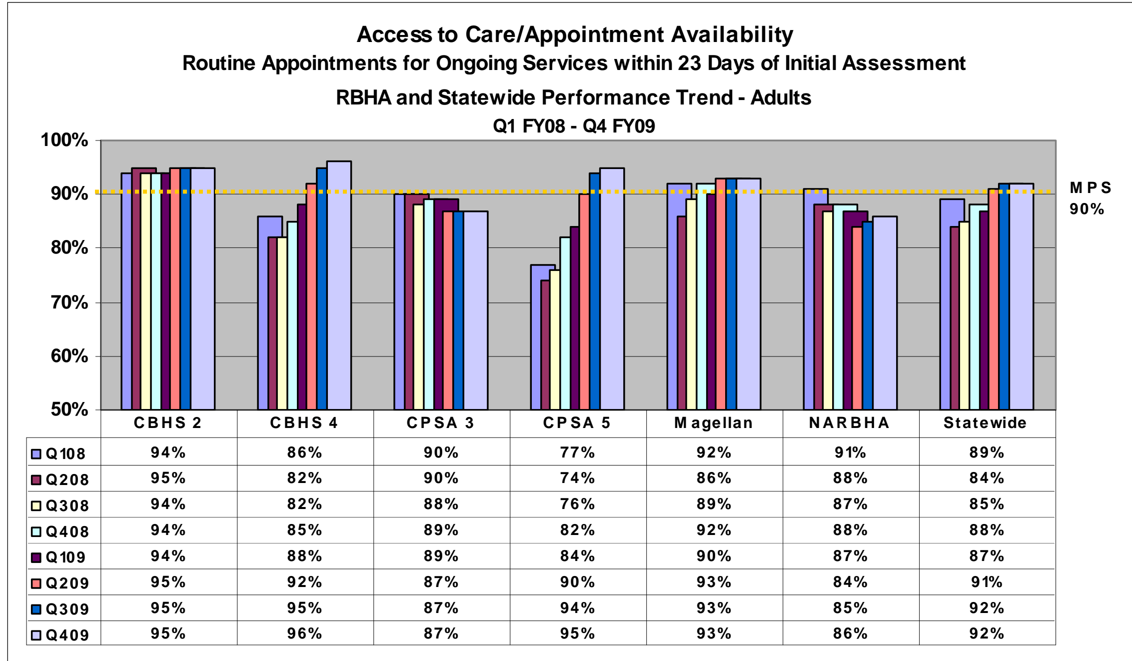
Minimum Performance Standard: 90%
Goal: 95%
Benchmark: 100%

Q409 Performance

Numerator: 26,011
Denominator: 28,218
Percent Compliance: 92%

Figure B. shows the trends of this measure over FY08 to Q409.

Figure B.

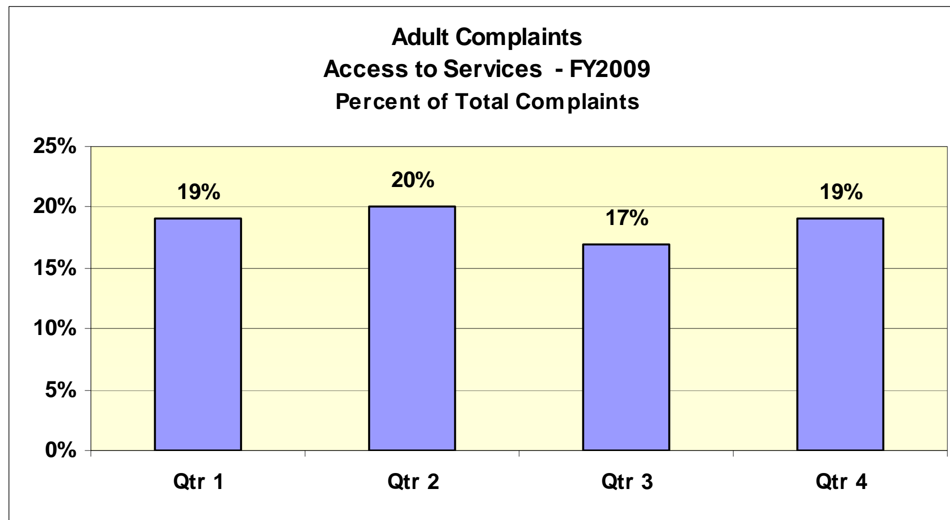


	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Q108	94%	86%	90%	77%	92%	91%	89%
Q208	95%	82%	90%	74%	86%	88%	84%
Q308	94%	82%	88%	76%	89%	87%	85%
Q408	94%	85%	89%	82%	92%	88%	88%
Q109	94%	88%	89%	84%	90%	87%	87%
Q209	95%	92%	87%	90%	93%	84%	91%
Q309	95%	95%	87%	94%	93%	85%	92%
Q409	95%	96%	87%	95%	93%	86%	92%

Statewide performance for Q409 is 92%. Trends over the past several reporting quarters indicate a slight but steady improvement in performance statewide over Q109, with statistical analysis conducted via chi-square test indicating the improvement is statistically significant. RBHAs with significant declines in performance on this measure over FY09 include NARBHA and CPSA, GSA 3. However, as this measure is calculated on a lag to allow for submission of encounters, data reported in the first ADHS/DBHS Semi-Annual report to AHCCCS in FY10 may indicate increased rates of compliance for these RBHAs. It should be noted that the MPS for this measure was revised by AHCCCS for FY10, with an MPS of 85% and a Goal of 90%. While NARBHA and CPSA 3 demonstrated a decline in performance over FY09, ADHS/DBHS will monitor these RBHAs over the next review period to determine if performance meets or exceeds the newly established MPS and Goal before taking further corrective action.

The findings on both measures show acceptable statewide performance in the Access to Care performance measures, but an analysis of complaint data consistently finds the *Access to Services* category among the top 3 highest complaint categories with a total of 146, or 19%, of all Q409 complaints. It should be noted that the *Access to Services* complaint category captures complaints pertaining to enrollment, or initial access to the behavioral health system, as well as complaints pertaining to accessing ongoing, outpatient covered services. Figure C. reflects the numbers of Access to Services complaints over FY09.

Figure C.



The sub-category contributing to the overall complaint rate for *Access to Services* is *No Provider to Meet Needs*, with 66 total, or 45% of this category's complaints. This sub-category continues to have the greatest impact on the overall numbers of complaints pertaining to *Access to Services.* This sub-category captures complaints pertaining to a member's concern that a certain provider type is not available to them for a covered service. *Timeliness* complaints were reported at a lower rate this reporting quarter than previously reported, with 16% of Access *to Services* complaints. This sub-category captures member complaints pertaining to services being provided in a timely manner. CPSA and Magellan contributed the largest amount of complaints to this complaint category over FY09.

The most frequently cited Covered Services Category related to *Access to Services* complaints in Q409 is *Treatment Services*. This marks a change in trend, as previously, *Medication Services* were the most frequently reported covered services pertaining to this complaint category in quarters 2 and 3 of FY09. The SMI population reported 49%, or 73 total *Access to Services* complaints this reporting quarter, followed by the GMH population with 38%, or 56 total complaints. These numbers are reflective of complaint patterns reported for this category from Q209 to this reporting quarter. This trend is in contrast to findings reported in Q109, where GMH persons receiving services from CPSA and Magellan lodged the largest numbers of *Access* complaints.

Upon review of available Quality of Care (QOC) data over FY09, only 15 total QOCs have been lodged in the *Access* related QOC category, *Availability, Accessibility and Adequacy*. However, five QOCs have been lodged in the *Access to Services* QOC sub-category with six falling into the *Delay in Treatment Services* QOC sub-category. While the rate of occurrence of such QOCs is infrequent, the data does support the complaint trends, indicating a need to improve the provision of ongoing outpatient services to continuously enrolled members.

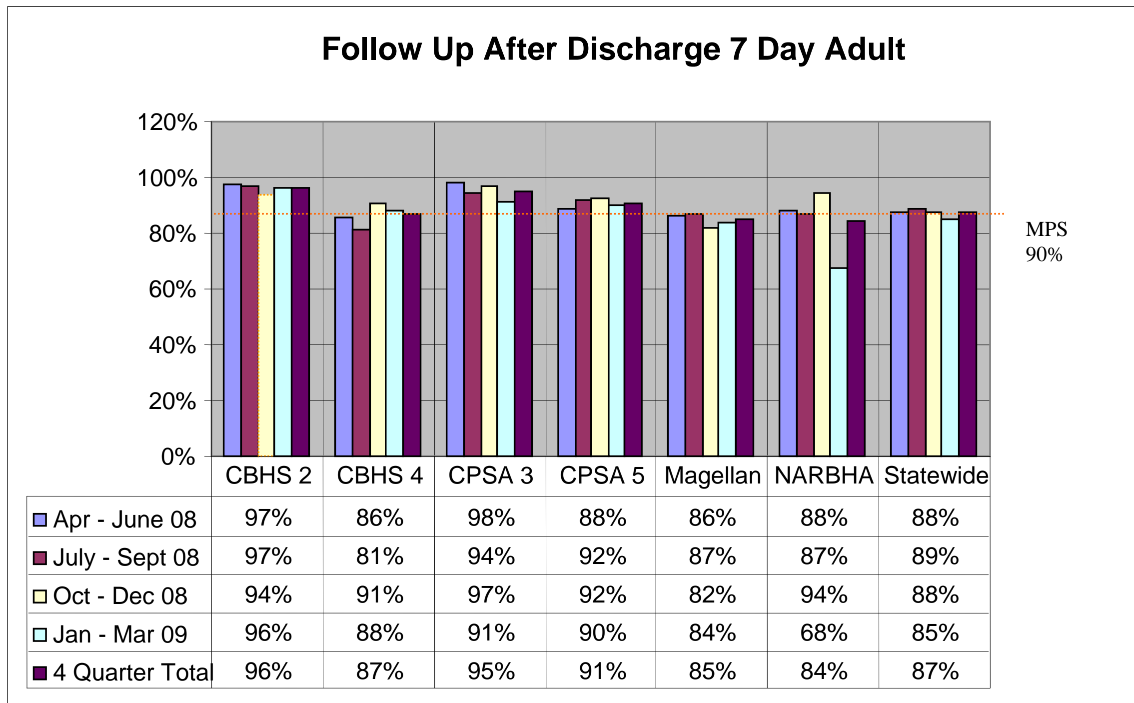
ADHS/DBHS reviews the Follow-up Service after Discharge standard as proxy measurement to the Access to Care measure. This standard assesses compliance with providing a behavioral health service to a member within the required timeframes (7 days and 30 days) following a discharge from a Level 1 Inpatient Setting. Calculation of this standard utilizes encounter data and is reported on a 90 day lag to allow for encounter submission.

Performance Standards
Minimum Performance Standard (7 Day): 90%
Minimum Performance Standard (30 Day): 95%

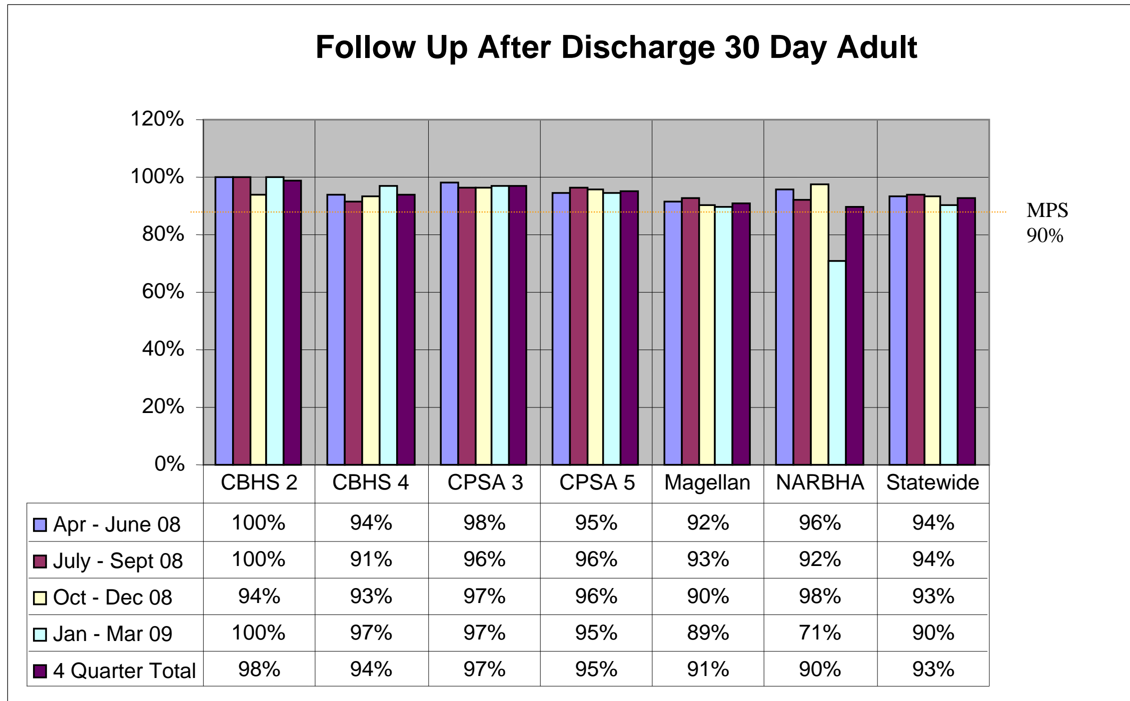
Q409 Performance (7 Day Measure)
Numerator: 6,010
Denominator: 6,874
Percent Compliance: 87%

Q409 Performance (30 Day Measure)
Numerator: 6,380
Denominator: 6,874
Percent Compliance: 93%

The following charts depict statewide performance for the Adult population on both Follow Up after Discharge Standards over four review periods.



	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Apr - June 08	97%	86%	98%	88%	86%	88%	88%
July - Sept 08	97%	81%	94%	92%	87%	87%	89%
Oct - Dec 08	94%	91%	97%	92%	82%	94%	88%
Jan - Mar 09	96%	88%	91%	90%	84%	68%	85%
4 Quarter Total	96%	87%	95%	91%	85%	84%	87%



	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Apr - June 08	100%	94%	98%	95%	92%	96%	94%
July - Sept 08	100%	91%	96%	96%	93%	92%	94%
Oct - Dec 08	94%	93%	97%	96%	90%	98%	93%
Jan - Mar 09	100%	97%	97%	95%	89%	71%	90%
4 Quarter Total	98%	94%	97%	95%	91%	90%	93%

Statewide, the MPS was not met for either of the Follow up after Discharge indicators. Due to a lag time provision for encounter submissions, calculation of performance on these indicators as reported in the ADHS/DBHS Semi Annual report may reflect increased statewide compliance. Due to the importance of receiving follow-up services after an inpatient stay, FY10 RBHA contracts have been amended to include Follow-Up Services after Hospitalization for Mental Illness as a performance measure with the MPS established at 70% for the 7 Day indicator and 80% for the 30 Day indicator. Goals for both measures have been established at 90%. As such, ADHS/DBHS will not apply any corrective action based on this measure at this time. Data will be calculated and reviewed against the MPS and Goals set by AHCCCS for FY10. In addition, ADHS/DBHS will require the RBHAs to submit data on follow-up services within 7 days and 30 days after all levels of residential care as part of theFY10 quarterly Medical/Utilization Management (MM/UM) reports.

This data as reviewed this reporting quarter does not support the findings of the complaint trends pertaining to accessing services. However, analysis of the ADHS/DBHS system of care in relation to accessing services should include all available data feeds with access implications, as reported above. The triangulation of these data feeds implies that while ADHS/DBHS' Contractors ensure services are provided to members stepping down from higher levels of care and timely access to services for persons entering the system, persons attempting to obtain certain routine outpatient services, such as individual therapy, report barriers to accessing these services.

Barriers

- Problems with the referral process at the Network/Provider level;
- Case manager retention;
- Delayed/rejected encounter submissions used to calculate measures;
- Reductions in funding for Non-Title 19 (Non TXIX) programs; and
- Possible capacity issues at specialty providers.

Actions

- ADHS/DBHS placed the RBHAs not meeting Access to Care minimum performance standards on Corrective Action Plans (CAPs) and monitors CAP progress quarterly. Magellan will conduct a new barrier analysis and efficacy review of its Access to Care CAP;
- ADHS/DBHS will provide individualized technical assistance to NARBHA and White Mountain on the Access to Care measures;
- AHCCCS and ADHS/DBHS revised the methodology for the Access to Care 23 Day measure for FY10 as it pertains to allowable services in the measure calculation. The allowable services include services determined "routine" and support the members in receiving outpatient services; and
- ADHS/DBHS will track the services calculated for this measure by covered service category and sub-category for analysis by the ADHS/DBHS Network and Clinical offices.

Coordination of Care

Coordination of Care (COC) is comprised of two standards that assess compliance with coordinating behavioral health services with the member's Arizona Health Care Cost Containment System (AHCCCS) Primary Care Physician (PCP)/Health Plan.

COC 1 (Referral)

Definition

The disposition of the referral is communicated to the PCP/Health Plan within 45 days of the assessment or; if behavioral health services are declined, within 45 days of the referral.

Methodology

100% of records submitted by the RBHAs via the monthly RBHA Referral Logs with a referral code of *35 - AHCCCS Health Plan/PCP* - are considered eligible for inclusion into the review process if the number of Health Plan/PCP referrals is <= 100 If the log contains over 100 records with a referral code of *35 – AHCCCS Health Plan/PCP*, then a random sample utilizing a 90% confidence level with a 5% error rate is pulled by ADHS/DBHS QM staff from the RBHA Referral Logs.

ADHS/DBHS QM staff place the samples on the Sherman server for RBHA use. RBHAs conduct record reviews for each individual in the sample to determine if there is evidence that the disposition of the referral was sent to the referral source as required. RBHAs submit the results to ADHS/DBHS electronically using a report template developed by ADHS/DBHS QM staff. ADHS/DBHS conducts random audits to verify the accuracy of the data submitted.

The accuracy and completeness of all required fields on the referral logs submitted by the RBHAs to ADHS/DBHS are checked programmatically and used to calculate error rates. Error rates cannot exceed 5% per GSA per reporting quarter. RBHAs are subject to corrective action, up to and including sanctions, if the error rate exceeds 5% for two consecutive quarters (Attachment A).

Calculation

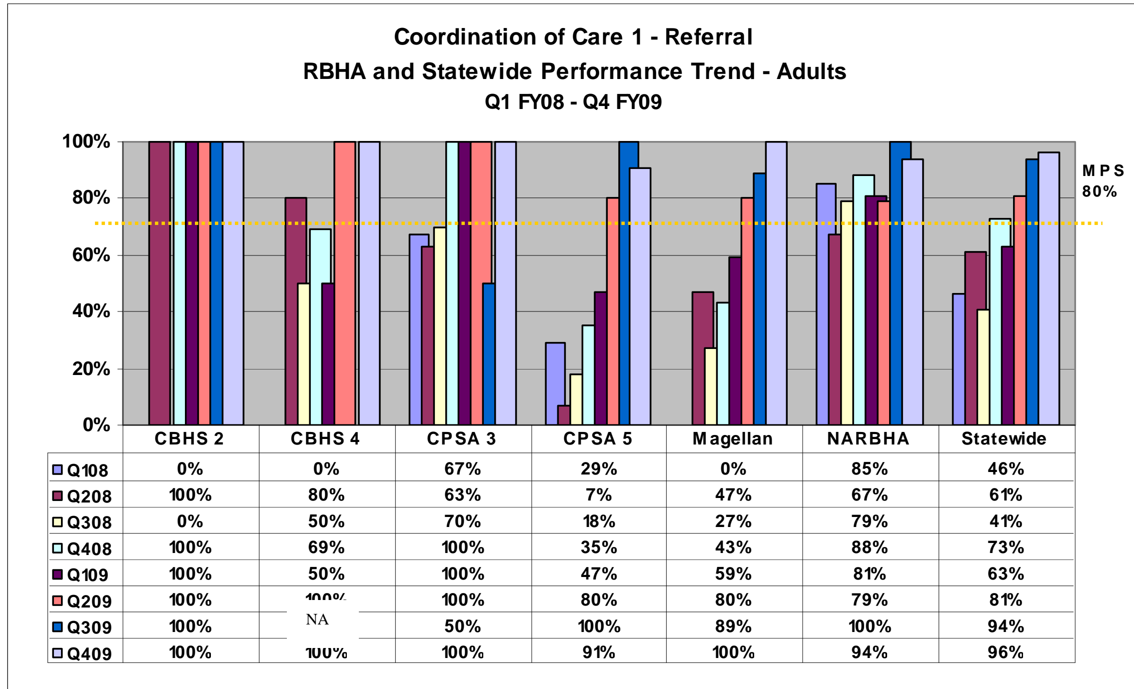
$$\frac{\text{Number of Charts Containing Referral Disposition Documentation}}{\text{Total Number of Charts Reviewed}}$$

Performance Standards
Minimum Performance Standard: 80%
Goal: 90%
Benchmark: 95%

Q409 Statewide Performance
Numerator: 97
Denominator: 101
Percent Compliance: 96%

Figure E depicts performance on COC1 from Q108 through FY09.

Figure E.



	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Q108	0%	0%	67%	29%	0%	85%	46%
Q208	100%	80%	63%	7%	47%	67%	61%
Q308	0%	50%	70%	18%	27%	79%	41%
Q408	100%	69%	100%	35%	43%	88%	73%
Q109	100%	50%	100%	47%	59%	81%	63%
Q209	100%	100%	100%	80%	80%	79%	81%
Q309	100%	NA	50%	100%	89%	100%	94%
Q409	100%	100%	100%	91%	100%	94%	96%

Statewide performance appears to continue an upward trend this reporting quarter, with a statewide score of 96%. Statistical analysis conducted via chi-square test indicates the improvement statewide in performance from Q109 to Q409 is statistically significant. No RBHA fell below the MPS this reporting quarter, with all RBHAs above the performance measure goal.

COC 2 (Communication)

Definition:
Behavioral health service providers attempt to communicate/coordinate care with the member's Primary Care Physician (PCP)/Health Plan.

Methodology:
The sample frame for this measure includes all Title XIX/XXI Adults with an SMI diagnosis and/or an Axis III diagnosis as reported in CIS. ADHS/DBHS QM staff pulls a random sample

utilizing a 90% confidence level with an error rate of 5%. The sample is then divided by four (4) to obtain the quarterly sample.

ADHS/DBHS QM staff place the samples on the Sherman server for RBHA use. RBHAs conduct record reviews for each individual in the sample to determine if there is evidence of coordination of care with the PCP as required. RBHAs submit the results to ADHS/DBHS electronically using a report template developed by ADHS/DBHS QM staff. ADHS/DBHS conducts random audits to verify the accuracy of the data submitted. Discrepant findings result in corrective actions, and may result in modifications to performance findings for the applicable reporting period.

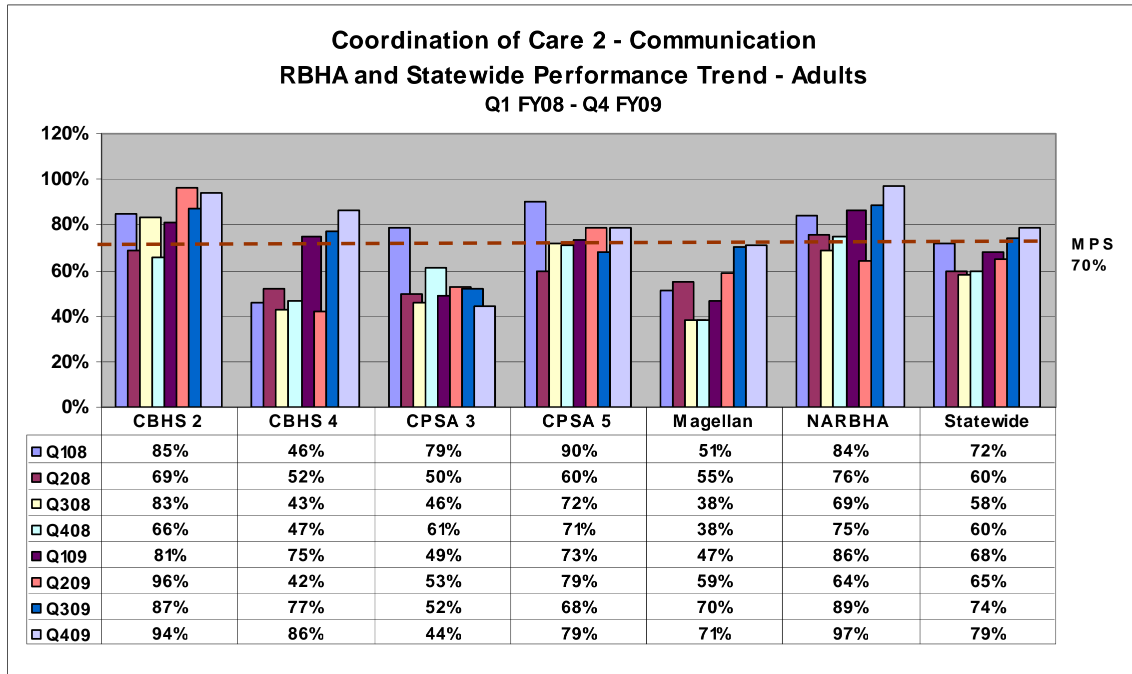
Calculation

$$\frac{\text{Number of Records with Documentation of COC within the Required Timeframes}}{\text{Number of Records Reviewed in the Sample}}$$

Performance Standards:
Minimum Performance Standard: 70%
Goal: 80%
Benchmark: 90%

Q409 Performance:
Numerator: 281
Denominator: 357
Percent Compliance: 79%

Figure F. depicts COC2 performance over FY08 through Q409.



	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Q108	85%	46%	79%	90%	51%	84%	72%
Q208	69%	52%	50%	60%	55%	76%	60%
Q308	83%	43%	46%	72%	38%	69%	58%
Q408	66%	47%	61%	71%	38%	75%	60%
Q109	81%	75%	49%	73%	47%	86%	68%
Q209	96%	42%	53%	79%	59%	64%	65%
Q309	87%	77%	52%	68%	70%	89%	74%
Q409	94%	86%	44%	79%	71%	97%	79%

Statewide performance surpassed the MPS again this reporting quarter with a score of 79%. As with the COC 1 standard, COC 2 compliance scores appear to be trending upward with Q409 statewide scores yielding the highest rates of compliance since the commencement of the current

methodology for the measure. Statistical analysis of Q409 data as compared to Q109 indicates the improvement is statistically significant on a statewide level. All RBHAs, with the exception of CPSA, GSA 3, surpassed the MPS in Q409.

A review of the Adult complaint data over the last five reporting quarters indicates that Coordination of Care related complaints have declined to the point of not impacting the statewide Adult complaint rate. The total number of Adult COC complaints equaled 43 in Q309 and 31 total complaints in Q409. Similar to complaint data, no significant supportive findings were obtained through review of Quality of Care data relating to Coordination of Care, with only 15 COC related QOCs reported statewide over this fiscal year and only five such QOCs reported in Q409. Along with the aforementioned data feeds, ADHS/DBHS QM will utilize the FY09 year-end trending of Morbidities and Mortalities as comparison/proxy data to the Coordination of Care standards in its firs Semi-Annual report for FY10.

Barriers

The following are systemic barriers to improved performance identified by the RBHAs in their CAPs on both COC standards:

- The referral disposition/communication attempts with the PCP/Health Plan do not occur timely;
- The documentation of the disposition/communication attempts is not completed in its entirety or is unclear as to the purpose of the communication;
- The RBHAs and their Providers have difficulty locating the member's PCP;
- The RBHAs and their Providers have difficulty in obtaining accurate contact information for outreach/enrollment/scheduling purposes; and
- Front line staff require training and ongoing supervision on the COC standards including identification of when it is clinically necessary and appropriate to initiate PCP/Health Plan communications.

Actions

The following are interventions to improve performance on this measure that are similar across the RBHAs, as indicated by their individual COC CAPs:

- Policy clarification;
- Training;
- Increased Provider record reviews;
- Focused Reviews of outlier agencies/Providers;
- Provider CAPs; and
- Sanctions

ADHS/DBHS has provided increased technical assistance, applied CAPs and sanctions to RBHAs not meeting the performance standards for the COC measures. Also, the ADHS/DBHS Interagency Liaison meets monthly with the AHCCCS Health Plan Liaisons and communicates barriers to improved performance on the Coordination of Care measures. As described in the FY10 RBHA contract amendments, RBHAs will be required to have a designated health professional to act as an Acute Health Plan & Provider Coordinator. These staff will be required to provide requested information by the PCP, Acute Health Plan Coordinators or other treating professionals and other involved stakeholders including Child Protective Services and Division of Developmental Disabilities providers. The process will be tracked by the ADHS/DBHS Bureau of Clinical and Recovery services and compared to COC performance measures data to determine if this position will positively impact system wide performance as it pertains to coordination of member care.

ADHS/DBHS mandated CAPs for Coordination of Care and initiated the use of the QM CAP Template to guide the RBHAs' cause analyses and CAP development. Q409 marks the second full implementation quarter for the RBHAs in utilizing the mandated CAP template and reporting outcomes of their revised CAP interventions. As statewide improvements in performance on both COC measures is statistically significant, ADHS/DBHS is lifting the RBHAs' CAPs. However, the RBHAs will continue to monitor performance on the COC measures in FY10 and any significant drop in performance will require further corrective action.

ADHS/DBHS and AHCCCS reviewed and modified the methodologies for the COC measures for reporting in FY10. ADHS/DBHS believes the modifications allow for more accurate data collection, are less process focused and increased the focus on clinical best practices.

Appropriateness of Services

Definition

The types and intensity of services, including case management, are provided based on the client's assessment and treatment recommendations.

Methodology

Performance is assessed via data validation review of RBHA submitted chart reviews and is conducted by the ADHS/DBHS Office of Monitoring and Oversight (OMO) on a quarterly basis. The data validation review applies a 90% confidence level with an allowable error rate of 10% (90 +/- 10) to the sample of each RBHA reviewed. Findings on this measure are reported on a quarter lag due to sampling requirements and the amount of time required by staff to conduct the record review.

Performance Standards:
Minimum Performance Standard: 85%
Goal: 90%
Benchmark: 95%

Calculation:

Number of "Yes" Answers to Questions: 59, 60, and 62 of the Universal Review Tool
Total Number of "Yes" and "No" Answers to Questions 59, 60, and 62 of the Universal Review Tool

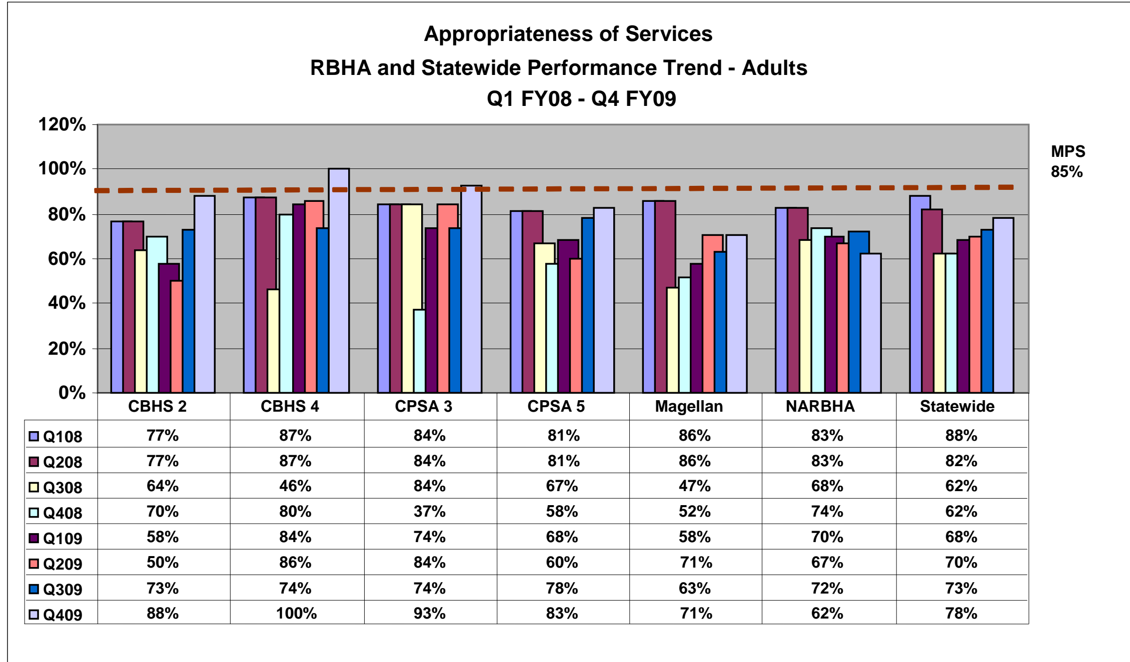
Universal Review Tool AOS Questions:

Question 59: The types and intensity of services are based on the needs of the individual (as identified on the treatment plan).
Question 60: The treatment plan has specific objectives to address the identified needs of the individual.
Question 62: The treatment plan lists the specific services and frequency of services to be provided to achieve the objective.

Statewide Q409 Performance
Numerator: 239
Denominator: 305
Percent in Compliance: 78%

Figure G below shows the results of the reviews trended over FY08 through Q409.

Figure G.

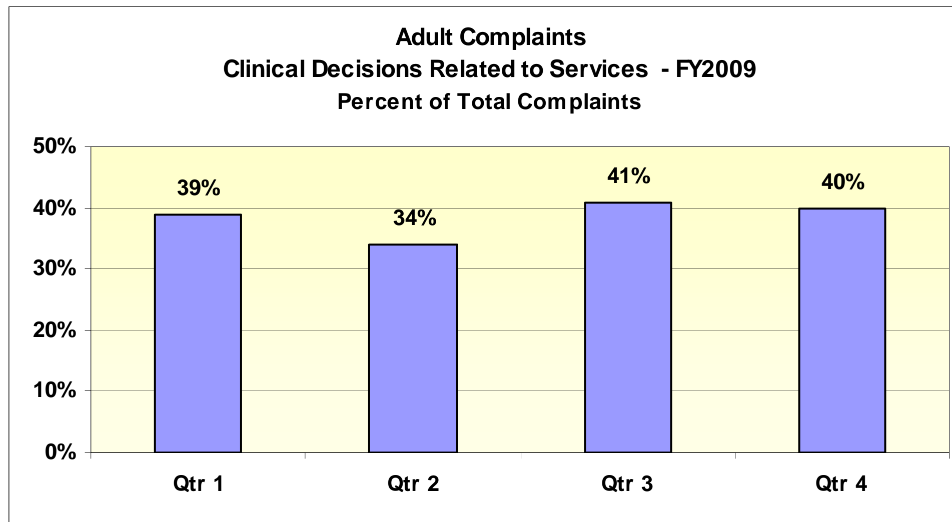


	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Q108	77%	87%	84%	81%	86%	83%	88%
Q208	77%	87%	84%	81%	86%	83%	82%
Q308	64%	46%	84%	67%	47%	68%	62%
Q408	70%	80%	37%	58%	52%	74%	62%
Q109	58%	84%	74%	68%	58%	70%	68%
Q209	50%	86%	84%	60%	71%	67%	70%
Q309	73%	74%	74%	78%	63%	72%	73%
Q409	88%	100%	93%	83%	71%	62%	78%

Statewide performance on this measure has improved over the last five reporting quarters to a score of 78%. Analysis conducted via chi-square test indicates the improvement over Q109 is statistically significant. Of note are the continued improvements in performance by CBHS, CPSA and Magellan.

A review of consumer complaint data supports the findings of the data validation review. The largest numbers of Adult complaints filed by all program types in over FY08 and FY09 were captured in the *Clinical Decisions Related to Services Category*, with a total of 314 adult complaints in Q409 (Figure H). This complaint category pertains to any complaint that can be attached to a member's service plan and/or services they are receiving and typically reflects the largest number of complaints for all Adult populations across the state.

Figure H.



The sub-category contributing to the *Clinical Decisions Related to Service* complaint numbers is *Assessment/Service Plan Content,* with a total of 109, or 35% of this category's complaints. This subcategory captures complaints pertaining to the types, frequency and intensity of Covered Services provided to the member as outlined in their individual service plan. As reported in Q309, 32% of *Clinical Decisions Related to Services* complaints fell with in the *Medications* sub-category, capturing complaints pertaining to a member's prescribed medications regime. The Covered Services category most frequently cited in relation to Q409 *Clinical Decisions Related to Services* complaints is *Medication Services*. Analysis of this data implies that members may disagree with their prescribed medication regime and/or the regime is not clearly outlined in their individual service plans. The largest number of *Clinical Decisions Related to Services Complaints* reported in Q409 were lodged by SMI consumers at a rate of 57% (179 total complaints), reflective of reported data for this population in this complaint category from Q209.

The ADHS/DBHS Quality of Care (QOC) category that relates to the Appropriateness measure is the *Effectiveness/Appropriateness of Care* Category, which captures QOCs pertaining to appropriate standards of treatment. Only 13 QOCs were reported statewide in this category in Q409, a reduction of 10 total QOCs from the previous reporting quarter. While 67% (eight total) of these QOCs are attributed to Magellan, this RBHA has evidenced a decrease in QOCs in this category over FY09 and has implemented performance improvement plans and CAPs to improve care provided to its members.

Barriers

Every RBHA is under a CAP to address barriers to performance improvement. ADHS/DBHS and the RBHAs identified the following barriers:

- No current service plan/comprehensive assessment;
- Service plans/comprehensive assessments are not updated timely and/or in response to the changing needs of the member;
- The chart reviews indicate specialized services are being provided but not documented appropriately in the member's progress notes, service plans and assessments; and
- Clinicians need increased training and clinical supervision to effectively evaluate and engage members from all Program Types (SMI, GMH and SA) in the assessment and treatment planning process.

Actions
The following are improvement activities initiated by the RBHAs to improve performance on the Appropriateness of Services Measure:

- Increased training on clinical record documentation standards;
- Increased oversight/clinical supervision of front line staff completing assessments/service plans;
- Increased frequency of record reviews; and
- Provider specific CAPs.

As with the COC CAP, ADHS/DBHS mandated the use of the CAP Template in the RBHA's development of improvement activities for this measure in at the beginning of FY09 and sanctioned low performing RBHAs in Q309. ADHS/DBHS will not lift the CAP on this measure at this time. In order to direct the RBHAs in the development, application and oversight of clinical supervision to front line staff, ADHS/DBHS published the *Clinical Supervision Protocol*, located on its website. As another means of direction and oversight of the RBHAs' clinical supervision practices, the ADHS/DBHS Adult System of Care (ASOC) Plan includes the following objective: *Quality of Clinical Supervision will be uniform and of high quality across the behavioral health system to ensure that individual receive quality behavioral health services from competent staff.* The accompanying ASOC Plan tasks are intended to assure that RBHAs are providing quality clinical supervision to members and that ADHS/DBHS provides guidance and oversight to the RBHAs.

The failure to update assessments and service plans has been observed through other ADHS/DBHS monitoring activities, including encounter data validations conducted by the Office of Program Support. This topic was discussed in the bi-monthly ADHS/DBHS Compliance Committee meeting in June of 2009. It was deemed necessary to establish a workgroup to problem-solve this issue in order to identify and target barriers from a systems perspective.

In FY10, the Appropriateness of Services performance measure has been replaced with the new performance measure, Behavioral Health Service Provision. This new measure accompanies the Behavioral Health Service Plan performance measure (described below) and evaluates service provision using encounter data to see if services rendered match those identified on the service plan.

ADHS/DBHS provides real time technical assistance to the RBHAs in the Quality Management Coordinators' meetings and includes best practice discussions to drive system wide improvement on the performance measures. The ADHS/DBHS Adult Clinical Team provides technical assistance pertaining to the quality of clinical supervision in developing assessment and treatment plans in meetings with the RBHA Clinical contacts.

Sufficiency of Assessments

Definition
Assessments are sufficiently comprehensive for the development of functional treatment recommendations.

Methodology
Data is extracted from the ADHS/DBHS CIS. Performance is assessed by counting the total number of demographic assessment records accepted by CIS as complete. To be considered

complete, all required fields of the demographic assessment must contain logical, valid values. The accuracy and completeness of data submitted to the ADHS/DBHS CIS is ensured through pre-processor edits and data validation review of medical records conducted by the ADHS/DBHS Office of Program Support.

Performance Standards:
Minimum Performance Standard: 85%
Goal: 90%
Benchmark: 95%

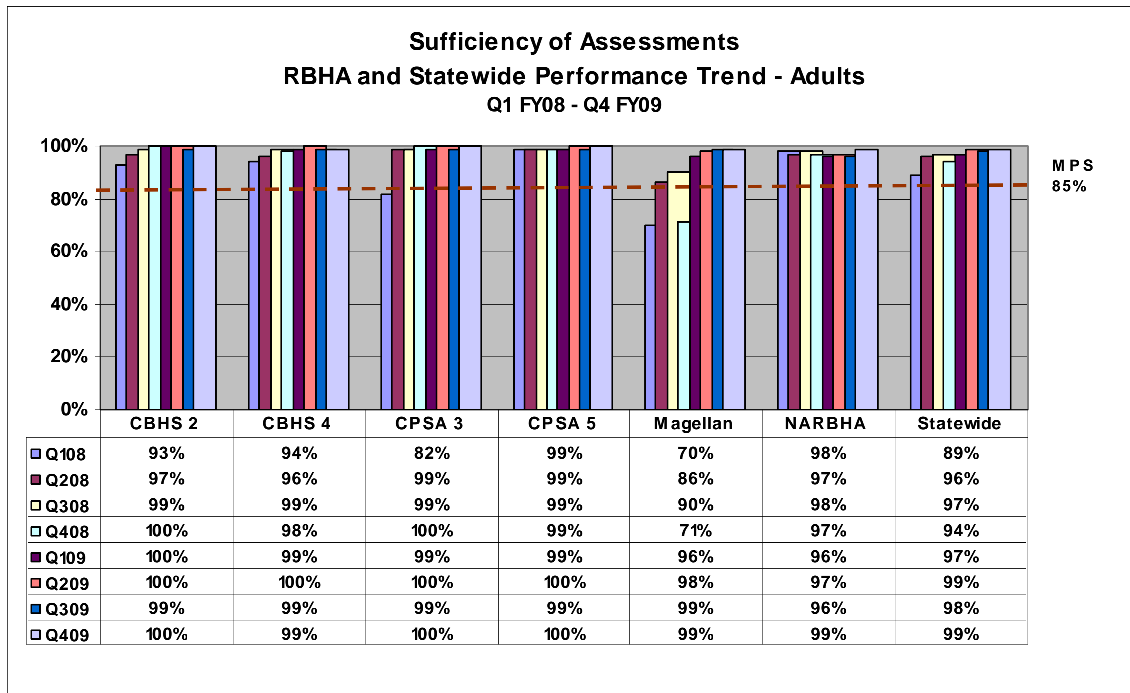
Calculation:

$$\frac{\text{Number of Demographic Assessment Records Accepted as Complete}}{\text{Total Number of Demographic Assessment Records Submitted to CIS}}$$

Statewide Q409 Performance:
Numerator: 120,620
Denominator: 121,405
Percent Compliance: 99%

Figure I below depicts performance on this measure over FY08 through Q409.

Figure I.



	CBHS 2	CBHS 4	CPSA 3	CPSA 5	Magellan	NARBHA	Statewide
Q108	93%	94%	82%	99%	70%	98%	89%
Q208	97%	96%	99%	99%	86%	97%	96%
Q308	99%	99%	99%	99%	90%	98%	97%
Q408	100%	98%	100%	99%	71%	97%	94%
Q109	100%	99%	99%	99%	96%	96%	97%
Q209	100%	100%	100%	100%	98%	97%	99%
Q309	99%	99%	99%	99%	99%	96%	98%
Q409	100%	99%	100%	100%	99%	99%	99%

Statewide performance on this measure remains above the MPS at a score of 99% this reporting quarter. Performance has been sustained above the benchmark of 95% since Q109. Statistical analysis of this measure conducted via chi-square test indicates that the improvement in performance as compared to Q109 is statistically significant.

The Sufficiency of Assessments measure reviews the sufficiency of the initial assessment as submitted to the CIS. ADHS/DBHS instituted a supporting method for assessing the quality of

assessment updates. This indicator is evaluated through a chart review conducted by the Office of Monitoring and Oversight (OMO) and is defined as: *The initial and annual assessments are completed and sufficient to develop functional treatment recommendations.*

Q409 Performance
Numerator: 538
Denominator: 627
Percent Compliance: 86%

The statewide Quality of Assessments score of 86% is an increase from the previous reporting quarter. This data indicates that while ongoing assessments and updates are not always completed timely, they are complete and sufficient when updated to develop treatment recommendations. This further supports the need for improvements in assessing members continually enrolled in the behavioral health system and providing timely updates to their service plans in order for the members to access requested, routine services.

Barriers
There are no barriers to performance on this measure at this time. However, the Quality of Assessments data supports the barriers reported for the Appropriateness of Services measure, indicating deficits in the ongoing maintenance and updates to member medical records and assessment of continuously enrolled persons.

Actions
No corrective actions are required for the Sufficiency of Assessments measure. ADHS/DBHS mandates that the RBHAs include interventions targeting improvements in developing current, quality member assessments within the Appropriateness of Services CAP.

In order to better target performance improvement of assessment quality, ADHS/DBHS collaborated with AHCCCS to revise the Sufficiency of Assessments performance measure for the FY10 contract year. The new measure, Behavioral Health Service Plan, moves away from evaluating only the process of completing an assessment to evaluating the quality of the assessment to improve behavioral health recipient outcomes. This measure is accompanied by the Behavioral Health Service Provision (described above) and will inform ADHS/DBHS how well the system conducts assessments, revises assessments as necessary to account for progress, uses assessments to create service plans, and uses the service plan to provide services.

Conclusion

Q409 Performance Measures analysis indicates continued improvement in the Coordination of Care 1 and 2 statewide performance; sustained improvement on the Sufficiency of Assessments measure and a drop in the Access to Care 7 Day measure. Chart reviews indicate that ADHS/DBHS behavioral health members are receiving behavioral health services but that the services received are not always documented on a current service plan based on a current assessment of the member's behavioral health needs. System wide areas for improvement based on trends from multiple data feeds as evaluated over FY09 continue to be applied to clinical supervision and the timely updating of member assessment and service plan information for continuously enrolled outpatient members.

ADHS/DBHS and AHCCCS revised the performance measures for monitoring in FY10. As such, ADHS/DBHS will treat FY10 as a baseline year for the new measures and will continue to

monitor statewide performance on the Coordination of Care measures and the Access to Care, 23 Day measure against all available historical data to drive systems improvements.

Performance data reviewed by the ADHS/DBHS QM Committee is presented to the RBHAs via email, letter, and discussed in the RBHA QM Coordinators' Meetings. The RBHAs currently conduct performance improvement activities utilizing performance measures data. Each RBHA reports interim monitoring data for open Performance Improvement (PI) Plans and CAPs to ADHS/DBHS quarterly.

ADHS/DBHS QM assesses and evaluates RBHA specific improvement activities in conjunction with multiple data feeds within the Division. Systemic trends are shared with representatives from each functional area within ADHS/DBHS in the QM Committee Meetings and sub-committees and the Compliance Committee meetings to ensure performance data is utilized to drive improvements within the Division. Corrective Actions and sanctions are applied to RBHAs not meeting performance standards.

Attachment A

ADULT PERFORMANCE MEASURES
Numbers Used in Calculation of Performance
Quarter 4 FY2009

Access to Care 7 Day

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	343	339	98.8%
CBHS 4	736	703	95.5%
CPSA 3	369	365	98.9%
CPSA 5	1,699	1,695	99.8%
Magellan	8,319	6,628	79.7%
NARBHA	2,193	2,072	94.5%
Statewide RBHA	*13,659*	*11,802*	*86.4%*
GRIC	132	130	98.5%
PYT	35	35	100.0%
WMAT	19	19	100.0%
Statewide TRBHA	*186*	*184*	*98.9%*

Error Rate - Access to Care 7 Day
(Errors in records removed to calculate compliance)

RBHA	# Errors	# Referrals	Error Rate
CBHS 2	0	343	N/A
CBHS 4	3	739	0.4%
CPSA 3	1	370	0.3%
CPSA 5	7	1,706	0.4%
Magellan	4	8,323	<0.1%
NARBHA	1	2,194	<0.1%
Statewide RBHA	*16*	*13,675*	0.1%
GRIC	4	136	2.9%
PYT	0	35	N/A
WMAT	3	22	13.6%
Statewide TRBHA	*7*	*193*	3.6%

Access to Care 23 Day

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	996	942	94.6%
CBHS 4	2,240	2,140	95.5%
CPSA 3	1,327	1,160	87.4%
CPSA 5	5,130	4,860	94.7%
Magellan	14,050	13,059	92.9%
NARBHA	4,475	3,850	86.0%
Statewide	*28,218*	*26,011*	92.2%

Coordination of Care 1

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	8	8	100.0%
CBHS 4	2	2	100.0%
CPSA 3	11	11	100.0%
CPSA 5	35	32	91.4%
Magellan	28	28	100.0%
NARBHA	17	16	94.1%
Statewide	*101*	*97*	*96.0%*

Coordination of Care 2

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	52	49	94.2%
CBHS 4	56	48	85.7%
CPSA 3	54	24	44.4%
CPSA 5	65	51	78.5%
Magellan	66	47	71.2%
NARBHA	64	62	96.9%
Statewide	*357*	*281*	*78.7%*

Sufficiency of Assessments

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	6,734	6,727	99.9%
CBHS 4	10,729	10,573	98.5%
CPSA 3	5,428	5,413	99.7%
CPSA 5	29,858	29,799	99.8%
Magellan	52,791	52,395	99.2%
NARBHA	15,865	15,713	99.0%
Statewide	*121,405*	*120,620*	*99.4%*

Appropriateness of Services

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	42	37	88.1%
CBHS 4	37	37	100.0%
CPSA 3	42	39	92.9%
CPSA 5	18	15	83.3%
Magellan	89	63	70.8%
NARBHA	77	48	62.3%
Statewide	*305*	*239*	*78.4%*

Quality of Assessments

RBHA	Denominator	Numerator	% in Compliance
CBHS 2	111	77	69.4%
CBHS 4	103	103	100.0%
CPSA 3	122	105	86.1%
CPSA 5	136	112	82.4%
Magellan	368	203	55.2%
NARBHA	33	33	100.0%
Statewide	*873*	*633*	*72.5%*

Complaint Rate per Thousand

RBHA	Enrollment	# Complaints	Rate per 1,000
CBHS 2	1,367	13	9.5
CBHS 4	3,274	28	8.6
CPSA 3	1,234	9	7.3
CPSA 5	7,709	74	9.6
Magellan	19,822	19	1.0
NARBHA	4,331	5	1.2
Statewide	*37,737*	*148*	*3.9*

Attachment B

Chi-Square Analyses

Access to Care 7Day

CBHS-2 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	2	335	337	99.4%
Quarter4	4	339	343	98.8%
	6	674	680	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	2.97	334.03
Time2	3.03	339.97
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.32	0.00
	0.31	0.00
Chi-square value	0.64	
P-value	0.4246	

CBHS-4 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	19	831	850	97.8%
Quarter4	33	703	736	95.5%
	52	1534	1586	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	27.87	822.13
Time2	24.13	711.87
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	2.82	0.10
	3.26	0.11
Chi-square value	6.29	
P-value	0.0122	

CPSA-3 ADULT	Non-compliance A	Compliance Numerator	Total Denominator

Quarter1	8	351	359	97.8%
Quarter4	4	365	369	98.9%
	12	716	728	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	5.92	353.08
Time2	6.08	362.92
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.73	0.01
	0.71	0.01
Chi-square value	1.47	
P-value	0.2253	

CPSA-5 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	5	1410	1415	99.6%
Quarter4	4	1695	1699	99.8%
	9	3105	3114	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	4.09	1410.91
Time2	4.91	1694.09
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.20	0.00
	0.17	0.00
	0.37	
P-value	0.5416	

Magellan-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	940	6220	7160	86.9%
Quarter4	1691	6628	8319	79.7%
	2631	12848	15479	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	1217.00	5943.00

Time2	1414.00	6905.00		
Chi-square	∑((Expected-Actual)^2/Expected))			
	63.05	12.91		
	54.26	11.11		
	141.34			
P-value	0.0000			

NARBHA-ADULT	Non-compliance	Compliance	Total	
	A	Numerator	Denominator	
Quarter1	76	1758	1834	95.9%
Quarter4	121	2072	2193	94.5%
	197	3830	4027	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	89.72	1744.28
Time2	107.28	2085.72
Chi-square	∑((Expected-Actual)^2/Expected))	
	2.10	0.11
	1.75	0.09
	4.05	
P-value	0.0442	

STATEWIDE-ADULT	Non-compliance	Compliance	Total	
	A	Numerator	Denominator	
Quarter1	1050	10905	11955	91.2%
Quarter4	1857	11802	13659	86.4%
	2907	22707	25614	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	1356.80	10598.20
Time2	1550.20	12108.80
Chi-square	∑((Expected-Actual)^2/Expected))	
	69.38	8.88
	60.72	7.77
	146.75	
P-value	0.0000	

Access to Care 23Day

CBHS-2 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	88	1271	1359	93.5%
Quarter4	54	942	996	94.6%
	142	2213	2355	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	81.94	1277.06
Time2	60.06	935.94
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.45	0.03
	0.61	0.04
Chi-square value	1.13	
P-value	0.2886	

CBHS-4 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	296	2179	2475	88.0%
Quarter4	100	2140	2240	95.5%
	396	4319	4715	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	207.87	2267.13
Time2	188.13	2051.87
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	37.37	3.43
	41.29	3.79
Chi-square value	85.86	
P-value	0.0000	

CPSA-3 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	185	1498	1683	89.0%
Quarter4	167	1160	1327	87.4%
	352	2658	3010	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	196.82	1486.18
Time2	155.18	1171.82
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.71	0.09
	0.90	0.12
Chi-square value	1.82	
P-value	0.1771	

CPSA-5 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	791	4241	5032	84.3%
Quarter4	270	4860	5130	94.7%
	1061	9101	10162	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	525.38	4506.62
Time2	535.62	4594.38
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	134.29	15.66
	131.72	15.36
Chi-square value	297.02	
P-value	0.0000	

Magellan-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	1434	13328	14762	90.3%
Quarter4	991	13059	14050	92.9%
	2425	26387	28812	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	1242.46	13519.54
Time2	1182.54	12867.46
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	29.53	2.71
	31.02	2.85

Chi-square value	66.12
P-value	0.0000

NARBHA-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	750	4814	5564	86.5%
Quarter4	625	3850	4475	86.0%
	1375	8664	10039	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	762.08	4801.92
Time2	612.92	3862.08
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	0.19	0.03
	0.24	0.04
Chi-square value	0.50	
P-value	0.4806	

STATEWIDE-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	2110	14003	16113	86.9%
Quarter4	2207	26011	28218	92.2%
	4317	40014	44331	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	1569.10	14543.90
Time2	2747.90	25470.10
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	186.46	20.12
	106.47	11.49
Chi-square value	324.53	
P-value	0.0000	

Coordination of Care, Referral

CBHS-2 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	0	6	6	100.0%

Quarter4	0	8	8	100.0%
	0	14	14	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	0.00	6.00
Time2	0.00	8.00
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected})$	
	#DIV/0!	0.00
	#DIV/0!	0.00
Chi-square value	#DIV/0!	
P-value	#DIV/0!	

CBHS-4 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	2	2	4	50.0%
Quarter4	0	2	2	100.0%
	2	4	6	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	1.33	2.67
Time2	0.67	1.33
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected})$	
	0.33	0.17
	0.67	0.33
Chi-square value	1.50	
P-value	0.2207	

CPSA-3 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	0	2	2	100.0%
Quarter4	0	11	11	100.0%
	0	13	13	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	0.00	2.00
Time2	0.00	11.00

Chi-square	$\sum((Expected-Actual)^2/Expected))$			
	#DIV/0!	0.00		
	#DIV/0!	0.00		
Chi-square value	#DIV/0!			
P-value	#DIV/0!			

CPSA-5 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	9	8	17	47.1%
Quarter4	3	32	35	91.4%
	12	40	52	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	3.92	13.08
Time2	8.08	26.92
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	6.57	1.97
	3.19	0.96
Chi-square value	12.69	
P-value	0.0004	

Magellan-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	34	49	83	59.0%
Quarter4	0	28	28	100.0%
	34	77	111	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	25.42	57.58
Time2	8.58	19.42
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	2.89	1.28
	8.58	3.79
Chi-square value	16.53	
P-value	0.0000	

NARBHA-ADULT	Non-	Compliance	Total

	compliance			
	A	Numerator	Denominator	
Quarter1	4	17	21	81.0%
Quarter4	1	16	17	94.1%
	5	33	38	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	2.76	18.24
Time2	2.24	14.76
Chi-square	∑((Expected-Actual)^2/Expected))	
	0.55	0.08
	0.68	0.10
Chi-square value	1.43	
P-value	0.2326	

STATEWIDE-ADULT	Non-compliance	Compliance	Total	
	A	Numerator	Denominator	
Quarter1	49	84	133	63.2%
Quarter4	4	97	101	96.0%
	53	181	234	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	30.12	102.88
Time2	22.88	78.12
Chi-square	∑((Expected-Actual)^2/Expected))	
	11.83	3.46
	15.58	4.56
Chi-square value	35.43	
P-value	0.0000	

Coordination of Care, Communication

CBHS-2 ADULT	Non-compliance	Compliance	Total	
	A	Numerator	Denominator	
Quarter1	10	43	53	81.1%
Quarter4	3	49	52	94.2%
	13	92	105	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	6.56	46.44

Time2	6.44	45.56		
Chi-square	∑((Expected-Actual)^2/Expected))			
	1.80	0.25		
	1.84	0.26		
Chi-square value	4.15			
P-value	0.0416			

CBHS-4 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	14	43	57	75.4%
Quarter4	8	48	56	85.7%
	22	91	113	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	11.10	45.90
Time2	10.90	45.10
Chi-square	∑((Expected-Actual)^2/Expected))	
	0.76	0.18
	0.77	0.19
Chi-square value	1.90	
P-value	0.1678	

CPSA-3 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	28	27	55	49.1%
Quarter4	30	24	54	44.4%
	58	51	109	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	29.27	25.73
Time2	28.73	25.27
Chi-square	∑((Expected-Actual)^2/Expected))	
	0.05	0.06
	0.06	0.06
Chi-square value	0.24	
P-value	0.6269	

CPSA-5 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	18	48	66	72.7%

Quarter4	14	51	65	78.5%
	32	99	131	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	16.12	49.88
Time2	15.88	49.12
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.22	0.07
	0.22	0.07
Chi-square value	0.58	
P-value	0.4450	

Magellan-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	35	31	66	47.0%
Quarter4	19	47	66	71.2%
	54	78	132	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	27.00	39.00
Time2	27.00	39.00
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	2.37	1.64
	2.37	1.64
Chi-square value	8.02	
P-value	0.0046	

NARBHA-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	76	55	64	85.9%
Quarter4	121	62	64	96.9%
	197	117	128	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	98.50	58.50
Time2	98.50	58.50
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	5.14	0.21
	5.14	0.21
Chi-square value	10.70	

P-value	0.0011			

STATEWIDE-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	114	247	361	68.4%
Quarter4	76	281	357	78.7%
	190	528	718	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	95.53	265.47
Time2	94.47	262.53
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	3.57	1.29
	3.61	1.30
	9.77	
P-value	0.0018	

Appropriateness of Services

CBHS-2 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	51	63	114	55.3%
Quarter4	5	37	42	88.1%
	56	100	156	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	40.92	73.08
Time2	15.08	26.92
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	2.48	1.39
	6.74	3.77
Chi-square value	14.38	
P-value	0.0001	

CBHS-4 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	20	103	123	83.7%
Quarter4	0	37	37	100.0%
	20	140	160	

Expected frequency	(RowtotalXColumntotal)/GrandTotal			
Time1	15.38	107.63		
Time2	4.63	32.38		
Chi-square	∑((Expected-Actual)^2/Expected))			
	1.39	0.20		
	4.63	0.66		
Chi-square value	6.88			
P-value	0.0087			

CPSA-3 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	30	87	117	74.4%
Quarter4	3	39	42	92.9%
	33	126	159	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	24.28	92.72
Time2	8.72	33.28
Chi-square	∑((Expected-Actual)^2/Expected))	
	1.35	0.35
	3.75	0.98
Chi-square value	6.43	
P-value	0.0112	

CPSA-5 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	41	85	126	67.5%
Quarter4	3	15	18	83.3%
	44	100	144	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	38.50	87.50
Time2	5.50	12.50
Chi-square	∑((Expected-Actual)^2/Expected))	
	0.16	0.07
	1.14	0.50

Chi-square value	1.87			
P-value	0.1715			

Magellan-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	50	70	120	58.3%
Quarter4	26	63	89	70.8%
	76	133	209	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	43.64	76.36
Time2	32.36	56.64
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.93	0.53
	1.25	0.72
Chi-square value	3.42	
P-value	0.0642	

NARBHA-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	36	84	120	70.0%
Quarter4	29	48	77	62.3%
	65	132	197	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	39.59	80.41
Time2	25.41	51.59
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	0.33	0.16
	0.51	0.25
Chi-square value	1.25	
P-value	0.2644	

STATEWIDE-ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	228	492	720	68.3%

Quarter4	66	239	305	78.4%
	294	731	1025	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	206.52	513.48
Time2	87.48	217.52
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	2.23	0.90
	5.28	2.12
Chi-square value	10.53	
P-value	0.0012	

Sufficiency of Assessments

CBHS-2 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	24	6808	6832	99.6%
Quarter4	7	6727	6734	99.9%
	31	13535	13566	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	15.61	6816.39
Time2	15.39	6718.61
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	4.51	0.01
	4.57	0.01
Chi-square value	9.10	
P-value	0.0026	

CBHS-4 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	49	3401	3450	98.6%
Quarter4	156	10573	10729	98.5%
	205	13974	14179	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	49.88	3400.12
Time2	155.12	10573.88

Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$			
	0.02	0.00		
	0.00	0.00		
Chi-square value	0.02			
P-value	0.8853			

CPSA-3 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	36	3792	3828	99.1%
Quarter4	15	5413	5428	99.7%
	51	9205	9256	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	21.09	3806.91
Time2	29.91	5398.09
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	10.54	0.06
	7.43	0.04
Chi-square value	18.07	
P-value	0.0000	

CPSA-5 ADULT	Non-compliance A	Compliance Numerator	Total Denominator	
Quarter1	468	30039	30507	98.5%
Quarter4	59	29799	29858	99.8%
	527	59838	60365	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	266.33	30240.67
Time2	260.67	29597.33
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	152.70	1.34
	156.02	1.37
Chi-square value	311.44	
P-value	0.0000	

Magellan-ADULT	Non-	Compliance	Total

	compliance			
	A	Numerator	Denominator	
Quarter1	1684	37752	39436	95.7%
Quarter4	396	52395	52791	99.2%
	2080	90147	92227	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	889.40	38546.60
Time2	1190.60	51600.40
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	709.90	16.38
	530.31	12.24
Chi-square value	1268.83	
P-value	0.0000	

NARBHA-ADULT	Non-compliance	Compliance	Total	
	A	Numerator	Denominator	
Quarter1	561	14695	15256	96.3%
Quarter4	152	15713	15865	99.0%
	713	30408	31121	

Expected frequency	(RowtotalXColumntotal)/GrandTotal	
Time1	349.52	14906.48
Time2	363.48	15501.52
Chi-square	$\sum((Expected-Actual)^2/Expected))$	
	127.95	3.00
	123.04	2.89
Chi-square value	256.88	
P-value	0.0000	

STATEWIDE-ADULT	Non-compliance	Compliance	Total	
	A	Numerator	Denominator	
Quarter1	2822	96487	99309	97.2%
Quarter4	785	120620	121405	99.4%
	3607	217107	220714	

Expected	(RowtotalXColumntotal)/GrandTotal

frequency		
Time1	1622.95	97686.05
Time2	1984.05	119420.95
Chi-square	$\sum((\text{Expected-Actual})^2/\text{Expected}))$	
	885.87	14.72
	724.64	12.04
Chi-square value	1637.27	
P-value	0.0000	