

Quality Assessment and Performance Improvement

Work Plan Evaluation

FY 2018-2019

September 9, 2019

#### Introduction

Ventura County Behavioral Health (VCBH), a department of the Ventura County Health Care Agency, provides a system of coordinated services to address the mental health and substance abuse treatment needs of Ventura County. The Department is committed to excellence through "best practices" and a consumer-driven and culturally competent approach to service delivery. VCBH staff are dedicated to reducing suffering and enhancing recovery from mental illness, alcohol, and/or other drug problems. VCBH believes that consumer and family member involvement is critical to meeting our commitment to excellence and for profound change in consumers' lives. Therefore, VCBH is dedicated to integrating consumers and family members across the Department's organization and activities.

The VCBH Quality Management Program is focused on the successful implementation of the mission, goals and commitment of the Behavioral Health Department. The Quality Management Program is responsible for quality improvement projects, performance outcome tracking and analyses, ensuring compliance with federal, state and contractual standards and Department policies, and ensuring overall quality service delivery. The principles of wellness, recovery, resiliency, and cultural competency serve to direct all Quality Management activities and projects.

The purpose of the annual Quality Assessment and Performance Improvement (QAPI) Work Plan is to provide a working document for the monitoring, implementation, and documentation of efforts to improve service delivery. The year-end evaluation of the QAPI describes progress towards overarching goals and highlights accomplishments for specific projects and activities. The year-end evaluation also supports development of the following year's QAPI Work Plan.

It is important to note that in 2019, organizational changes were made to create a broader VCBH Quality Management program that encompasses Quality Improvement and Quality Assurance work units. A description of the revised program will be included in the FY 2019-2020 QAPI Work Plan.

#### **Evaluation**

Updates for FY 2018-2109 QAPI projects and activities for six projects are presented in this evaluation. These projects and accompanying activities were embedded at the operational program level and addressed overarching priorities related to improving access, timeliness, quality of care, health equity, and acuity levels.

# 1. Cognitive-Behavioral Therapy (CBT) as Primary Intervention Modality

Goal	Objectives	Baseline (FY 17-18)	Evaluation (FY 18-19)					
	Processes							
	Use of audio-taping sessions and rating with Cognitive Therapy Rating Scale (CTRS) fidelity scale	CTRS, audio recording and monthly supervision groups at all programs (started March 2015)	Continued monthly Fidelity					
	Program based on-going supervision of recorded sessions and use of CTRS fidelity scale	<ul> <li>Focus group held with participating coaches to inform future roll-out of training and fidelity efforts</li> </ul>	Group sessions – all VCBH clinicians must participate in at least 9 Fidelity groups annually					
		<ul> <li>Fidelity process enabled new offering of CBT Treatment Track by coaches</li> </ul>						
	Outcomes – See Table A below							
	Development of data entry system to track fidelity and outcome measures	<ul> <li>PHQ-9, GAD7 added to clinician's progress note in Avatar</li> </ul>	<ul> <li>Continued PHQ-9, GAD7 in Avatar progress note</li> </ul>					
New Sterre (EV10, 00)		<ul> <li>Determined frequency of administration of PHQ-9 and GAD7 outcome measures (at least monthly)</li> </ul>	Began use of CANS for youth (implemented 10/1/2018)					

#### Next Steps (FY19-20):

- Certify additional VCBH clinicians per VCBH policy AD77 Mandatory and Professional Development Training. VCBH certification requires CTRS score threshold of 36 (Academy certification requires threshold of 40).
- Add 10 more Diplomats and 5 more Trainers.
- Continue Fidelity Group sessions.

#### <u>Table A - Outcome measures</u>

#	Metric	Source
1	CBT Fidelity	• CTRS
2	Symptoms & Functional Impairment	<ul> <li>All – VCOS/ CANS+/MORS++;</li> <li>Depression/Anxiety – PHQ-9/GAD7</li> </ul>
3	Consumer Satisfaction	• VCOS
4	Average Length of Stay	Episode start and end date

<sup>+</sup> CANS implemented 10/1/2018

<sup>++</sup> MORS implemented 7/1/2019

# 2. Client Acuity Index: Using History of Psychiatric Hospitalization as Guide to Staff Interventions

Goal	Objectives	Baseline (FY 17-18)	Evaluation (FY 18-19)
To use client acuity as a guide in determining service levels for enrolled consumers. Acuity to be determined by frequency of past psychiatric hospitalizations, time since last hospital admission and lengths of stays.	<ul> <li>Categorize High /Moderate /Low level of client acuity by psychiatric history and develop recommended minimum frequencies of contact</li> <li>Examine the impact of implementing this acuity-based service delivery approach on units of service and number of contacts.</li> </ul>	<ul> <li>Measure 1: Pre-Intervention Units of Service (Figure 1, 2)</li> <li>July 2017- 4,324 units for high acuity group.</li> <li>Measure 2: Pre-Intervention Contacts (Figure 3, 4)</li> <li>July 2017- High acuity group contacts-15.5% billable, 11.6 non-billable, 16.6% with no contact.</li> </ul>	<ul> <li>Measure 1: Post-Intervention Units of Service (Figure 1, 2)</li> <li>February 2018- 12,981 units</li> <li>67% increase in units for high acuity group.</li> <li>Measure 2: Post- Intervention Contacts (Figure 3, 4)</li> <li>February 2018- High acuity group contacts- 25.3% billable contacts, 24.1% non-billable contacts, 11.3% with no contact.</li> <li>Contact increased for the high acuity group. The number of high acuity clients with no contact was reduced by 5.3%.</li> </ul>

### Validation Process for the AVATAR Acuity Rating:

Starting with the preliminary intervention and indicator, the comparison of the assessments of acuity (prior to any discussion of method for categorization) by the pilot providers, those providers who participated in this study, and the acuity ratings determined by Hillmont Inpatient Unit (HPC) admissions revealed a relatively high level of correspondence and went in the direction of validating categorization using history of psychiatric admission. This was intended to measure the validity and reliability of the proposed method of determining acuity.

- There were 449 clients among the July 2017 caseloads of the twelve original pilot providers.
- One hundred and fifty-five (155) of these clients had HPC histories in AVATAR and were familiar enough to staff such that the staff felt comfortable rating them.
- There was complete agreement on acuity in 42% of the cases and "close disagreement" (i.e., high to moderate and moderate to low) an additional 41% of the time (see below). A moderate correlation between these ratings (i.e., r=0.22) was observed.
- When there was disagreement, 29% of the time the AVATAR acuity rating was higher than the one assigned by the staff and the other 29% of the time the assigned staff's acuity rating was higher than AVATAR's.

Among the 272 clients uncategorized by AVATAR (i.e., those without an HPC admission in AVATAR) the assigned staff perceived 19% to be high acuity; 23% to be moderate acuity; 43% to be low acuity; and the remaining 15% were not felt to be known well enough to categorize (see below).

#### Measure 1: Pre-Intervention Units of Service

Average Units (per client) Using All Staff Data for
June 2017 through August 2017

600.0

600.0

400.0

300.0

100.0

High Moderate Low Uncategorized

Figure 1: Average Units of Service

#### Measure 1: Pre-Intervention Units of Service

Billable Units of Services

Figure 2: Pre/Post Intervention Units of Service Comparison

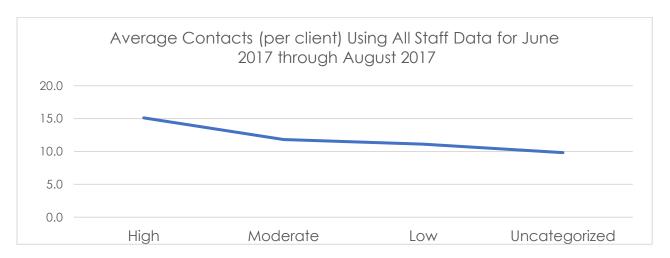
#### July 2017 February 2018 % Change 66.7% High 4,324 12,981 Moderate -103.6% 6,730 3,305 4,973 2,757 -80.4% Low 20,806 30,269 31.3% Uncategorized 36,833 49,312 Overall % increase 25.3%

#### Findings for Measure 1:

- The proportion of units of service **increased** post-intervention for the higher acuity clients. The percentage increase in billable units for the "high" acuity group (i.e., 66.7%) exceeded the percentage increase in the number of those clients (i.e., 25%).
- **Decreases** in these same billable units were observed, pre- and post-intervention, for the "moderate" and "low" clients.

#### **Measure 2: Pre-Intervention Contacts**

Figure 3: Pre-Intervention Contacts provided to High/Moderate/Low Clients



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Figure 4: Pre/Post Intervention Contacts Comparison

#### July 2017 Contacts

	Billable	Non-Billable	None
High	75	15	26
Moderate	87	20	16
Low	66	17	19
Uncategorized	256	77	96
	484	129	157

	% of billable	% of nonbillable	% with no contact	
116	15.5%	11.6%	16.6%	
123	18.0%	15.5%	10.2%	
102	13.6%	13.2%	12.1%	
429	52.9%	59.7%	61.1%	
770				

#### February 2018 Contacts

	Billable	Non-Billable	None
High	147	54	23
Moderate	48	15	13
Low	43	15	14
Uncategorized	342	140	154
	580	224	204

	% of billable	% of nonbillable	% with no contact
224	25.3%	24.1%	11.3%
76	8.3%	6.7%	6.4%
72	7.4%	6.7%	6.9%
636	59.0%	62.5%	75.5%
1008		-	

#### Findings for Measure 2:

- Number of **high acuity clients with no contact** with the mental health provider **went down** (i.e., 5.3%), despite the fact that the number of clients on their caseloads went up considerably.
- "Moderate" and "low" clients saw decreases in their percentage of contacts.
- "Moderate" and "low" groups also saw decreases in the number of clients with no contact with their mental health provider.

#### Limitations:

• This study sample and the period of implementation was limited. The process for categorizing was not fully automated.

#### Conclusion:

• The main intervention which directed staff to spend a greater proportion of work effort on high acuity clients was effective, resonated with staff, and gained their acceptance. These preliminary findings were encouraging and will serve as the basis for further development and performance improvement.

#### Next Steps:

- Consider refining and expanding measurement of client acuity algorithm (i.e., adjustment to cutoffs, rules, capturing out-of-county hospitalizations).
- Examine "uncategorized" client data for other markers or variables in addition to psychiatric hospitalization, which may prove useful in expanding the "acuity" construct.
- Consider review of staffing numbers and caseload/off-caseload demands in review of potential sustainability of prescribed minimum frequency of contact per acuity level.
- Consider a process improvement project to study ways to reduce re-hospitalization and improve time to first clinical service post-hospitalization.

# 3. Post Hospitalization: Timely Follow-Up

Goal	Objectives	Baseline (FY 17-18)	Evaluation (FY 18-19)
	Protocols		·
To implement procedures to ensure post inpatient psychiatric hospitalization	Create protocol for post IPU follow-up for enrolled and non-enrolled consumers (include notification to VCBH of IPU	Productive workgroups held to outli procedures for enrolled and non- enrolled consumers.	Fine-tuned and standardized notification of hospitalizations for enrolled and non-enrolled consumers through
(IPU) consumers are offered a follow up	cases).	Current and future state flow chart developed.	
appointment within 7	Tracking Process		
calendar days of discharge.	Create tools, process, and reports to track performance.	Avatar Form/ Tracking Tool developed and tested. Determined that it doe not meet the needs of non-enrolled consumers.	Developed and tested new Psych
		Workgroups held with STAR leads to outline needs for effective tracking for non-enrolled consumers.	Tracking form in Avatar to capture all IPU
		Administrative meetings held to ide tracking needs of the department.	entify
	Outcomes		
	Percentage of time to follow up appointment is offered within 7 calendar days following an inpatient psychiatric hospitalization.	Adult 39% Children 56% Foster Care 82%	Adult Pending release Children in Fall 2019 as Foster Care part of annual timeliness assessment

# Next Steps (FY19-20):

Efforts to ensure timely follow-up after IPU discharge will continue with a post-hospitalization performance improvement project (PIP). Use of new Avatar tracking form will be monitored.

# 4. Reducing Disallowances Due to Documentation Errors

Goal	Objectives	Baseline (FY 14-15)	Evaluation (FY 18-19)
To identify leading causes of documentation disallowances and develop a Division-wide practice standard to address the identified issues and allow for revenue recovery.	1) Review clinical documentation issues, as identified by monthly VCBH UR audits and triennial DHCS audits.  2) Develop training / procedural protocols to address loss of revenue.  a. Mandatory Staff Documentation Trainings (including CBOs)  b. ISSP Lockout PIP (all CAs trained)  c. Collaborative Documentation Training with UR Team  d. Simplified Recoupment Process  e. Provided Manager/ CA Documentation Trainings  3) Develop comprehensive analysis of UR reports by Department, Division, Program  a. Analysis of fiscal reports re: lost revenue by program  b. Identify formula for unit of service and cost for programmatic review  4) Develop data reports to reflect disallowance trends and fiscal implications	Disallowed errors averaged 37,469 in the baseline year      18% (24% Adult / 5% Youth and Family) of all charts reviewed indicated out-of-date Client Plans as the single largest cause of disallowances.	The benefit of completing this project is that documentation meets clinical practice standards and increased revenue. Those benefiting are all staff providing clinical services, consumers related to improved documentation, Administration, Billing and Fiscal.  Note - there are two different methods for acquiring disallowances:  1. Utilization Review nurses physically review a given set of patient files and determines disallowances by which documentation is missing, not completed properly, or completed erroneously (Fig. 1).  2. Fiscal Department locks out the patient file for billing purposes after set period. Documents not included in patient's electronic health record are considered disallowed (Fig 2).  Percentages are based on difference between baseline (2014-2015) year and actual year.

#### Figure 1: Utilization Review Disallowances

Although there was an increase in disallowances immediately after the baseline year, following years indicate a decrease. There was a significant decrease in FY 18-19, as staff implemented and become accustomed to intervention protocols.

	14-15	15-	-16	16-	-17	17-	-18	18	-19
	Baseline	Disallowed Errors	% Change	Disallowed Errors	% Change	Disallowed Errors	% Change	Disallowed Errors	% Change
Q1	17700	36675	51.74%	18688	5.29%	12940	-36.79%	12020	-47.25%
Q2	14926	28536	47.69%	16342	8.66%	14795	-0.89%	6639	-124.82%
Q3	22666	30538	25.78%	11483	-97.39%	10295	-120.17%	7511	-201.77%
Q4	23145	21978	-5.31%	12397	-86.70%	12916	-79.20%	5067	-356.78%
TOTAL	78437	117727	33.37%	58910	-33.15%	50946	-53.96%	31237	-151.10%
AVERAGE	19609	29432	<b>1</b> 33.37%	14728	-33.15%	12737	-53.96%	7809	-151.10%

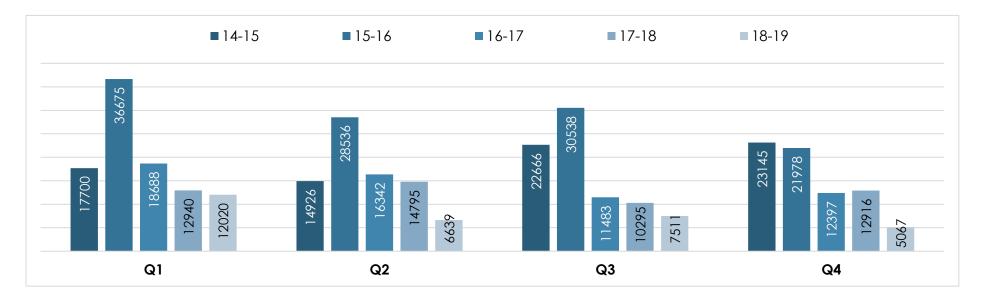


Figure 2: Disallowances Due to Lock-Out Client (Fiscal)

Increases for two consecutive years indicate that intervention protocols are affecting patient's physical charts but have no impact on timeliness of document submission. The small decrease in disallowances demonstrates that additional interventions may need to take place at the electronic health record level.

	14-15	15-16		16-17		17-18		18-19	
	Baseline	Disallowed Errors	% Change	Disallowed Errors	% Change	Disallowed Errors	% Change	Disallowed Errors	% Change
Q1	26275	28621	8.20%	37113	29.20%	19052	-37.91%	22019	-19.33%
Q2	25718	31461	18.25%	24456	-5.16%	16406	-56.76%	16116	-59.58%
Q3	11071	40652	72.77%	23318	52.52%	18910	41.45%	12583	12.02%
Q4	8374	31447	73.37%	21591	61.22%	13511	38.02%	8044	-4.10%
TOTAL	71438	132181	45.95%	106478	32.91%	67879	-5.24%	58762	-21.75%
AVERAGE	17860	33045	45.95%	26620	<b>1</b> 32.91%	16970	-5.24%	14691	-21.57%

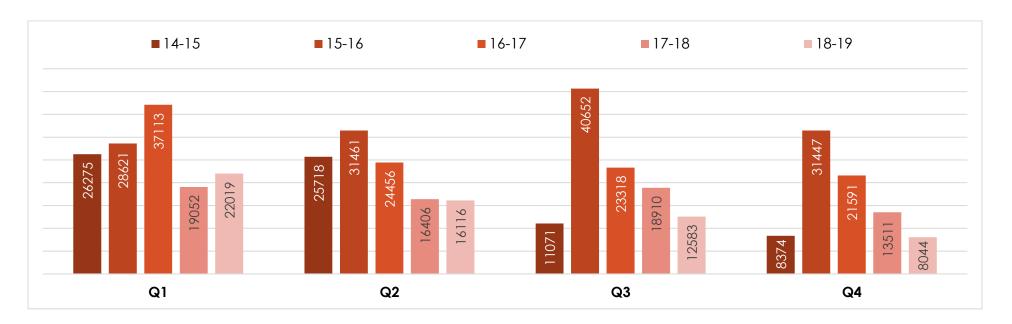


Figure 3: Combined Disallowances

	14-15	15-16		16-17		17-18		18-19	
	Baseline	Disallowed Errors	% Change	Disallowed Errors	% Change	Disallowed Errors	% Change	Disallowed Errors	% Change
Q1	43975	65296	32.65%	55801	21.19%	31992	-37.36%	34039	-29.19%
Q2	40644	59997	32.26%	40798	0.38%	31201	-30.27%	22755	-78.62%
Q3	33737	71190	52.61%	34801	3.06%	29205	-15.52%	20094	-67.90%
Q4	31519	53425	41.00%	33988	7.26%	26427	-19.27%	13111	-140.40%
TOTAL	149875	249908	40.03%	165388	9.38%	118825	-26.13%	89999	-66.53%
AVERAGE	37469	62477	<b>4</b> 0.03%	41347	<b>1</b> 9.38%	29706	<b>-</b> 26.13%	22500	-66.53%



#### Findings:

- Interventions were implemented at the clinic level show a marked decrease in proportion of units of disallowed errors in statistics at the Utilization Review metrics.
- Minor decrease indicated at the Lock-Out Client process demonstrates that further research is necessary at the electronic health record level.

#### Next Steps:

- Examine process used by each UR Nurse in order to possibly standardize auditing procedures.
- Analyze units of service at the site level to clarify which personnel are responsible for completion of documentation.
- Review clerical process at site level to better understand procedures for capturing documentation for electronic health record.
- Continue monitoring disallowances for future improvements.

## 5. Access to Services - STAR to Clinic

Goal	Objectives	Baseline (FY 17-18)	Evaluation (FY 18-19)				
	Access to Services Process						
To improve the VCBH consumer-access experience by streamlining and improving the accuracy of the process.	Create a process whereby 100% of those that request mental health services are referred to an appropriate treatment provider.  Optimize consumer throughput.	Recommendations were presented (see Table B below).	Recommendations resulted in the initiation of the Santa Paula Access Pilot Study to focus on a high-need, underserved population. Interventions to support more timely access to services were implemented. Data are being examined and the work will continue as				
	Ensure the accuracy of those referred out, decrease "dropouts" of those remaining in VCBH, and improve the accuracy of screening and assessing.		a performance improvement project (PIP) in FY 19-20. Additionally, findings from the 2017 Kaizen are being more broadly applied across VCBH clinics.				
	Cycle Time						
	Reduce cycle time for the following: request for service, offered appointment, actual assessment, first appointment at assigned clinic, first appointment with a psychiatrist.	Cycle times were calculated:  Days from request for service in STAR to first service in clinic  Routine Expedited Adult 68 36 Youth 82 50  Days from request for service in STAR to first psychiatric appointment  Routine Expedited Adult 95 63 Youth 119 86	Pending release in Fall 2019 as part of annual timeliness self-assessment				

## Next Steps (FY19-20):

Recommendations will continue to be reviewed for further implementation and tracking across VCBH services. The 19-20 Santa Paula Access PIP will identify additional intervention to support access to services that could be replicable.

Table B: Recommendations from Kaizen (September 13, 2017)

Intake Information & Forms	Streamline consumer intake forms (readability, linguistic level). Determine whether some sections from the consumer intake forms should be eliminated or completed at clinic.	
Screening	<ul> <li>Survey, review and standardize screening criteria for all entities that can refer to VCBH services.</li> <li>Create standard screening tool that collects consumer information and uses algorithm for self-triage for likelihood of meeting Medical Necessity (MN). Conduct pilot, gather feedback, train, then implement.</li> <li>Define roles, responsibilities and interface protocol for initial screening personnel (RISE, CT, LB).</li> </ul>	
Scheduling	Schedule assessment during live (phone, face-to-face) RFS/Triage.	
Staff	Develop method to identify staff availability to complete RFS. Expand Spanish-speaker staff pool for RFS completion.	
Process	<ul> <li>Develop standard operational definitions for the access process (e.g., first available appointment, time frames) to improve communication and reduce rework.</li> <li>Eliminate paper chart and create digital chart to facilitate data entry and digital signatures.</li> </ul>	
Communication	<ul> <li>Ensure appropriate staff receive notification as consumer moves through the process. Incorporate automatic notification for appropriate staff (email notification, etc.). For example, to STAR OA during request for service, notice of appointments, notice of consumer information availability in Avatar.</li> <li>Determine intra-county communication needs with respect to consumer information disclosure, legal consent requirements, and implement. Consider external county communication requirements.</li> </ul>	
Collaboration	<ul> <li>Create community liaison group that will work with "referral in" entities (internal and external-schools, primary care physicians, RISE, LB) to continuously improve the referral process and consumer information collected with respect to completeness, quality and appropriateness.</li> <li>Increase communication and improve processes, formalize collaboration between intake team (RISE, LB, STAR/Crisis Team) and clinics by creating a collaboration group of direct service staff (brown bag lunch discussions- with report feedback to executive for accountability).</li> </ul>	
Assessment	> Revisit and formalize purpose and goals for STAR assessment in collaboration with clinics. Review & streamline STAR assessment form, building on what information has been collected (screening, triage).	
Integration of Services	<ul> <li>Investigate current referral process for adjunct services. Clarify access process for services (ex. ADP) and embed within formal access process.</li> <li>Create a list of point of contacts for process functions and organizations.</li> </ul>	

## 6. Access to Services - After Hours

Goal	Objectives	Baseline (FY 17-18)	Evaluation (FY 18-19)
To support and guide the improvement of the after-hours VCBH Access Line which provides access to request for services, crisis intervention, and information. Consumer experience will be examined by consumer call volume, the nature of call, and outcome of call.	<ul> <li>Ensure 100% of calls are logged</li> <li>Maintain a score of 90% or above on the 24/7 Test Call Quarterly Report Form on initial disposition of request (e.g., caller provided with clinic hours/location, beneficiary scheduled for assessment with provider at date/time, warm hand off to 24-hour Crisis Clinician)</li> <li>Maintain a score of 95% or above on the 24/7 Test Call Quarterly Report Form on language capability in all languages (non-English) spoken by beneficiaries of the County.</li> </ul>	<ul> <li>Through quality improvement efforts, elements of process effectiveness and data accuracy on quarterly reports were discovered.</li> <li>As a result, efforts focused on addressing quality improvement needs related to both test call providers and Access Line staff before tracking of objectives.</li> <li>The quality of the Access Line both after and during business hours were considered.</li> </ul>	<ul> <li>Process Mapping and Modifications</li> <li>October 2018: Workgroup with representatives from Access Line, Quality Improvement (QI) I and Electronic Health Records, reviewed test call process via current contractor to identify areas for improvement and consider essential elements for a future contractor.</li> <li>Contract with existing test call provider ended fall 2018: <ul> <li>VCBH staff conducted test calls for Q3 &amp; Q4</li> </ul> </li> <li>June 2019: Refinement of test call process and survey for data collection.</li> <li>July 2019: Engaged new contractor to provide test calls utilizing updated process and survey.</li> <li>Collaboration between Access Line Manager and QI staff strengthened to support future implementation.</li> </ul>

**Next Steps (FY 19-20):** QI staff and Access Line Manager will regularly monitor test calls to identify opportunities for growth for both new test call provider and/or the Access Line staff to yield accurate data on quarterly reports.