



Follow-up Review of Audit of Broward Addiction Recovery Center's Information Technology Operations

Office of the County Auditor

Follow-up Review Report

Robert Melton, CPA, CIA, CFE, CIG
County Auditor

Review Conducted by:

Kathie-Ann Ulett, CPA, Deputy County Auditor
Gerard Boucaud, CIA, CISA, CDPSE, Audit Manager
Stacey Thomas, CGAP, Audit Senior
Muhammad Ramjohn, CISA, Information Technology Auditor

Report No. 21-11
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**OFFICE OF THE COUNTY AUDITOR**

115 S. Andrews Avenue, Room 520 • Fort Lauderdale, Florida 33301 • 954-357-7590 • FAX 954-357-7592

March 23, 2021

Honorable Mayor and Board of County Commissioners:

We have conducted a Follow-up Review of our Audit of the Broward Addiction Recovery Center's (BARC) Information Technology Operations (Report No. 19-03). The objective of our review was to determine the implementation status of our previous recommendations.

We conclude that of the 25 recommendations in the report, we determined that 18 recommendations were implemented, 6 recommendations were partially implemented, and 1 recommendation is no longer applicable. We commend management for implementing our recommendations. The status of each of our recommendations is presented in this follow-up report.

We conducted this review in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objectives.

We appreciate the cooperation and assistance provided by the Broward Addiction Recovery Center and Enterprise Technology Services Divisions throughout the course of our audit.

Respectfully submitted,

A handwritten signature in blue ink that reads "Bob Melton".

Bob Melton
County Auditor

cc: Bertha Henry, County Administrator
Andrew Meyers, County Attorney
Monica Cepero, Deputy County Administrator
Jack Feinberg, Director, Broward Addiction Recovery Center

Broward County Board of County CommissionersMark D. Bogen • Lamar Fisher • Beam Furr • Steve Geller • Dale V.C. Holness • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine
www.broward.org

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IMPLEMENTATION STATUS SUMMARY

Implementation Status of Previous Recommendations From Audit of Broward Addition Recovery Center's Information Technology Operations

REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
1A.	We recommend management ensure appropriate temperature monitoring equipment is in place and functioning for the storage of medication and food items requiring refrigeration.	☑			
1B.	We recommend management ensure incident response procedures and employee training are updated to require documentation of the nature, duration and resolution of temperature variances that fall outside established guidelines.	☑			
1C.	We recommend management require APC to perform a minimum of one physical inventory count per contract year as required by the vendor agreement.	☑			
1D.	We recommend management develop and implement procedures to periodically detect and resolve inventory discrepancies.	☑			

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REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
2.	We recommend management enhance medication dispensing procedures to require adequate documentation and management review of any medications dispensed from medDispense without a physician's prescription.	<input checked="" type="checkbox"/>			
3A.	We recommend management implement adequate procedures to ensure all BARC employees complete required HIPAA training courses annually.	<input checked="" type="checkbox"/>			
3B.	We recommend management maintain adequate training documentation for all ECHO application and medDispense system operators.	<input checked="" type="checkbox"/>			
4A.	We recommend management evaluate the feasibility of using a single patient record system and technologies that may assist in this process.	<input checked="" type="checkbox"/>			
4B.	We recommend management implement procedures to ensure all required documentation is contained in each patient record.		<input checked="" type="checkbox"/>		
4C.	We recommend management strengthen record keeping controls to ensure all billable activity is entered in each patients' record and adequately billed.		<input checked="" type="checkbox"/>		

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REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
5.	We recommend management implement appropriate procedures to periodically reconcile billable units, invoices, and payments. In addition, management should explore acquiring technology to assist with billing and payment processes.		<input checked="" type="checkbox"/>		
6.	We recommend management obtain SOC reports from all vendors with access to ePHI to gain assurance over the security, availability, processing integrity, confidentiality, and privacy of the County's data.				<input checked="" type="checkbox"/>
7A.	We recommend management disable or remove terminated employee accounts within County systems upon employee termination.	<input checked="" type="checkbox"/>			
7B.	We recommend management ensure that internal procedures are updated to accurately record the date employee accounts are disabled from County systems.	<input checked="" type="checkbox"/>			
7C.	We recommend management work with Broward Behavioral Health Coalition (BBHC) to restrict user access to ePHI within the web portal based on job responsibilities.		<input checked="" type="checkbox"/>		

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REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
7D.	We recommend management enhance current user administration practices by implementing a formal process for requesting, removing, and modifying user access to medDispense. Management should ensure that the access requested, as well as management's approval of that access, is clearly documented.	<input checked="" type="checkbox"/>			
7E.	We recommend management continue efforts to restrict access to reports in ECHO based on job responsibilities and revise policies and procedures related to the approval of forms and reports.		<input checked="" type="checkbox"/>		
8A.	We recommend management work with The ECHO Group to update the password configuration for the ECHO system to meet or exceed County policy.	<input checked="" type="checkbox"/>			
8B.	We recommend management work with APC and medDispense's vendor to obtain and review the minimum password configuration for the medDispense system and evaluate the configuration for compliance with County policy.		<input checked="" type="checkbox"/>		
9A.	We recommend management perform an annual review of physical access controls and submit the results of the review to the HIPAA Officers within 30 days of completion as required by County policy.	<input checked="" type="checkbox"/>			

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REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
9B.	We recommend management ensure that requests for physical access are appropriately authorized and submitted timely to the Facilities Management Division according to County Policy.	<input checked="" type="checkbox"/>			
9C.	We recommend management review and enhance controls surrounding the issuance of physical access cards to sensitive areas. Such controls should include a periodic validation of all active cards as well as an inventory of any stored cards. In addition, management should perform a periodic review of access logs to identify any unusual activity.	<input checked="" type="checkbox"/>			
9D.	We recommend management explore the use of electronic physical access cards to the Detox medication room to improve tracking and employee accountability. In addition, we recommend that if a physical key is used, management should implement additional monitoring controls, such as security cameras, and should ensure the possession of the physical key is adequately tracked.	<input checked="" type="checkbox"/>			
10.	We recommend management maintain appropriate records of items submitted to the HIPAA Security Officer to demonstrate compliance with the County's HIPAA Security Policy.	<input checked="" type="checkbox"/>			

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REC. NO.	PREVIOUS RECOMMENDATION	IMPLEMENTED	PARTIALLY IMPLEMENTED	NOT IMPLEMENTED	NOT APPLICABLE
11.	We recommend management enhance contract administration for the APC agreement to ensure vendor compliance with key provisions of the agreement, such as the annual physical inventory count. In addition, management should review APC timesheets to account for total hours and agree the amount to the monthly invoice.	☑			

INTRODUCTION

Scope and Methodology

The County Auditor's Office conducts audits of Broward County's entities, programs, activities, and contractors to provide the Board of County Commissioners, Broward County's residents, County management, and other stakeholders unbiased, timely, and relevant information for use in promoting government accountability and stewardship and improving government operations.

We conducted a follow-up review of our Audit of Broward Addiction Recovery Center's Information Technology Operations (Report No. 19-03, issued November 8, 2018). The objective of our review was to determine the implementation status of previous recommendations for improvement.

We conducted this review in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objectives.

Our follow-up review included such tests of records and other auditing procedures, as we considered necessary in the circumstances. The follow-up testing was performed for the period January 1, 2020 through December 31, 2020. However, transactions, processes, and situations reviewed were not limited by the audit period.

Overall Conclusion

We conclude that of the 25 recommendations in the report, we determined 18 recommendations were implemented, 6 recommendations were partially implemented, and 1 recommendation is no longer applicable. The status of each recommendation is included in this report.

OPPORTUNITIES FOR IMPROVEMENT

This section reports actions taken by management on the Opportunities for Improvement in our previous review. The issues and recommendations herein are those of the original review, followed by the status of the recommendations.

1. Inventory of Medications and Food Were not Managed to Maintain Viability and Reduce Theft and Loss.

Inventory controls for medications and food issued to BARC clients were not adequate. During our review, we noted the following:

- A. The storage temperature for medications and food items in the refrigerator at the Detox facility was not consistently maintained at an appropriate temperature to ensure effectiveness of medications and the viability of food items.
- B. An alarm was triggered when the refrigerator's temperature exceeds the allowable temperature range for stored items; however, appropriate procedures had not been implemented to adequately address these incidents, and it was reported that nurses routinely turned-off or reset the alarm.
- C. Advanced Pharmaceutical Consultants, Inc. (APC) did not perform an annual physical inventory of medications as required by the vendor agreement.
- D. Six of 20 (30%) medications counted at the Booher facility on October 10, 2017 and the Detox facility on October 20, 2017 did not match inventory logs provided by the pharmacist.

We recommended management:

- A. Ensure appropriate temperature monitoring equipment is in place and functioning for the storage of medication and food items requiring refrigeration.
- B. Ensure incident response procedures and employee training are updated to require documentation of the nature, duration and resolution of temperature variances that fall outside established guidelines.
- C. Require APC to perform a minimum of one physical inventory count per contract year as required by the vendor agreement.
- D. Develop and implement procedures to periodically detect and resolve inventory discrepancies.

Implementation Status:

- A. Implemented
- B. Implemented
- C. Implemented
- D. Implemented

2. Medications Were Dispensed Without a Physician's Prescription or Appropriate Documentation for Exceptions.

In two of ten (20%) patient paper charts reviewed, we observed a physician's prescription order was not in the patients' charts for the medication dispensed from the medDispense unit.

We recommended management enhance medication dispensing procedures to require adequate documentation and management review of any medications dispensed from medDispense without a physician's prescription.

Implementation Status: Implemented

3. Employees Were not Adequately Trained to Avoid Error and Ensure Compliance With County Policy.

During our review of employee training, we noted the following as of December 4, 2017:

- A. Forty-six of 49 (94%) BARC employees tested had not taken the required training on the HIPAA Sanctions Policy, and 31 of 49 (63%) had not taken the required training on the HIPAA Privacy Policy.
- B. For eight of ten (80%) employees sampled with access to the ECHO application, evidence of training on ECHO could not be provided. For two of ten (20%) employees sampled with access to the medDispense system, evidence of training on the medDispense equipment could not be provided.

BARC provided training on ECHO; however, adequate documentation was not retained. APC was contractually required to provide training to the nurses and authorized operators on the medDispense equipment; however, documentation of the training provided to nurses was not adequately maintained.

We recommended management:

- A. Implement adequate procedures to ensure all BARC employees complete required HIPAA training courses annually.
- B. Maintain adequate training documentation for all ECHO application and medDispense system operators.

Implementation Status:

- A. Implemented
- B. Implemented

4. Management did not Ensure Technology Adequately Supports Business Operations.

During our review of technology processes, we noted the following concerns:

- A. BARC maintained a dual client chart system using paper charts and electronic records within ECHO.
- B. Forty-five of 60 (75%) of patients' paper charts reviewed did not contain one or more required pieces of information.
- C. BARC did not have adequate controls to ensure that the billable activity recorded in patients' paper charts matched the billable activity recorded in ECHO.

We recommended management:

- A. Evaluate the feasibility of using a single patient record system and technologies that may assist in this process.
- B. Implement procedures to ensure all required documentation is contained in each patient record.
- C. Strengthen record keeping controls to ensure all billable activity is entered in each patients' record and adequately billed.

Implementation Status:

- A. Implemented
- B. Partially Implemented. Management has implemented some system alerts to provide notification when required information is missing from patient records. These alerts

remain on the patient record until the missing documentation issue is resolved; however, two randomly selected patient records had missing identification, residency or income documentation required by BARC policies for service. We **encourage** management to ensure that procedures are appropriate to obtain and retain documentation required by BARC's policies.

- C. Partially Implemented. BARC transitioned to all electronic patient records in April 2020 and asserts this has contributed to strengthening record keeping. We selected three clients to check billing accuracy. Because these clients did not owe anything based on the sliding fee scale, no invoice was generated. Further, we were informed from February 2020 self-pay invoices are in the "quality assurance" stage of processing and have not been billed. Therefore, BARC could not provide invoices from when they transitioned to complete electronic health records (April 2020) for self-pay clients that would allow us to confirm whether all billable activity was invoiced. We **encourage** management to issue outstanding invoices for self-pay clients.

5. BARC did not Implement a Process to Adequately Reconcile Billable Units, Invoices, and Payments.

BARC uses ECHO to identify billable activities for payment, manually creates invoices using multiple methods, and manually processes payments into the County's accounting system (PeopleSoft); however, a process to adequately reconcile these activities has not been implemented. During our review, we noted 12 of 27 (44%) transactions where the billable amount recorded in ECHO and the amount posted in PeopleSoft did not match. Six of the 12 occurrences were Broward Behavioral Health Coalition (BBHC) transactions that, according to the Business Manager, will not match ECHO because:

- A. The agreement with BBHC requires BARC to provide a cash match of \$355,000, and
- B. BARC is expected to provide \$650,000 in uncompensated units (free services). These uncompensated units may or may not be reimbursed by the Florida Department of Children and Families (DCF).

We recommended management implement appropriate procedures to periodically reconcile billable units, invoices, and payments. In addition, management should explore acquiring technology to assist with billing and payment processes.

Implementation Status: Partially Implemented. BARC provided documentation of some billable unit reconciliations (BBHC, Ryan White) and matching payment documentation for a self-pay account between ECHO, QuickBooks and PeopleSoft and acknowledged that aggregate

reconciliations for self-pay and insurance are not performed. Management indicated that the reconciliation process is highly manual and aggregate reconciliation is not currently available without implementing new technology. We **encourage** management to enhance reconciliation procedures and explore the ability to provide aggregate data.

6. Protected Health Information Entrusted to Vendors Were Not Adequately Protected.

Broward County is not in receipt of Service Organization Controls (SOC) reports from The Echo Group and Touchpoint Medical to obtain assurance about the controls relevant to security, availability, processing integrity of the ECHO and medDispense systems used to process County data, and to obtain assurance about the confidentiality and privacy of ePHI.

We recommended management obtain SOC reports from all vendors with access to ePHI to gain assurance over the security, availability, processing integrity, confidentiality, and privacy of the County's data.

Implementation Status: Not Applicable. This data is now managed by the County.

7. Access to Electronic Protected Health Information (ePHI) was not Restricted Based on Job Responsibilities to Prevent Unauthorized Exposure.

During our review of access controls to ePHI, we noted the following:

- A. Thirteen of 26 (50%) terminated employee accounts within the ECHO system and two of 26 terminated (8%) employee accounts within the medDispense system were not disabled within one day of termination from Broward County. It took an average of 11 days to disable sampled terminated employee accounts with values ranging from three to 35 days.
- B. BARC's IT Team routinely adjusted the account termination date in ECHO to reflect the date the employee was terminated from the County, not when the respective user's account was actually disabled within ECHO.
- C. The web portal used by BBHC did not restrict user access to ePHI based on job responsibilities. As a result, we noted that 4 of 10 (40%) users sampled had access beyond what is required to perform their job responsibilities.
- D. BARC did not have a formal process for requesting, removing and modifying user access to medDispense.

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- E. Access to ECHO reports was not restricted based on employee job responsibilities.

We recommended management:

- A. Disable or remove terminated employee accounts within County systems upon employee termination;
- B. Ensure that internal procedures are updated to accurately record the date employee accounts are disabled from County systems;
- C. Work with BBHC to restrict user access to ePHI within the web portal based on job responsibilities;
- D. Enhance current user administration practices by implementing a formal process for requesting, removing and modifying user access to medDispense. Management should ensure that the access requested, as well as management's approval of that access, is clearly documented; and
- E. Continue efforts to restrict access to reports in ECHO based on job responsibilities and revise policies and procedures related to the approval of forms and reports.

Implementation Status:

- A. Implemented
- B. Implemented
- C. Partially Implemented. Concordia has indicated to BARC staff that the web portal used by Counselors and Behavioral Clinicians meet all regulatory requirements as it is a national portal. As such, due to the portal being outside the control of BARC, BARC has no ability to implement our recommendation.
- D. Implemented
- E. Partially Implemented. ECHO system limitations have prevented BARC from fully restricting reports within the current system. As a result, BARC has begun the process of upgrading the ECHO application to support this functionality.

8. System Password Requirements Were not Enhanced to Prevent Unauthorized Access to ePHI.

Passwords represent the keys to County systems. We noted the following concerns:

- A. Password configurations for ECHO did not comply with County policy.

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- B. Management had not determined whether the password configuration for the medDispense system complies with minimum requirements of the County's password policy.

We recommended management

- A. Work with The Echo Group to update the password configuration for the ECHO system to meet or exceed County policy.
- B. Work with APC and medDispense's vendor to obtain and review the minimum password configuration for the medDispense system and evaluate the configuration for compliance with County policy.

Implementation Status:

- A. Implemented
- B. Partially Implemented. Management obtained and reviewed the minimum password configurations and has determined that the password configurations are coded into the hardware by the original manufacturer. Neither BARC nor APC have the ability to update the password configuration to match County Policy.

9. Physical Access Controls Did not Comply with Federal Regulations and County Policy.

During our review of physical access controls we noted the following:

- A. BARC did not perform an annual review of the physical access controls for their facilities for fiscal year 2017 as required by County policies.
- B. Although management had a formal process for authorizing physical access to secure areas within BARC through the Facilities Management Division, we noted that:
 - i. Four of 11 (36%) physical access request forms selected were processed without the required approval from the Agency Director. The individuals that signed the forms on behalf of the Agency Director were not authorized to do so.
 - ii. The Security Division received notification to remove the physical access for one of seven (14%) employee terminations selected, 15 days after the employee was terminated from Broward County.
- C. Eight of 10 (80%) physical access cards to the pharmacy room where both prescription and over the counter medications are stored at the Booher facility could not be accounted for during our audit.

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- D. A physical key is used to provide access to the medication room at the Detox facility. A key log is used to track possession of the key to this room. However, this log is not consistently used and there is no automated record of who entered the room and at what times increasing the risk of theft, loss or tampering with medications and medication dispensing equipment.

We recommended management:

- A. Perform an annual review of physical access controls and submit the results of the review to the HIPAA Officers within 30 days of completion as required by County policy.
- B. Ensure that requests for physical access are appropriately authorized and submitted timely to the Facilities Management Division according to County Policy.
- C. Review and enhance controls surrounding the issuance of physical access cards to sensitive areas. Such controls should include a periodic validation of all active cards as well as an inventory of any stored cards. In addition, management should perform a periodic review of access logs to identify any unusual activity.
- D. Explore the use of electronic physical access cards to the Detox medication room to improve tracking and employee accountability. In addition, we recommend that if a physical key is used, management should implement additional monitoring controls; such as security cameras and should ensure the possession of the physical key is adequately tracked.

Implementation Status:

- A. Implemented
- B. Implemented
- C. Implemented
- D. Implemented

10. Appropriate Records Were not Maintained of Items Submitted to the HIPAA Security Officer for Review.

The HIPAA Security Team did not maintain an appropriate audit trail to demonstrate when documents are submitted to, and reviewed by the HIPAA Security Officer.

We recommended management maintain appropriate records of items submitted to the HIPAA Security Officer to demonstrate compliance with the County's HIPAA Security Policy.

Implementation Status: Implemented

11. Contract Administration Activities Required Enhancement.

BARC was performing monitoring of APC's compliance with the pharmacy services agreement; however, the monitoring activities were not reported to, or coordinated by, the Contract Administrator. During our review, we noted the following;

- A. The contract required APC to perform, at a minimum, one physical inventory count per contract year. At the time of our review this activity had not been performed.
- B. APC maintained time sheets for each employee providing services at BARC facilities; however, BARC did not request the timesheets to reconcile total hours worked during the month invoiced.

We recommended management enhance contract administration for the APC agreement to ensure vendor compliance with key provisions of the agreement, such as the annual physical inventory count. In addition, management should review APC timesheets to account for total hours and agree the amount to the monthly invoice.

Implementation Status: Implemented