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**Subject: *Epic Community Connect
Report 2018-13***

The final report for Epic Community Connect, 2018-13, is attached. We would like to thank all members of the department for their cooperation and assistance during the review.

Because we were able to reach agreement regarding management action plans in response to the audit recommendations, a formal response to the report is not requested. The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to evaluate the status of the management action plans.

UC wide policy requires that all draft reports be destroyed after the final report is issued. We also request that draft reports not be photocopied or otherwise redistributed.

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Attachment

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UC San Diego

AUDIT & MANAGEMENT ADVISORY SERVICES

Epic Community Connect
Report No. 2018- 13
March 2019

FINAL REPORT

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I. EXECUTIVE SUMMARY

Audit & Management Advisory Services (AMAS) has completed a review of Epic Community Connect as part of the approved audit plan for Fiscal Year 2017-18. The objective of our review was to evaluate contractual arrangements with community entities for provision of EHR software, to validate the terms and conditions of the contract were adhered to, financial and service obligations were met, and payments were properly recorded in UCSD financial systems.

We concluded that the Epic Community Connect Program practices for managing contractual agreements with community affiliates were generally compliant with the terms of the agreement, financial and services obligations were met, and affiliate payments were properly recorded in UCSD financial systems. We observed the PACC management and staff worked closely with affiliates and other UCSDH teams in implementing Epic at affiliate sites, and providing post-implementation support. The Information Security team works with an external contractor to conduct a security assessment of the affiliate after go-live, as part of on-going security review and monitoring processes. We also observed that PACC adopted a standard contract template to ensure consistency in affiliate agreements, and reviewed and updated the cost model for each new affiliate customer. User management and billing processes were generally adequate to comply with relevant policies.

We observed opportunities for improvement with respect to billing processes and affiliate account reconciliation. We also noted that certain contract provisions related to affiliate access management, authorized users, and privacy disclosure to affiliate patients were not consistently managed to ensure contract compliance on the part of the affiliate. Management Action Plans to address these findings are summarized below:

A. Billing Processes

1. PACC will work with UCSDH Physician Group Accounting Office to reconcile billing and payments for all affiliates with proper supporting documentation.
2. The UCSDH Physician Group Accounting Office will formalize processes for monthly billing, payment collection, reconciliation, and financial recording of affiliate payments.

B. User Management

1. PACC will review to ensure that all users execute the confidentiality agreement prior to being granted access to the system. PACC will also work with the one affiliate discussed below to have users re-sign the agreements as needed
2. PACC has developed a process for obtaining affiliate quarterly all user change list and reconciling to the active user list in the system.

C. Contract Compliance - Privacy Practice

Population Health Services Organization will work with affiliates to ensure that the Notice of Privacy Practice and Patient Release Form contain the appropriate disclosures as required by the Hosting Agreement.

Observations and Management Action Plans are described in greater detail in section V of this report.

II. BACKGROUND

Audit & Management Advisory Services (AMAS) has completed a review of Epic Community Connect as part of the approved audit plan for Fiscal Year 2017-18. This report summarizes the results of our review.

One strategic initiative of UC San Diego Health (UCSDH) is the expansion of its clinical network to improve patient care and reduce overall health care costs. This effort was initiated in 2014 with the formation of a Clinically Integrated Network (CIN), a network of providers who collaborate on administrative functions and business and clinical initiatives to improve efficiencies and benefit patients. In 2018, UCSDH established an Accountable Care Network, which functions as an Accountable Care Organization (ACO) under the Medicare Shared Savings Program (MSSP).

One benefit offered by UCSDH to CIN and ACO participants is the extension of the Epic Electronic Health Record (EHR) through the Epic Community Connect Program. This program allows UCSDH to provide the Epic EHR application to affiliates to extend the usage of EHRs to community providers who may not otherwise adopt EHRs independently, and allow clinical records to be shared in a secure manner, with financial and medical records kept separate. Current regulations¹ allow hospitals to subsidize community physician adoption of electronic health records. UCSDH is therefore able to subsidize associated software and supporting labor costs for extending its EHR to CIN and ACO members. The subsidy ranges from 70% to 100% depending on the type of affiliation (CIN and/or ACO) and affiliate specialty. In 2015/2016, an external consultant was engaged to develop a pricing model to calculate implementation costs and on-going maintenance charges for affiliates who wish adopt the Epic EHR through UCSDH. Ongoing maintenance costs includes services provided by external technology vendors that integrate with Epic workflows.

In addition to contractual arrangements to join the CIN or ACO, a separate contract is executed between UCSDH and the affiliate for Epic hosting services which addresses health record access, use and hosting services, as well as the associated implementation pricing and monthly maintenance fees. A standard template for these contracts was developed by UCOP Office of General Counsel in 2018.

The first two affiliates were integrated in 2016 by UCSDH Information Services (IS) with assistance from an external consultant. In June 2017, the Practice Affiliations and Community Connect (PACC) group was formally established within UCSDH IS to serve as the Epic Community Connect hosting service provider for UCSD's clinical affiliates, offering the Epic EHR platform and implementation services. PACC's vision is to enable UCSD's ambulatory affiliates to smoothly transition from existing electronic medical records or paper practices to UCSD Epic-based workflows for clinical, operational and finance management through step-by-step implementation processes and dedicated go-live support. PACC acts as a liaison between UCSDH and affiliates for Epic support. Other UCSDH Information Services teams including training, user security and user access also play important roles in the implementation and on-going support for affiliates.

The affiliates integrated through the Community Connect Program as of October 31, 2018 are:

¹ Exemptions to the Stark Law and Anti-Kickback Statute were enacted to allow provider groups to accept gifts of EHR software without violating the law and statute to encourage widespread implementation of EHRs.

Practice	Contract Execution Date	Affiliate Type	Number of Clinic Sites	Provider Count	All Active User Count (10/30/2018)
Affiliate 1	February 2016	CIN/ACO	3	29	116
Affiliate 2	August 2016	CIN	5	33	105
Affiliate 3	June 2017	CIN/ACO	1	10	56
Affiliate 4	March 2018	CIN/ACO	8	32	157
Affiliate 5	July/Aug 2018	CIN/ACO	1	2	15
Affiliate 6	July/Aug 2018	CIN/ACO	1	1	11
Affiliate 7	July/Aug 2018	CIN/ACO	1	1	7
Totals			20	108	467

III. AUDIT OBJECTIVE, SCOPE, AND PROCEDURES

The objective of our review was to evaluate contractual arrangements with community entities for provision of EHR software, to validate the terms and conditions of the contract were adhered to, financial and service obligations were met, and payments were properly recorded in UCSD financial systems.

In order to achieve our objectives, we performed the following procedures:

- Reviewed Epic Hosting Agreements executed with affiliates to gain an understanding of terms and conditions;
- Interviewed the following:
 - PACC management and staff for EHR implementation processes, user account management, and financial oversight;
 - Information Services manager and staff for practices for affiliate security review;
 - User Access team for users access management processes; and
 - UCSDH Physician Group Accounting Manager and staff for transition of affiliate invoice/payment processes;
- Reviewed UCSDH *Clinical System Information Services Policy (ISP) 3.02 EMR Affiliate and Community Connect Access Procedure* and *ISP 3.07 EMR Affiliate Access Procedure*;
- For two selected affiliates, tested contract compliance for selected terms related to user management and privacy practices;
- Examined a random sample of authorized user agreements from selected affiliates;
- Reviewed selected affiliate privacy policies and patient release forms;
- Verified affiliate implementation payments to the University financial system (IFIS);
- Examined monthly invoices and payment status for selected affiliates; and
- Traced affiliate payments to ledger transactions.

The scope of our review was focused on activities supporting Community Connect services provided for community affiliates in the CIN or ACO. We did not evaluate hosting agreements for services provided to other University of California campuses as part of this review. We also did not validate the work of previous consultants, or conduct a fair market value analysis of the services provided under these contracts.

IV. CONCLUSION

Based on our review, we concluded that the Epic Community Connect Program practices for managing contractual agreements with community affiliates were generally compliant with the terms of the agreement, financial and services obligations were met, and affiliate payments were properly recorded in UCSD financial systems. We observed the PACC management and staff worked closely with affiliates and other UCSDH teams in implementing Epic at affiliate sites, and providing post-implementation support. The Information Security team works with an external contractor to conduct a security assessment of the affiliate after go-live, as part of on-going security review and monitoring processes. We also observed that PACC adopted a standard contract template to ensure consistency in affiliate agreements, and reviewed and updated the cost model for each new affiliate customer. User management and billing processes were generally adequate to comply with relevant policies.

We observed opportunities for improvement with respect to billing processes and affiliate account reconciliation. In the past, these duties were managed within PACC. We noted that over the last four months PACC has been working with UCSDH Physician Group Accounting Office to transition affiliate billing and payment processes. This transition remained in progress during our review.

We also noted that certain contract provisions related to affiliate access management, authorized users, and privacy disclosure to affiliate patients were not consistently managed to ensure contract compliance on the part of the affiliate.

These opportunities for improvement are discussed further in the balance of this report.

V. OBSERVATIONS REQUIRING MANAGEMENT ACTION

A.	Billing Processes
PACC billing to affiliates and payment reconciliation were not always performed timely or consistently.	
Risk Statement/Effect	
Lack of timely billing and payment reconciliation could result in late payments and increase risk that services are provided without appropriate payment.	
Management Action Plans	
A.1	PACC will work with UCSDH Physician Group Accounting Office to reconcile billing and payments for all affiliates with proper supporting documentation.
A.2	The UCSDH Physician Group Accounting Office will formalize processes for monthly billing, payment collection, reconciliation, and financial recording of affiliate payments.

A. Billing Processes – Detailed Discussion

The Epic Hosting Agreement, Exhibit G, lists implementation and maintenance fees for the provision of EHR services. The initial implementation cost are due at the end of the month of Go-Live.

The monthly fees include a fixed monthly maintenance fee, which is typically based on the number of authorized users. In addition, other variable charges primarily associated with additional technology offered through external vendors. There are a number of technology vendors, such as Change HealthCare and Experian, that provide integrated services essential to the Epic workflow. These technology vendors have contractual agreements with the University to extend license agreements to the affiliates. The University then passes through costs associated with the implementation and the maintenance of these technologies to affiliates, via monthly invoices. These variable charges are determined by actual volume or usage.

Our review confirmed that all affiliates' initial implementation fees were paid in accordance with the contract. A summary of the timing of the first monthly payment collected from affiliates from 2016 to September 2018 and total payments is listed below.

Affiliate	Contract Started	Payment Collected (first month)	2016	2017	2018 (Jan –Sep)	Total Monthly Amount
Affiliate 1	Feb 2016	Oct 2016	\$ 17,719	\$ 140,477	\$ 62,654	\$ 220,850
Affiliate 2	Aug 2016	Oct 2016	\$ 64,271	\$ 162,108	\$ 175,312	\$ 401,691
Affiliate 3	June 2017	Aug 2017		\$ 39,194	\$ 10,638	\$ 49,832
Affiliate 4	Mar 2018	April 2018			\$ 81,752	\$ 81,752
Affiliate 5	July 2018	Sep 2018			\$ 1,047	\$ 1,047
Affiliate 6	July 2018	Sep 2018			\$ 983	\$ 983
Affiliate 7	July 2018	Sep 2018			\$ 1,627	\$ 1,627

Source: IFIS Expanded Budget with Index Summaries Reports

Our review noted that the billing processes for Affiliate 1, which was implemented by an external consultant, were not performed timely and consistently in 2016 and 2017. This appeared attributable to the early stage of the program, and lack of existing structure for billing of pass-through costs from the external vendors. As the Community Connect Program matured, the affiliate invoices were billed more routinely. We observed that invoicing and collection was more consistent and timely in 2018. However, our review noted the following exceptions:

- Supporting Documentation for Credits** – For Affiliate 1, we noted that some charges were reversed and/or corrected to reflect accurate provider count and/or fee calculation during the first two years. No supporting documentation for these credits were provided for our review. Therefore, we could not validate the accuracy of the credits or amounts due the University. The lack of supporting documentation increases the risk that unauthorized credit was granted and affiliate cost were not fully recovered.

- Technology Vendor Pass-Through Cost** – We noted that pass-through costs were not always billed timely, and the processes for billing these costs required administrative effort which may not have been value-added. For some of these vendors, invoices were billed separately to the affiliate by each billing item instead of a total invoice amount per vendor. Further, several months' billing items were aggregated and included in UCSDH invoices to the affiliate. Therefore it was difficult to ascertain whether the costs had been fully billed. Also, additional effort was spent in preparing itemized billing for pass-through costs, rather than simply attaching a copy of technology vendor's invoice with UCSDH billing to support charges by external vendors. These additional steps appeared unnecessary, creating difficulties in reconciling technology vendor invoices, and increased the risk that technology vendors' pass-through costs may not be fully recovered.

As a result of the above, we were not fully able to reconcile the billing and payments from Affiliate 1 to confirm that the University has been paid for all services provided and costs incurred.

Prior to July 2018, billing and collection functions were managed by one PACC staff, which did not allow for appropriate separation of duties in these functions. During the review, this activity was transitioned to the Accounting Office of the UCSDH Physician Group, to improve consistency and alignment with UCSDH account practices. Going forward, the UCSDH Physician Group Accounting Office will manage billing, payment collection, and account reconciliation to ensure that the program is receiving the contractual payments due the University, and recovering external vendor costs.

B.	User Management
Authorized User Registration and Confidentiality Agreements were not consistently obtained. PACC did not ensure that affiliates submitted quarterly user change reports to monitor user access and the disabling of accounts for separated users.	
Risk Statement/Effect	
Signed confidentiality statements create formal notice of user responsibility for following requirements defined in the confidentiality statement. Ineffective user monitoring could increase the risk of unauthorized access to the EHR that may lead to potential cases of data breach or system disruptions.	
Management Action Plans	
B.1	PACC will review to ensure that all users execute the confidentiality agreement prior to being granted access to the system. PACC will also work with the one affiliate discussed below to have users re-sign the agreements as needed.
B.2	PACC has developed a process for obtaining affiliate quarterly all user change list and reconciling to the active user list in the system.

B. User Management – Detailed Discussion

The Hosting Agreement between UCSDH and the affiliates contains terms for the provision and maintenance of access to authorized users. Agreement item 5, *Authorized Users*, provides terms related to user access, background checks, access codes, compliance with Information System policies, inappropriate protected health information access, termination of access, quarterly review of user accounts, and system availability. We noted some instances where PACC did not ensure that affiliates met these contract terms.

Authorized User Confidentiality Agreement

The Hosting Agreement (Section 5 (B), *Requirements of Authorized Users*) requires the participant (affiliate) execute an Authorized User Registration and Confidentiality Agreement prior to accessing the Epic system. Our sample testing of one affiliate implemented in 2016 noted that some user agreements for non-provider staff were not consistently maintained. For more recently implemented affiliates, user agreements were signed and maintained. It appeared that the user access review process may not have been fully in compliance with the contract for affiliates implemented at the early stages of the Community Connect Program.

Authorized User Status Report and Changes

The Hosting Agreement (Section 5 (A), *Access is Limited to Authorized Users*) states that “Participant will notify UC Host of any changes to the list of Authorized Users as soon as possible but in no case longer than within two business days of any such change.” Upon notice from Participant, the University will deactivate these users who are no longer Authorized Users. Section 5 (I), *Quarterly Review of User Accounts*, requires the affiliate to perform a review of Authorized User accounts for accuracy and currency by the end of each quarter. The affiliate is required to provide UCSDH a quarterly authorized user update within five business days after completion of the review. Additionally, the affiliate must provide a list of any Authorized Users who are not members of the affiliate’s workforce to the University on a quarterly basis.

Our review of the authorized user list (dated April 2018) for one affiliate identified one separated affiliate employee who remained as an active user for some time following separation. No additional information was provided regarding the actual separation date. It appears that the process for deactivating authorized users may not be timely performed. Due to lack of information, we were unable to confirm whether the user account was disabled within two business days of the change as required by the contract.

As of October 2018, all user changes are processed through the ServiceNow application for adding or deleting users. With PACC and IS team review and approval notifications, processes deactivating users are expected to improve to facilitate contract compliance.

We also noted that PACC sent a copy of the user list to the affiliate quarterly, rather than the affiliate providing a list of changes in authorized users to PACC. PACC also did not require confirmation of the user list. As a result, authorized user monitoring may not be effectively and efficiently performed. A quarterly authorized user review that compares the affiliate user change report with the existing authorized user list would provide greater assurance that proper user access to Epic.

C.	Contract Compliance – Privacy Practice
For selected affiliates reviewed, the Notice of Privacy Practices and Patient Release Forms were not amended to fully disclose integration with the University’s EHR.	
Risk Statement/Effect	
Inconsistencies in disclosing the integration with the University’s EHR could increase risk of patient misunderstanding regarding their health records, and non-compliance with the contract.	
Management Action Plan	
C.1	Population Health Services Organization will work with affiliates to ensure that the Notice of Privacy Practice and Patient Release Form contain the appropriate disclosures as required by the Hosting Agreement.

C. Contract Compliance – Privacy Practice – Detailed Discussion

The Hosting Agreement (Section 7 (E), *Patient Release Forms*) indicates the affiliate will require “each patient to sign a release form, indicating the patient’s understanding that their health record is a shared record between participant and UC Host.” Further, item 7 (F), *Notice of Privacy Practices*, states that “Participant (Affiliate) shall amend its Notice of Privacy Practices to provide notice to inform patients that their record created by the Participant: (i) are integrated into the UC Host’s EHR; (ii) will be accessible by UC Host and/or its affiliates; (iii) may be used by UC Host for quality and research purposes in accordance with law.”

Our sample review of the Notice of Privacy Practices noted instances where this contract term was not fully implemented by the affiliates. One affiliate disclosed that it participated with UCSD Organized Health Care Agreement (OHCA) and jointly described the practices of all participants within the OHCA, including without limitation any health care professional authorized to enter into patient medical records. It appears the items specified in the Hosting Agreement contract were not clearly stated. Another affiliate’s Notice of Privacy Practices (which was dated in September 2010) did not reflect current affiliation status with UCSD. In addition, no Patient Release Forms were available for our review, as they had not been obtained from affiliates, to determine whether these forms were updated in accordance with the contract. Generally, the UCSDH Population Health Services Organization works with affiliates on these forms prior to PACC implementation of the EHR.

Population Health Services Organization has worked with UCSD and UCOP Compliance Office to update the Notice of Privacy Practice language, and will work with affiliates to implement this language as needed.