July 12, 2013

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Subject: ***Meaningful Use Program***
                  Audit & Management Advisory Services Project 2013-16

The final audit report for *Meaningful Use Program* Audit Report 2013-16, is attached. We would like to thank the Meaningful Use Team and Medical Group personnel for their cooperation and assistance during the review. Because we were able to reach agreement regarding corrective actions to be taken 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 corrective actions. At that time, we may need to perform additional audit procedures to validate that actions have been taken prior to closing the audit findings

UC wide policy requires that all draft audit reports, both printed and electronic, be destroyed after the final report is issued. Because draft reports can contain sensitive information, please either return these documents to AMAS personnel, or destroy them at this time. AMAS also requests that draft reports not be photocopied or otherwise redistributed.

                              David Meier
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Attachment

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UC San Diego

AUDIT & MANAGEMENT ADVISORY SERVICES

Meaningful Use Program
July 2013

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Project Number: 2013-16

Meaningful Use Program
Audit & Management Advisory Services Project #2013-16

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Executive Summary

Audit & Management Advisory Services (AMAS) has completed a review of the UC San Diego Health System Meaningful Use Program and related management practices in accordance with the Fiscal Year 2012-13 audit plan. This report summarizes the results of our review.

The American Recovery and Reinvestment Act of 2009 (ARRA) established incentive payments to eligible professionals (EPs), eligible hospitals (EHs), critical access hospitals (CAHs) and Medicare Advantage Organizations to promote the adoption and "meaningful use" (MU) of interoperable health information technology and qualified electronic health records. The incentive payments are part of the broader effort under ARRA provisions included in the Health Information Technology for Economic and Clinical Health Act (HITECH Act) to accelerate the adoption of health information technology by clinical professionals and hospitals.

The primary goal of MU is to improve quality of health care by leveraging health information technology. To facilitate this complex transition, the Center for Medicare and Medicaid Services (CMS) has proposed a multiple stage approach to gradually increase the extent to which providers utilize Electronic Health Record (EHR) technology over a five year timespan.

The objectives of our review were to evaluate the structure of the MU Program; and assess the efficacy of the processes implemented to identify and manage qualifying EPs and the supporting data.

Based on the audit procedures performed, we concluded that the EP component of the MU Program has been effectively managed using Epic EHR reports for capturing and reporting attestation data to CMS. We further concluded that additional staff resources may be needed to continue to compile and report accurate MU data as the physician participation in the Program increases and data management becomes more complex for Stage 2 objectives.

We also identified opportunities to improve MU Program documentation for EP identification, data management, and timelines to increase incentive revenue and to ensure data accuracy and consistency; and to implement a MU Team and Medical Group staff reconciliation effort to verify the consistency of EP registration and attestation data between the UC San Diego Health System (UCSDHS) MU database and the information entered into the CMS MU websites. The MU Team and Medical Group management agreed to implement the suggested management corrective actions.

I.   Background

Audit & Management Advisory Services (AMAS) has completed a review of the UC San Diego Health System Meaningful Use Program and related management practices in accordance with the Fiscal Year 2012-13 audit plan. This report summarizes the results of our review.

The American Recovery and Reinvestment Act of 2009 (ARRA) established incentive payments to eligible professionals (EPs), eligible hospitals (EHs), critical access hospitals (CAHs) and Medicare Advantage Organizations to promote the adoption and "meaningful use" (MU) of interoperable health information technology and qualified electronic health records. The incentive payments are part of the broader effort under ARRA provisions included in the Health Information Technology for Economic and Clinical Health Act (HITECH Act) to accelerate the adoption of health information technology by clinical professionals and hospitals.

The primary goal of MU is to improve quality of health care by leveraging health information technology. To facilitate this complex transition, the Center for Medicare and Medicaid Services (CMS) has proposed a multiple stage approach, including the following first three stages, to gradually increase the extent to which providers utilize Electronic Health Record (EHR) technology.

- Stage 1:   Data Capture and Sharing. Increase implementation and adoption of EHR systems and the capture of structured data. Providers begin to qualify for MU incentive payments by meeting Stage 1 requirements for a 90-day period during their first year participation, and a full year in their second year of participation.

- Stage 2:   Advanced Clinic Processes. Increase the exchange of health information; demonstrate care coordination across sites of care; and empower patients by providing access to health information. After meeting Stage 1 requirements, providers must meet Stage 2 requirements for two full years based on the EP calendar years.

- Stage 3:   Improved Outcomes. Drive the use of real-time data at the point of care; use outcomes focused clinical quality measures; and utilize clinical decision support for prevention, disease management and safety.

To be considered as an "eligible professional" (EP), providers must be non-hospital-based, credentialed, and achieve a certain level of patient volume or allowable billable charges.

EPs must meet and report on the following CMS defined measurements during Stage 1 of the EHR Incentive Program:

- 15 core measures;
- Five out of 10 menu measures; and

- A sum total of up to nine clinical quality measures (CQM): three core measures, up to three alternate core measures, and three additional CQMs.

Each EP may receive up to a maximum of $44,000 over five years through the Medicare EHR Incentive Program. The maximum limit of potential incentives for EHR incentive payments are outlined in Table 1.

TABLE 1	Adoption Year (Calendar Year) (CY)				
Funding Year (Calendar Year)	2011	2012	2013	2014	2015 and later
2011	$18,000				
2012	$12,000	$18,000			
2013	$8,000	$12,000	$15,000		
2014	$4,000	$ 8,000	$12,000	$12,000	
2015	$2,000	$4,000	$8,000	$8,000	$0
2016		$2,000	$4,000	$4,000	$0
Total Incentive Amount	$44,000	$44,000	$39,000	$24,000	$0

The information in Table 1 shows that EPs will obtain the maximum incentive payment if they registered and met MU requirements in 2011. Incentive payments will decline with each progressive year of adoption. Beginning in 2016, normal Medicare reimbursement will be reduced for those EPs who do not meet MU requirements.

The UC San Diego Health System (UCSDHS) initiated the CMS MU Program in Fiscal Year 2010-11. The MU Program is led by a Steering Committee comprised of Information Services and Medical Group senior leaders. MU Program operations and data are managed by Decision Support personnel. Medical Group personnel completed EP registrations and attestations and facilitated communication with physicians as needed. Table 2 provides an overview of EP registrations and attestations in 2011 and 2012.

TABLE 2	EP Registration		EP Attestation	
Adoption Year	2011	2012	2011	2012
2011	330		226 (Year 1)	203 (Year 2)
2012		122 (a)(b)		104 (Year 1) (a)
Total Number of EPs	330	122	226	307
Number of EPs with Incomplete Information	51(a)	17	104	38

(a) The 122 EPs registered in 2012 include some EPs with incomplete information in 2011.
(b) Out of 139 providers eligible to attest for Year One in 2012, 122 were successfully registered. Sixty-seven of the 122 were registered during the 2011 attestation period (late 2011 and early 2012), but were not attested. Fifty-five of the 122 were registered in 2013.

Incentive payments received for EPs that attested for 2011 totaled $3.3 million.

UCSDHS has progressively implemented outpatient and inpatient modules of the Epic EHR beginning in 2006. Epic is a CMS certified EHR technology (also referred to as a qualified electronic health record) that is certified pursuant to section 3001(c)(5) of ARRA as meeting standards adopted under ARRA Section 3004. The MU Program relies on reports generated from Epic to complete EP attestations.

The U.S. Department of Health and Human Services (HHS) Office of Inspector General (OIG) visited the UCSDHS on September 12, 2012 (after the OIG Survey of Electronic Health Records was submitted) to gain additional knowledge about the EHR implementation. The OIG issued no findings based on what they learned at the site visit.

In April 2013, CMS notified two physicians that a prepayment audit would be conducted on Stage 1, Year 1 attestation information submitted for 2012.

II.   Audit Objectives, Scope, and Procedures

The objectives of our review were to evaluate the structure of the MU Program; and assess the efficacy of the processes implemented to identify and manage qualifying EPs and the supporting data.

We performed the following audit procedures to achieve the project objectives:

- Reviewed relevant regulations and researched CMS websites to gain an understanding of MU objectives and measures and the criteria for determining EP eligibility;
- Interviewed the MU Program staff and physician leaders to obtain an understanding of existing practices and processes for MU governance, EP identification, registration and attestation;
- Performed an analytical review to access the accuracy of the data stored to measure compliance with MU core and menu objectives;
- Evaluated the effectiveness of the MU delegation, registration and attestation processes;
- Reconciled the number of EP attestations for 2012 included on the MU worksheets, EP Summary Reports, and CMS attestation reports;
- Examined the MU monitoring processes, department training materials , and communication with stakeholders;
- Traced one CMS MU measurement from the Epic reports to an individual physician attestation to the Epic patient medical record;
- Reviewed the April 2013 CMS audit request; and
- Requested MU Program staffing information from other UC campuses.

The audit work performed was limited to EP measures and did not include evaluation of the data used to attest to MU hospital measures. We focused our review procedures on assessing the completeness and accuracy of MU data downloaded from the Epic system and managed by Decision Support. We did not evaluate the EP registration and attestation data input processes. A second AMAS review will be opened in Fiscal Year 2013-14 to further evaluate the MU Program.

III.   Conclusions

Based on the audit procedures performed, we concluded that the EP component of the MU Program has been effectively managed using Epic EHR reports for capturing and reporting attestation data to CMS.   We further concluded that additional staff resources may be

needed to continue to compile and report accurate MU data as the physician participation in the Program increases and data management becomes more complex for Stage 2 objectives.

We also identified opportunities to improve MU Program documentation for EP identification, data management, and timelines to increase incentive revenue and to ensure data accuracy and consistency; and to implement a MU team and Medical Group reconciliation effort to verify the consistency of EP registration and attestation data between the UCSDHS MU database and the information entered into the CMS MU websites. These issues are discussed in more detail in the remainder of this report.

IV. Observations and Management Corrective Actions

A. MU Program Staffing

Adequate staff resources are needed to manage complex MU data to ensure accuracy MU data reporting and maximize incentive revenue.

EPs may be paid up to $18,000 from the CMS MU incentive program if they register in 2011 or 2012 and achieve required MU measures. To ensure that accurate, reportable data is available to earn maximum incentive payments, the MU Team or Medical Group staff completed the following tasks:

- Analyzed Epic reports for MU hospital measures and EP measures;
- Formatted and executed data downloads into the MU EP database;
- Developed worksheets that captured Epic data for each physician and measure;
- Identified EPs that qualified for MU registration and attestation;
- Completed EP registrations (multiple providers/year);
- Compiled and monitored EP attestation data (300+ providers/year);
- Compiled and monitored hospital attestation data;
- Entered EP attestation data into the CMS websites;
- Monitored physician achievement of MU measures throughout the year and identified areas for improvement;
- Collaborated with EP clinic administrators to train EPs on how to capture MU related data in Epic;
- Prepared MU status reports to the Steering Committee and departments upon request;
- Participated in a weekly conference call with Information Services personnel, and Epic representatives;
- Coordinated data requests from external auditors; and
- Shared MU practices and experiences with MU Teams from other UC campuses.

During the review period, MU activities were supported by one Decision Support Analyst who spent approximately 50% of his time maintaining the MU database (spreadsheets) and completing other MU functions. The Analyst reported to the Decision Support Associate Director who spent approximately 20% of her time supporting the MU Program. The physician responsible for MU Quality Reporting

functions also provided periodic support. EP registration and attestation responsibilities were performed by one Medical Group supervisor, one staff member (the percentage of work time varied) and temporary support staff to complete the data input for attestations. Medical Group management advised us that EP attestations completed in February 2013 required four temporary staff for a period of approximately three weeks.

For comparative purposes, AMAS obtained MU staffing levels from UCLA (two dedicated staff and one physician supervisor) and UCSF (five dedicated staff). Both campuses participated in the CMS and Medi-Cal incentive programs; and were in the beginning stages of registering qualifying EPs, which is a time consuming process. However, in comparison, UCSD did not have one staff member fully dedicated to the MU Program.

In Stage 2 (starting in 2014), some Stage 1 objectives will be either combined or eliminated. Most of the Stage 1 objectives will be core objectives under the Stage 2 criteria. CMS expects that physicians who reach Stage 2 will be able to demonstrate MU of their Certified EHR Technology for an even larger portion of their patient populations.

As the complexity of the MU database increases and the MU team is required to manage additional MU measures for each EP over multiple years, additional resources may be required to increasing to continue to provide accurate information in support of the incentive programs.

> **Management Corrective Action:**
>
> UCSDHS management will consider increasing MU Program personnel either through an increase in the percentage of time dedicated to MU activities by current personnel, or by adding a part-time FTE to be cross-trained as a back-up to the MU analyst.

B.   MU Program Documentation

The MU processes for identifying EPs and achieving the MU measurements were not fully documented, which could result in missed opportunities for incentive revenue.

MU General Program

Early in the review process, we suggested to the MU Team that MU Program governance information and data collection, registration and attestation processes be documented. During the review, the MU Team began by preparing a general MU activity summary. A detailed work flow will be prepared for each critical process to ensure consistency of reports and data analyses across multiple reporting periods. An

MU timeline will be completed and shared with the Medical Group to assist them with allocating staff time to MU activities.

EP Identification

The MU Team explained their process for identifying EPs that are eligible for MU registration, the percentage of time devoted to clinical practice and the volume and type of patient encounters that qualified their participation in the MU Program. However, a written guideline had not been created. Development of written procedures for identifying new physicians and a decision matrix to determine whether their patient volume qualifies them for inclusion in the incentive program would help to ensure that all eligible providers are identified and registered.

MU Data Management

The MU team developed worksheets to capture EP data required to assess compliance with each MU stage. The worksheets have been continually refined to adjust to regulatory changes. A routine process was in place to extract data from the Epic Clarity reporting system and import it into MU worksheet templates. An Excel macro was designed to populate additional fields such as department, specialty, employment status, registration, number of measurement met, and MU compliance (green) status. The accuracy of this data is critical to maintain EP metrics for monitoring achievement of MU measures. When completing an analytical review of the worksheets, we did not note significant variances between spreadsheet formulas and MU measurement calculations. However, detailed procedures for spreadsheet maintenance updates had not been developed.

Changes and updates to the Epic application or other relevant systems could potentially impact the accuracy of reported MU data. Therefore, a verification of the accuracy of Epic reports post system updates should be included in MU data management procedures.

The development of written procedures is a best practice to ensure the consistency and accuracy of information.

Management Corrective Actions:

1. The MU Team prepared a draft guideline to document data management procedures during this review.

2. The MU team will continue to develop, document, and implement MU report preparation and test procedures which including but not limited to procedures for EP identification, MU data management, and timelines.

C. **Registration and Attestation Data Review and Reconciliation**

Some EP registrations or attestations were incomplete or could not be successfully submitted. In addition, minor variances were identified between the MU Team spreadsheet and the Medical Group list of EPs registered and attested.

Medical Group staff was responsible for entering EP MU registration and attestation data into the CMS websites. To assist with that process, the MU Team provided Medical Group managers with a list of EPs that required delegation, registration or attestation at various times during the year, or when an EP achieved reporting status.

Throughout the year, multiple EP lists for physician registration and/or attestation were exchanged by the MU Team and Medical Group personnel. As noted in the Table 2 on Page 3 of this report some EP registrations or attestations were not completed in time to meet the MU filing deadline. Completion may require contacting EPs to obtain additional information, to authorize delegation, or to provide additional instruction or training on how to more effectively document compliance with MU measures in the Epic system. A formal Medical Group/MU Team plan for contacting EPs and obtaining the necessary information would help to ensure that all eligible EPs are registered and attested, maximizing MU incentive payments.

A reconciliation of the February 2013 MU Team attestation list and the Medical Group list of completed attestations identified a small number of variances. In addition, the Medical Group submitted attestations for seven EPs that were not included in MU Team data. One additional attestation listed as Year One on the MU spreadsheet was actually attesting for Year Two. One EP was included in MU data twice. Finally, there were several minor variances between the EP data input to the CMS site and the data included on the individual EP attestation reports.

MU Team and Medical Group staff collaboration on the development of written procedures for registration/attestation data input, review and resolution of missing or inconsistent data would help to ensure the consistent application of validation steps and minimal data variances.

<u>**Management Corrective Actions:**</u>

1. The MU Team confirmed that the seven EP attestations completed by the Medical Group (four providers for Year Two and three providers for Year One), but not included in MU Team data were appropriate. This process resulted in a reconciliation of the databases used by each group.

2. The MU Team and Medical Group management will collaborate to document a standard process for monitoring and reconciling EP

registration and attestation data. Variances identified during the process will be corrected.

3. Medical Group management has developed a procedure for attestation data input and review. The procedure requires that a concurrent secondary check will be performed on all attestations input to the CMS website to verify that the data was accurately entered prior to submitting them to CMS.

D. Logical Access to CMS Websites

Logical security standards were not followed due to personnel changes and time limitations.

EPs granted access rights to Medical Group staff to complete their MU registration and attestation functions on the CMS data collection websites (Pecos and EHR). Due to the large volume of participating EPs in the incentive program, three Medical Group staff were designed as EP representatives. When the EPs grant access to a Medical Group administrator, his or her contact information is linked to the EP's account, and they are copied on CMS MU communications sent to the EP.

We were advised by Medical Group staff that a former Medical Group Revenue Cycle Administrator (one of the three staff who provided MU support), was linked to 71 EPs on the Pecos website. When she separated from the University in March 2013, the Administrator's username and password was used by the two other staff to complete time sensitive registration and attestation functions. One supporting staff member used the former Administrator's username and password to access EP accounts on the Pecos site. She then changed the password and linked her contact email address to 16 of 71 EPs to ensure that she was advised of all CMS notices. She will continue to change email contact information for the remaining 55 EPs.

We also noted that the Medical Group hired temporary staff to assist with entering EP attestation information into the CMS website in February 2013. Medical Group management has no permanent employment relationship with temporary staff, making it difficult to maintain accountability for accurate data reporting.

The use of the login credentials for a separated Administrator, and hiring temporary staff to enter EP attestation information results in decreased accountability for the accuracy of the data entered into the CMS site. Incorrect data could impact the accuracy of incentive payments received.

Management Corrective Actions:

1. Medical Group personnel stated that they changed the passwords to the CMS websites after attestations were completed to help ensure that unauthorized access by temporary staff does not occur.

2. Medical Group management has developed a standard procedure for completing EP registration and attestation, which provides a guideline for accessing CMS websites.

3. Medical Group management will follow up with CMS to determine if the EP delegation may be granted to UC San Diego at an institutional level to eliminate the risk of breaching logical security when personnel changes occur.