UNIVERSITY OF CALIFORNIA SAN FRANCISCO
AUDIT AND ADVISORY SERVICES

Radiation Oncology

Project # 17-043

September 2017
September 6, 2017

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UCSF Helen Diller Comprehensive Cancer Center
Department of Radiation Oncology

SUBJECT: Radiation Oncology Review

Audit and Advisory Services (A&AS) completed a review of pre-access controls and systems for Radiation Oncology. The purpose of the review was to assess the adequacy of the processes and controls in place for ensuring effective patient scheduling, new patient and procedural referrals and authorizations, machine utilization, and denial management.

Our review was completed and the preliminary draft report was provided to department management in June 2017. Management provided their final comments and responses to our observations in September 2017. The observations and corrective actions have been discussed and agreed upon with department management and it is management’s responsibility to implement the corrective actions stated in the report. In accordance with the University of California audit policy, A&AS will periodically follow up to confirm that the agreed upon management corrective actions are completed within the dates specified in the final report.

This report is intended solely for the information and internal use of UCSF management and the Ethics, Compliance and Audit Board, and is not intended to be and should not be used by any other person or entity.

Sincerely,

Irene McGlynn
Director
UCSF Audit and Advisory Services
EXECUTIVE SUMMARY

I. BACKGROUND

In accord with the UCSF Audit Plan for Fiscal Year 2017, Audit & Advisory Services (A&AS) conducted a review of Radiation Oncology pre-access controls and systems pertaining to patient scheduling, referrals, and authorizations. In fiscal year 2017 Radiation Oncology generated in annual gross revenue $405 M.

Radiation Oncology utilizes two unique electronic medical record (EMR) systems, namely APeX and Mosaiq. APeX is the UCSF branded EPIC EMR and is the system of record for managing referrals, consults, authorizations, and billing. Mosaiq is a third party EMR system primarily used by Radiation Oncology clinical providers for medical documentation, billers/coders for charge capture, and machine scheduling across the three UCSF Radiation Oncology department locations, namely Mission Bay, Parnassus, and Mt. Zion.

II. AUDIT PURPOSE AND SCOPE

The purpose of this audit was to assess controls, processes, and systems for pre-access in the following areas to provide specific findings and recommendations: patient scheduling, new patient and procedural referrals and authorizations, machine utilization, and denials.

The scope of the review covered transactions and activities for the period January 2016 – March 2017. This review did not include charge capture processes and systems, which was covered in a separate advisory project dated March 2017.

Procedures performed as part of the review included interviews with relevant personnel, walkthroughs of the schedulers, authorization, and radiology tech workflows, and assessment of existing controls and processes to understand clinic and patient work flows. For more details on specific procedures performed, please refer to Appendix A.

Work performed was limited to the specific activities and procedures described above. As such, this report is not intended to, nor can it be relied upon to provide an assessment of compliance beyond those areas specifically reviewed. Fieldwork was completed in June 2017.

III. SUMMARY

Based on work performed, the Radiation Oncology department has a knowledgeable and experienced management team. In addition, there were notable tools developed by the department that could enhance functionality for APeX in managing the registration, scheduling, and authorization process.

The specific observations and areas for enhancement of processes are summarized below and discussed more thoroughly in the “Summary of Observation and Management Corrective Action” section that follows:

1. Patient-directed cancellations for new patient consults are not tracked with sufficient detail.
2. Current scheduling practices for On Treatment Visits (OTV) does not allow for sufficient tracking due to system constraints.

An additional opportunity for improvement would be to include additional analysis in the current denial management efforts.
## IV. OBSERVATIONS AND MANAGEMENT CORRECTIVE ACTIONS (“MCA”)

### A. Cancelled appointments

<table>
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<tr>
<th>No.</th>
<th>Observation</th>
<th>Risk/Effect</th>
<th>Recommendation</th>
<th>MCA</th>
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| 1   | Patient-directed cancellations for new patient consults are not tracked with sufficient detail. | Cancellation reasons not being addressed may result in treatment delays, underutilization of clinic time and space, and wasted efforts by registration and scheduling staff. | 1. Available cancellation reasons in APeX should be reviewed with the front desk/schedulers to ascertain if the current options are sufficient, and the need for specificity and detail emphasized.  
2. Radiation Oncology Management should assess other ways to document in APeX patient reason cancellations pertaining to personal reasons and transportation that may assist in reducing the number of bumped appointments and improved patient satisfaction.  
3. Radiation Oncology Management should analyze current cancellation information based on location and appointment rescheduling to determine if root causes can be identified. | Radiation Oncology management will analyze current cancellation information and communicate to front desk staff and schedulers the need to use specificity when choosing cancellation reasons.  
**Responsible Party:** Radiation Oncology Operations Director  
**Implementation Date:** January 31, 2018 |

### B. Weekly Therapy Management

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<th>No.</th>
<th>Observation</th>
<th>Risk/Effect</th>
<th>Recommendation</th>
<th>MCA</th>
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<td>2</td>
<td>Current scheduling practices for On Treatment Visits (OTV) does not allow for sufficient tracking due to system constraints.</td>
<td>The inability to interface OTV scheduling between Mosaq and APeX may</td>
<td>1. Weekly management scheduling should be assessed and an established workflow/process identified for Providers to ensure patients are roomed and seen in</td>
<td>Radiation Oncology management will assess options for scheduling in Mosaq or APeX that will allow for</td>
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Mosaiq, leading to unavailable or unreliable data. A retrospective review of Mosaiq reports for weekly management for the months of March, April, September, and October (peak months of service for Radiation Oncology), indicated that four physicians (out of the 18 total physicians) were covering 51% of all weekly therapy management services (855 visits out of a total 1659). However, it was identified during data validation that this data is inaccurate. As OTVs are a large source of wRVUs, and therefore physician payments, it is critical to have accurate and reliable data. Additionally, lost revenue opportunities may not be able to be identified, and communication with patients may be hampered if schedules are not accurate and available.

result in disruptions in patient treatments and patient dissatisfaction.

2. Patient education materials should be explored and assessed to communicate the importance of the patient OTV and other facets of radiation oncology treatments. For example, UCLA Radiation Oncology provides patients with a patient education video (http://radonc.ucla.edu/patient-education-video) which provides patients with an overview of their care team that also includes mention of the OTV.

### Opportunity for Improvement

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<th>Observation</th>
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<td>1</td>
<td>An analysis of denials indicates the majority of denied claims are due to limited reason codes that may warrant further review and improvement efforts.</td>
<td>Additional analysis incorporated into the current denial management process could enhance improvement efforts. A retrospective review of denials management reports should be requested from MGBS to identify any possible trends. For additional documentation, payor policies should be reviewed to identify documentation requirements that are payor specific.</td>
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A retrospective review of professional fee denials for service dates occurring during the period January 2016 – March 2017 indicates total professional fee charges were $71.3M, whereas total denied charges for the same period were $6.6M. The top five denial reasons comprised over half of all denials by count, and were Duplicate Claim/Service (20% of denials), Attachment Required (11% of denials), Non-Covered Charges (10% of denials), Charges Exceed Fee Schedule/Max Allowable (6% of denials), and May be Covered by Other Payor (5% of denials).

A large percentage of denials due to specific reason codes may indicate processes that would benefit from review and improvement.
APPENDIX A

To conduct our review the following procedures were performed for the areas in scope:

- Interviewed UCSF Leadership and Radiology Oncology Management to assess risk areas and scope for review.
- Walkthroughs with new patient coordinators, schedulers, and radiology technician
- Assessment of APeX workflows and Radiation Oncology department workflows in the areas of:
  - New Patients
  - Procedure Referrals
  - Authorizations
  - Scheduling Lag and Cancellations
- Assessment of Mosaiq workflows and reports pertaining to machine and provider utilization
- Analysis of payor mix and denials for Radiation Oncology