UCLA HYPERBARIC MEDICINE

 AUDIT REPORT #19-1204

Audit & Advisory Services

October 2019

UCLA HYPERBARIC MEDICINE

AUDIT REPORT #19-1204

Background

In accordance with the UCLA Health Sciences audit plan for fiscal year 2018-19, Audit & Advisory Services (A&AS) has completed an audit of the UCLA Hyperbaric Medicine Center (HBO).

The HBO is located in the Peter Morton Medical Building (200 Medical Plaza) and operates 24 hours a day, seven days a week, providing care to both outpatients and critically ill inpatients. The HBO specializes in managing the treatment of patients with complex wounds, decompression sickness, carbon monoxide poisoning, delayed radiation injuries, traumatic crush injuries, and several other medical injuries. Hyperbaric oxygen therapy (HBOT) is a medical treatment in which a patient breathes near 100 percent oxygen while inside a hyperbaric chamber that is pressurized to greater than sea level pressure. The increased pressure and oxygen concentration raises the oxygen content in the blood, which promotes the healing of certain wounds. The UCLA center features a multi-occupant hyperbaric chamber capable of accommodating up to 18 patients at a time. There is also a small chamber used for single occupants with acute conditions. Treatment plans vary by individual diagnosis, but most plans involve anywhere from 20 to 30 sessions, each typically lasting two hours. Patients are assessed by a hyperbaric-trained physician before and after each treatment, while a hyperbaric technician or nurse accompanies the patients inside the chamber at all times during the treatment.

The HBO is operated by CutisCare (formerly OxyHeal Health Group) under an amended and restated agreement with UCLA that originated in August 1993, when OxyHeal Health Group was formerly known as Hyperbaric Technologies, Inc. The current agreement with CutisCare became effective in September 2018, and it closely resembles the previous one between the OxyHeal Health Group and UCLA.

CutisCare nurses, technicians, and administrative staff provide patient care services at the facility under the direction of the on-site program director, who reports to the UCLA Vascular Surgery division administrator overseeing the center. (The hospital funds a portion of the division administrator’s salary for her oversight of the HBO.) In addition to the program director, there are seven full-time and eight per diem CutisCare personnel. The CutisCare nurses are supervised by a full-time nurse employed by UCLA. Five hyperbaric-trained UCLA physicians provide patient care under the direction of two UCLA medical directors, one of whom has been contracted by UCLA. UCLA provides billing and collection services through the hospital’s Patient Business Services (PBS) department.

The HBO’s gross patient revenues and expenses for the last three fiscal years and the current fiscal year through May 2019 are shown below. Expense amounts include the payments to CutisCare for their contracted services.

|  |  |  |  |
| --- | --- | --- | --- |
| Fiscal year | Gross Patient Revenues | Expenses | OxyHeal/CutisCare Payments |
| 2016 | $5,453,936 | $1,084,849 | $980,179 |
| 2017 | 4,818,047 | 950,737 | 781,555 |
| 2018 | 5,039,048 | 971,445 | 713,044 |
| 2019 (through May) | 5,956,924 | 971,505 | 857,147 |

Purpose and Scope

The purpose of the audit was to evaluate the adequacy of internal controls over the below processes and to verify that University policies and procedures are followed.

The scope of the audit covered the following activities:

* Contract Administration & Compliance
* UCLA Vendor Monitoring
* Revenue Capture
* Health Insurance Portability and Accountability Act (HIPAA) Compliance
* Fiscal Management

The audit was performed in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included tests, interviews with management and staff, and other procedures considered necessary to achieve the objective.

Summary Opinion

Based on the results of the work performed within the audit’s scope, improvements are needed to strengthen the practices for monitoring and verifying staff credentials and documenting unit maintenance procedures. Some enhancements to the charge capture process could help to ensure that all charges are accurately recorded.

Specific observations of the audit are highlighted by the bullet points below.

Contract Administration and Compliance

* The department's procedures need to be improved to ensure that staff credentials and competencies are verified in a timely manner and maintained in accordance with UCLA Health policies.
* Review of equipment maintenance forms identified some instances where required maintenance was not documented.
* Two different versions of the weekly maintenance log for the month of December 2018 were provided to the auditors.
* In some cases, the forms and logs used to document maintenance do not clearly correlate to the list of CutisCare-required maintenance procedures.
* Not all maintenance procedures are warranted or applicable for the equipment being used at the HBO; however, justifications for waived or deferred maintenance procedures are not documented in the corresponding maintenance logs.
* Although the CutisCare contract states that accreditation by the Undersea & Hyperbaric Medical Society (UHMS) as a Level One Clinical Hyperbaric Facility With Distinction is to be maintained, HBO did not attain the “With Distinction” level in its most recent accreditation review due to the lack of a medical director who is board-certified in Hyperbaric Medicine.

UCLA Vendor Monitoring

* Although the vendor has a contractual obligation to ensure that new employees are hired in compliance with University policies, Vascular Surgery, the oversight department, currently does not ensure that verifications required for vendor personnel have been completed by the vendor.

Revenue Capture

* The HBO currently does not have a process in place to reconcile charges to the daily appointment schedule.

HIPAA Compliance

* At the time of the audit, a HIPAA training certificate for one of 13 sampled HBO employees was not in the individual’s personnel file for verification by the auditors.

Fiscal Management

* Audit testing of invoice payments to CutisCare indicated that the payments were properly substantiated and calculated in accordance with the contract payment terms.
* Fiscal oversight practices were found to be adequate.
* Testing of a sample of HBO expense transactions verified that they related to the unit, were adequately supported, and were properly approved.

The audit results and recommendations are detailed in the following section of the audit report.

Audit Results and Recommendations

| **#** | **FINDING**  | **RECOMMENDATION** | **MANAGEMENT’S RESPONSE** |
| --- | --- | --- | --- |
| **CONTRACT ADMINISTRATION AND COMPLIANCE** |
| Audit work included the following:* Determined whether CutisCare was meeting the contract terms and conditions in regard to maintenance of equipment by reviewing maintenance logs for the period July 2018 through March 2019. The audit results are based on the 45 maintenance procedures that are considered applicable to the HBO.
* Reviewed personnel files for 13 staff to verify that CutisCare is adequately monitoring staff credentials and that annual competency evaluations are being performed.
* Confirmed that CutisCare maintains an operations manual that addresses safety and includes policies and procedures for the following areas: Safety; Quality Assurance; Orientation and Training; Operations; and Maintenance.
* Confirmed that CutisCare maintains current insurance coverage at or above the minimum limits required in the contract.
* Confirmed that UCLA Health is fulfilling its terms and conditions of the contract.

As summarized below, issues were identified related to monitoring staff credentials and annual competencies, documenting equipment maintenance, and facility accreditation.  |
| 1 | Monitoring of Staff Credentials and Competencies The department's procedures need to be improved to ensure that staff credentials and competencies are verified in a timely manner and maintained in accordance with UCLA Health policies. Although the department has made efforts to ensure that staff credentials, training, and competencies are documented and maintained in its personnel files, a review of the files identified the following issues: **Expired Credentials** A total of nine expired credentials belonging to four staff members were found in the personnel files. The expired credentials were Basic Life Support (BLS), Advanced Cardiovascular Life Support (ACLS), Emergency Medical Technician (EMT), Registered Nurse (RN), and Respiratory Care Professional (RCP). Only five of the nine expired credentials were identified to be current when verified by the auditor online with the accrediting organizations. The status of the remaining four credentials (BLS/ACLS) could not be verified online. **Credentials Not on File** BLS credentials were not found on file for one technician. BLS, along with Emergency Medical Technician (EMT), credentials are the minimum requirements to be hired as a technician. According to the Program Director, the technician had recently been hired. The technician’s BLS credential was issued on May 15, 2019, and was provided to the auditor on May 17, 2019. At the time of the audit test on May 6, 2019, the auditor could not determine whether or not the technician had a previous current BLS. **Verification of Annual Competencies**  Annual competencies were verified to be current for all 13 sampled employees except one. Competencies were not current for an on-call Respiratory Therapist (RT) that was recently hired. According to the Program Director, due to the on-call nature of the position, the RT has not worked often and has not been able to fulfill his annual competencies review.  **Timeliness of Credentials Verification** Of the 40 credentials reviewed, only ten had documentation demonstrating that they had been verified timely. The timeliness of credentials verifications could not be determined for the remaining 30 credentials because the verification dates were not documented. Verification was considered timely if it was completed and documented prior to a credential’s expiration date.  **Credentials Verification Process**UCLA Health Policy #7310 requires that a print-out with a computer-generated date be maintained in the employee's personnel file for credentials that are verified online. For credentials not available for online verification, a dated and initialed photocopy of the credential must be placed in the personnel file. Of the 40 credentials reviewed, 19 had evidence of verification by an online printout, 20 had been evidenced by making a photocopy of the credentials, and in one case, there was no credential document. Online Verifications Of the 19 online printout verifications, nine did not include a computer-generated date. In instances when the date is not printed, the date should be handwritten on the document.Hard Copy Verifications Of the 20 credentials evidenced by photocopies, none were initialed or dated by the verifier. | CutisCare and HBO management should ensure that all staff credentials and competencies are verified prior to the first day of employment, and prior to the expiration date for credential renewals. A print-out of all online verifications should include a computer-generated date or annotation of the date printed and reviewed. For credentials not verifiable online, a copy of the credential must be dated and initialed by the verifier.  | Moving forward, HBO management will make sure to follow UCLA Health Policy #7310. All employee credentials will be verified prior to the first day of employment. HBO management will make sure to print a verification of the credentials and maintain an actively verified copy of credentials with the most current dates in each employee’s HR binder.HR binders will be monitored more closely.1. A schedule will be set in place to audit each HR binder.
2. An annual schedule will be set in place to ensure that all annual competencies are completed at the same time for all staff.
3. A back office assistant is to be hired in the near future; the upkeep of employee HR binders will be one of his/her job duties.

UCLA management will ensure that they physically see the credentials prior to a new contractor/employee starting their employment at the HBO. |
| 2 | Equipment Maintenance Documentation CutisCare has made good efforts to establish a maintenance process that is in accordance with the maintenance standards and guidelines set by the UHMS. However, review of equipment maintenance forms identified some instances where required maintenance was not documented. The following missing documentation was identified: (The codes below refer to the task number in the CutisCare periodic maintenance schedule [W – weekly, Q – quarterly, S – semiannual, A – annual])**Missing Maintenance Logs**  **[W-01, Q-07, Q-08, S-03, A-10, A-11]**A maintenance log had not been prepared for six of the 45 maintenance procedures based on UHMS standards and guidelines. Although two of the items are cleaning tasks, the other four relate to proper equipment function and safety.**Missing Maintenance Entry  [M-10, M-11, Q-01, Q-02, Q-03]**Documentation that maintenance was performed was not included on one or more occasions for five of the 45 maintenance procedures. The five procedures primarily relate to proper equipment function and infection control.**Missing Initials for Maintenance Entry  [M-03, M-05, Q-04]**Initials of the personnel who performed the maintenance procedures were not documented on one or more occasions for three of the required 45 maintenance procedures. | Efforts should be made to ensure that all applicable maintenance procedures are performed as scheduled, and fully documented. Although the safety director is ultimately responsible for performing and documenting all equipment maintenance, a process that requires someone other than the safety director to periodically verify the completion and documentation of all maintenance should be considered. | Moving forward, HBO management will make sure maintenance is scheduled and documented in an accurate and timely manner.It is the responsibility of the technical/safety director to assure all maintenance is being done correctly and in a timely manner. Moving forward, the process will be for the program director to verify the completion and documentation of all maintenance, and to ensure all is in working order.CutisCare’s corporate regional safety director has visited the HBO and met with the HBO’s safety director. The regional safety director and the HBO safety director have gone over the HBO’s maintenance packet and will revise it to suit the HBO center. The revision will include the removal of any maintenance that does not apply to the UCLA HBO site.Moving forward, missing documentation will not occur as the HBO is removing all redundant competencies from the maintenance schedule. All maintenance documentation will be done accurately. |
| 3 | Maintenance Form DiscrepancyTwo different versions of a maintenance form were used to document the weekly maintenance performed for the month of December 2018. After an initial request for documents, the first version of the maintenance form was provided to the auditors in April 2019, while the second version was obtained in May 2019, after an additional request for maintenance documents was made. Upon review, the forms were found to be in a different format and with different personnel’s’ initials documenting the maintenance performed.The safety director explained that the second version of the form may have been recreated by the HBO technicians when the original could not be located. He believes the technicians were not aware that the safety director had previously provided the auditors a copy of the original maintenance form. According to the safety director, the technicians may have been comfortable creating a second version because they knew they had completed the maintenance tasks for December 2018. The safety director added that he believes all other maintenance records accurately document the individuals performing the tasks and the dates completed. | CutisCare employees performing and documenting maintenance should be instructed to not recreate maintenance logs if the original is missing. A log’s loss can be documented and a statement made about the completion of the maintenance tasks. As protection against future loss of original maintenance logs, copies of the logs could be made with minimal effort at the time the originals are completed. This back-up set should be filed in a separate location from the originals. | The HBO’s maintenance packet will be revised and formatted correctly for ease of use and understanding.Maintenance documents and logs will not be recreated. HBO management will make sure to scan all completed copies and keep hard copies in maintenance binders at all times.Moving forward, original completed maintenance cards are not to be recreated. A written note with a detailed description of any missing maintenance cards is to be made with a signature from the safety director and program director. |
| 4 | Equipment Maintenance FormsIn some cases, the forms and logs used to document maintenance do not clearly correlate to the list of CutisCare-required maintenance procedures. There are some inconsistencies between the maintenance process established by CutisCare and the process being performed at the HBO.**Inconsistent Use of Maintenance Logs** CutisCare’s standard maintenance logs are not always used to document the equipment maintenance. Of the 45 CutisCare maintenance procedures that are considered applicable to the HBO, only 19 (42%) are documented on CutisCare logs, while the remaining maintenance procedures have been documented using other logs that do not consistently link to the CutisCare list of prescribed maintenance tasks. The safety director indicated that he prefers to use non-CutisCare maintenance forms for certain maintenance procedures because the alternative forms have additional space that allows for supplementary notes and details. Although additional notes and details are encouraged, non-CutisCare forms do not always capture or reference the CutisCare maintenance procedures that are being performed.**Documentation of Waived Maintenance** Not all CutisCare-prescribed maintenance procedures are warranted or applicable for the equipment being used at the HBO; however, justifications for waived or deferred maintenance procedures are not documented in the corresponding maintenance forms. Additionally, certain maintenance items are addressed by more than one procedure, but cross references to other forms where the maintenance is documented have not been recorded.**Redundant Maintenance Schedules**In some cases, documentation of maintenance tasks that are performed during multiple procedures is prepared; this practice may be redundant and inefficient. For example, maintenance procedure Q-05, Inspection of ECU Fan and Filter, and maintenance procedure A-02, Change of ECU Cooling/Heating Fluid, are performed and documented during maintenance procedure M-07, Cleaning and Inspection of ECU.  | The HBO program and safety directors should consider working with CutisCare management to revise the maintenance process so that the maintenance forms correspond to only the required maintenance tasks for the UCLA unit. In order to maximize efficiency and effectiveness, the agreed- upon maintenance process should also incorporate the HBO's maintenance best practices, methods, and forms, while the inefficient and redundant maintenance practices and forms should be considered for removal. In the case that a new maintenance process is not feasible, the program and safety directors should still make efforts to ensure that all maintenance procedures that are being waived or deferred are explained by a documented justification for such determination. Additionally, any maintenance procedure that is waived or deferred because it is performed during an earlier or later iteration should be cross-referenced and documented in all corresponding maintenance forms. | CutisCare’s corporate regional safety director has visited the HBO and met with the HBO’s safety director. The regional safety director and the HBO safety director have gone over the HBO’s maintenance packet and will revise it to suit the HBO center. The revision will include the removal of any maintenance that does not apply to the UCLA HBO site. The new maintenance packet should not result in any deferment or waiver of maintenance procedures, but if such a case were to occur, justification of deferment or waiver of maintenance procedures will be documented and signed by the safety and program director. |
| 5 | UHMS AccreditationAlthough the CutisCare contract states that accreditation as a Level One Clinical Hyperbaric Facility With Distinction is to be maintained, HBO did not attain the “With Distinction” level in its most recent accreditation review. In the UHMS review in February 2019, UHMS accredited the HBO as a Level One Clinical Hyperbaric Facility but without "With Distinction." According to the UCLA Vascular Surgery Division Administrator, the HBO cannot meet the criteria required to be recognized as accredited with distinction until at least one of its two medical directors is board-certified in Hyperbaric Medicine, which is a rare specialty. The medical directors, one of whom is a contractor, are employed by UCLA.  | Vascular Surgery should strive towards having in place an HBO medical director who is board-certified in Hyperbaric Medicine so that the facility can be accredited "With Distinction." If that is not attainable, consideration should be given to modifying the contract requirement that accreditation "With Distinction" be maintained.  | The UCLA/CutisCare contract is to be revised per the UCLA Health executive director of operations and clinical services. The HBO currently does not have any physicians who have board certification in hyperbaric medicine because it is a rare specialty. Should the contract not be updated, the UCLA medical director and UCLA management, along with CutisCare, will continue to search for a board-certified medical director. |
| **UCLA VENDOR MONITORING** |
| Audit work included the following:* Determined whether UCLA reviews and approves the qualifications of all staff employed by CutisCare prior to their being allowed to practice at UCLA.
* Determined UCLA’s role in monitoring the HBO’s accreditation status.
* Determined whether UCLA ensures that CutisCare performs timely and adequate maintenance/inspections of equipment in accordance with standards and maintenance schedules.

Issues identified are summarized below. |
| 6 | Vendor Staff Pre-Assignment RequirementsAlthough the vendor has a contractual obligation to ensure that new employees are hired in compliance with University policies, Vascular Surgery, the oversight department, currently does not ensure that verifications required for vendor personnel have been completed by the vendor. A UCLA Health Verification Checklist, revised as of December 2018 and consisting of fifteen items, must be completed by external organizations in order for their employees to work at UCLA Health. Examples of the fifteen items include evidence of a background check, verification of medical clearance, completion of HIPAA privacy and information security training, and completion of an attestation regarding the use of mobile devices and removable media. The completed checklist must be signed by the UCLA hiring department manager. UCLA Health policy requires that the hiring department acknowledge the receipt of the employee's verified documentation prior to them beginning their assignment at UCLA. | The Vascular Surgery administrator should request that CutisCare provide a verification checklist for all newly hired employees, prior to them beginning their assignment at UCLA. The verification checklist should be signed by the UCLA administrator and retained in the contract employees' personnel files. | The hyperbaric department will work with UCLA HR to guide HBO management through a better and more efficient hiring process for any future staff hires.UCLA management will review the UCLA Health Verification checklist to ensure that all the necessary items are completed prior to a new employee starting in Hyperbaric.  |
| 7 | Accreditation Site Survey ResultsAlthough accreditation was renewed by the UHMS in March 2019, the UHMS Accreditation Council report contains 48 recommendations to address. While the surveyors commended the unit in many areas, the UHMS report includes various recommendations relating to safety, training, equipment testing, and facility improvements that should be resolved.  | The Vascular Surgery administrator should ensure that the 2019 UHMS accreditation survey recommendations are evaluated to determine which of them require corrective action. For those for which corrective action is not needed, justification should be documented.  | HBO management will use the UHMS survey recommendations as a tool to guide preparation for the HBO’s next survey.UCLA management is working with HBO management to monitor that all UHMS survey recommendations have been reviewed and addressed. |
| **REVENUE CAPTURE** |
| Audit work included the following:* Generated reports of HBO patient referrals and orders for the period December 2018 through March 2019 from CareConnect (CC) using the CC Workbench Reports. Reports of HBO patient appointments and Hospital Billing (HB) Charges for the period July 2018 through March 2019 were also generated using the CC Workbench Reports.
* Verified that all referrals and orders for the audit period had been authorized by a licensed HBO physician. For this period, there were 357 orders associated with referrals and 236 stand-alone orders.
* Verified that all 642 authorized orders for the audit period were associated with a diagnosis code that meets the indications recommended by the UHMS for HBOT.
* Confirmed that pre-authorization was obtained for the 45 of 991 appointments during the period July 2018 through March 2019 for which insurance authorization was required.
* Analyzed 1,829 completed patient treatments for the period July 2018 through March 2019 and verified that a hospital charge was generated for all treatments.
* Reviewed hospital charge lag reports for the period of July 2018 to May 2019. Only five percent of inpatient charges and two percent of outpatient charges were not charged timely.
* Sampled ten appointments from the period of July 2018 through March 2019 for detailed examination of charge capture accuracy.
* Opportunities for control enhancements were identified.
 |
| 8 | Charge ReconciliationThe HBO currently does not have a process in place to reconcile charges to the daily appointment schedule. Although hospital charges and collections are aggregated by Patient Business Services for the purpose of preparing CutisCare's monthly invoice, the process itself does not provide any assurance that all patient charges are being accurately captured by the HBO. Without a process to reconcile charges to the daily appointment schedule, HBO management is unable to ensure that the HBO is maximizing departmental revenue. | HBO management should establish a charge reconciliation process that ensures the review and comparison of all charge transactions and the daily appointment schedule. All appointments in the schedule should result in a charge, a no-show appointment, or a canceled appointment. Any discrepancies between the appointment schedule and the charge transactions should be investigated and addressed.  A Service Now Ticket should be opened with ISS to request access to the applicable Hospital Billing reports if current access is not available. | HBO management has created a daily charge reconciliation process to ensure the HBO is charging correctly and accurately. On a daily basis, the HBO will check that charges exist for patients in the daily schedule and check-off a box next to each patient’s name once the validation is made. |
| **HIPAA COMPLIANCE** |
| 9 | HBO Employee HIPAA TrainingAt the time of the audit, a HIPAA training certificate for one of 13 HBO employees sampled was not in the individual’s personnel file for verification by the auditors. HIPAA privacy and information security training is to be completed by all employees of external organizations prior to their being assigned to work at UCLA Health. This requirement is included in one of the fifteen items that are part of the UCLA Health Verification Checklist, which is described in more detail at finding #6.As a result of the audit, the program director instructed the HBO employee to complete the HIPAA training.  | CutisCare and HBO management should ensure that all staff complete the HIPAA privacy and information security training prior to their first day of employment at UCLA Health.  | The HBO already follows this recommendation. The HIPAA training certificate that was not available for the HBO employee was most likely misplaced. Moving forward, HBO management will monitor employee HR binders more thoroughly to prevent this from happening in the future.HBO management recommends that UCLA provide an online verification portal to check verification of completed HIPAA training for contracted employees. |
| **FISCAL MANAGEMENT** |
| Audit work included the following:* Verified that invoice payments to CutisCare were properly substantiated and calculated in accordance with contract payment terms for the period July 2018 through March 2019.
* Reviewed the adequacy of administrative oversight practices over operating revenues and expenditures.
* Sampled one expense transaction from each vendor with payments greater than $1,000 from the period July 2018 through May 2019. For the four sampled transactions, verified that they related to the unit, were adequately supported, and were properly approved.

No concerns were identified.  |

190628-8

REP