



AUDIT AND ADVISORY SERVICES

School of Public Health
Audit
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July 27, 2011

Stephen Shortell
Dean
School of Public Health

Dean Shortell:

We have completed our audit of the School of Public Health (SPH) as per our annual audit plan in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter.

Our audit objectives were to evaluate the design and effectiveness of certain procedures and controls within SPH's Business and Administrative Services and External Relations units related to four business process areas, as determined by our engagement level risk assessment: (i) sponsored project and gift fund management, (ii) revenue-generating business contracts administration, (iii) health and safety compliance activities, and (iv) gift intake and recording. Our approach included reviews of policies, procedures and other documentation relevant to each focus area of our audit, interviews with SPH personnel, and detailed testing of a sample of transactions.

SPH Business and Administrative Services' management has an effort in progress to strengthen procedures and controls around expenditures and business contracts through increased levels of communication with staff and faculty, as well as scrutiny of internal business processes and operational and compliance concerns. However, based on our testing, we identified transactions that did not appear to be consistent with some aspect of policy or regulation, as well as process gaps, including the untimely or incomplete communication of information that would have bearing on fund management, and incomplete or outdated procedural documentation. Therefore, we believe that procedures and controls are not yet sufficiently formalized or consistently applied to optimize SPH's effectiveness in ensuring compliance with relevant policies, rules and regulations, as well as ensuring that risks related to revenue-generating business contracts are identified and mitigated. We also noted opportunities for SPH management to strengthen processes related to ensuring the appropriate management and monitoring of health and safety compliance requirements and issues. In particular, certain required elements of the unit's Injury and Illness Prevention Program were not in place, and findings from Office of Environment, Health & Safety inspections were not consistently addressed on a timely basis. Management has developed, and in some cases begun implementing, plans to address each of these observation areas through changes to business processes, training activities, and enhancements to documented policies and procedures.

The aforementioned and other observations with management action plans are expounded upon in the accompanying report. Please destroy all copies of draft reports and related documents. Thank you to the School of Public Health staff for their cooperative efforts throughout the audit process. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Wanda Lynn Riley
Chief Audit Executive

cc: Executive Vice Chancellor and Provost George Breslauer
Associate Dean Kelvin Quan
Senior Vice President Sheryl Vacca
Associate Chancellor Linda Morris Williams
Interim Associate Vice Chancellor and Controller Delphine Regalia

**University of California, Berkeley
Audit and Advisory Services
School of Public Health**

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OVERVIEW

Executive Summary

The audit objectives were to evaluate the design and effectiveness of certain procedures and controls within the School of Public Health (SPH) Business and Administrative Services and External Relations units related to four business process areas, as determined by our engagement level risk assessment: (i) sponsored project and gift fund management, (ii) revenue-generating business contracts administration, (iii) health and safety compliance activities, and (iv) gift intake and recording.

SPH Business and Administrative Services' management has an effort in progress to strengthen procedures and controls around expenditures and business contracts through increased levels of communication with staff and faculty, as well as scrutiny of internal business processes and operational and compliance concerns. However, based on our testing, we identified transactions that did not appear to be consistent with some aspect of policy or regulation, as well as process gaps, including the untimely or incomplete communication of information that would have bearing on fund management, and incomplete or outdated procedural documentation. Therefore, we believe that procedures and controls are not yet sufficiently formalized or consistently applied to optimize SPH's effectiveness in ensuring compliance with relevant policies, rules and regulations, as well as ensuring that risks related to business contracts are identified and mitigated.

We also noted opportunities for SPH management to strengthen processes related to ensuring the appropriate management and monitoring of health and safety compliance requirements and issues. In particular, certain required elements of the unit's Injury and Illness Prevention Program (IIPP) were not in place, and findings from Office of Environment, Health & Safety (EH&S) inspections were not consistently addressed on a timely basis.

Management has developed, and in some cases begun implementing, plans to address each of these observation areas through changes to business processes, training activities, and enhancements to documented policies and procedures.

Source and Purpose of the Audit

Audit and Advisory Services (A&AS) completed our audit of SPH as part of our annual audit plan for fiscal year 2011. Our audit objectives were to evaluate the design and effectiveness of certain procedures and controls within SPH's Business and Administrative Services and External Relations units related to four business process areas: (i) sponsored project and gift fund management, (ii) revenue-generating business contracts administration, (iii) health and safety compliance activities, and (iv) gift intake and recording. The areas of focus for our audit were determined based upon our risk assessment conducted as part of the planning phase of this audit. Key factors driving our audit scope, our specific audit objectives, and the primary sources referred to for each audit area, where applicable, were as follows:

Sponsored project and gift fund management

- SPH sponsored project funding is significant, accounting for approximately 8% of the overall campus' sponsored project funding; as well, there were past indications of potential issues with sponsored project management given historical patterns of fund deficits and untimely fund close-outs. Our audit objectives related to this area were to assess the current design and effectiveness of SPH Business and Administrative Services unit controls to help ensure that sponsored project funds are managed in accordance with federal, sponsor, and University requirements. Relevant federal regulations are outlined in Office of Management and Budget Circular (OMB) A-21 (*Cost Principles for Educational Institutions*). Key University policies referred to in connection with the audit included, but were not specifically limited to, the University of California Contract and Grant Manual, Section 7 (Budgets and Expenditures), Business and Finance Bulletins G-28 (*Policies and Regulations Governing Travel*), BUS-43 (*Material Management*), and BUS-77 (*Independent Contractor Guidelines*). Campus policies and procedures were also referred to, including "A Guide to Major Projects and Charging Administrative Costs to Sponsored Projects" issued by the Sponsored Projects Office (SPO).

Related to gift funding, approximately \$4 million in expenditures annually are funded by gifts, with some SPH units receiving the majority of their funding through private gifts.

Revenue business contracts administration

- Given SPH's community involvement, several of the school's units engage in a significant number of revenue-generating contracts relative to other units campus-wide; historically, there has been limited visibility by Business and Administrative Services into such contracts. Our audit objectives related to this area were to assess the design and effectiveness of SPH Business and Administrative Services unit controls to help ensure the appropriateness of contract pricing, the sufficient evaluation, mitigation, and monitoring of contract risks, and the timely and accurate collection of revenue.

Health and safety compliance activities

- Research and teaching activities that entail the use of materials, substances and agents that present potential health and safety concerns are conducted by SPH laboratories. Currently, SPH has 37 laboratories in eight on and off-campus locations, creating challenges in managing health and safety concerns, and increasing the likelihood that unmitigated risks may go undetected. Our audit objectives related to this area were to assess the design and effectiveness of SPH Business and Administrative Services unit controls to help ensure compliance with health and safety regulations in general, as well as the timely identification and mitigation of potential issues. Sources referred to included the results of the central campus EH&S unit's most recent SPH lab inspections, and the "Injury

and Illness Prevention Programs (IIPP)” fact sheet issued by EH&S, which outlines key unit-level health and safety-related responsibilities.

Gift intake and recording

- Finally, SPH is engaged in various fundraising activities, including a \$100 million current campaign to fund a new building for the school, which could potentially give rise to a significant increase in the volume of gifts processed by SPH External Relations.

Scope of the Audit

Our audit approach included reviews of policies, procedures and other documentation relevant to each focus area of our audit, interviews with SPH personnel, and detailed testing of a sample of transactions, as follows:

Sponsored project and gift fund management

- We interviewed SPH personnel and reviewed documentation to identify and evaluate procedures related to transaction approvals and monitoring as well as training and guidance provided to staff regarding fund management principles, federal regulations, sponsor rules, and campus policies.
- We reviewed a sample of 19 transactions charged to four federal grants, and eight transactions charged to two restricted gift funds. Transactions selected were from the period April 2010 through March 2011, and included original charges and costs transfers related to payroll and non-payroll expenses. As part of our testing and for each transaction, we verified that the transaction was approved by the Principal Investigator (PI), and that the expense appeared to be allowable under OMB A-21, UC, and campus policies, appeared to be reasonable and in conformance with any limitations or exclusions described in OMB A-21 Section J, was expended during the performance period, and was verifiable from records.

We selected our sample to include SPH PIs with significant funding levels, and SPH units that we assessed, given the nature of their activities or other factors (e.g., extensive foreign research, unit personnel remotely located, rapid growth in funding), presented a potentially higher risk profile. Within these units, specific transactions were selected from those general ledger expenditure categories that had the highest expenditure totals during our audit period. As our sample was judgmentally selected and was not large enough to have statistical relevance, our audit was not designed to provide an opinion on overall SPH compliance, but rather on underlying controls.

Revenue business contracts administration

- We selected a sample of three revenue business contracts from those SPH units with the highest volume and dollar value of contracting activity. Given recent

changes within SPH to bring more central oversight over the business contracting process, we selected agreements for review that were executed in late 2010 or early 2011, with the objective of evaluating current procedures and controls. Our audit procedures included a review of the specific agreements and interviews with the SPH personnel responsible for the initial review and on-going monitoring of the agreements in our sample. Topics considered were the appropriateness of contract pricing (i.e., whether pricing appeared to fully cover associated costs), the sufficient evaluation, mitigation, and monitoring of contract risks, and the timely collection and accurate recording of revenue.

Health and safety compliance activities

- We interviewed the SPH Department Safety Coordinator to identify and evaluate SPH activities related to supporting and ensuring health and safety regulation compliance in general, and specifically those requirements outlined in the IIPP.
- For a sample of six labs, we examined the results of EH&S' most recent annual inspections, the lab's most recent self-assessment, and documentation related to the follow-up and remediation of any identified issues. Labs were selected judgmentally to cover different PIs, physical locations, and also to specifically include labs identified by the Department Safety Coordinator's records as having had EH&S inspection or self-assessment findings.

Gift intake and recording

- Finally, related to gift intake and recording, we performed a walkthrough of the procedures, controls and documentation related to the intake and set-up of each type of gift (cash, check, credit card) typically processed by SPH's External Relations department.

Background Information

SPH Information

SPH is one of UC Berkeley's largest professional schools, enrolling 560 graduate students across its 12 different degree programs and 200 undergraduate students in 2010-2011. The school takes an interdisciplinary approach to both research and teaching, and places an emphasis on the social justice and ecological considerations inherent to the discipline of public health. In addition to its research and teaching activities, various units of SPH also provide services to the community through public health-related trainings and publications.

Annual SPH expenditures in fiscal year 2010 totaled approximately \$80 million, and the school is one of the top campus recipients of sponsored project funding with awarded funds totaling between approximately \$40-70 million (out of a campus total of approximately \$700 million) on an annual basis over the past three years.

In addition to the research and training activities that are conducted by individual PIs within their disciplinary areas and that are directly supported by SPH Business and Administrative Services,

SPH also houses approximately 30 externally funded centers and programs that serve to coordinate interdisciplinary research and training activities related to specific public health concerns. Many of these programs have their own business and administrative services staff who are responsible for helping to coordinate transaction flow and ensure that business and administrative activities are appropriately managed. Further, business and administrative activities relating to Environmental Health Sciences (EHS), a SPH academic program which comprises approximately 35% of SPH funding and expenditures, and its related programs and centers, are managed by a team of SPH business office staff different than those who support other SPH units. Effective January 2011, both business and administrative services groups report to the same Associate Dean; however, business processes and staffing are still separate. Both business and administrative units and the centers and programs which they support were included in the scope of our audit and are considered as one population for reporting purposes.

Summary Conclusion

As identified during the risk assessment conducted as part of the planning phase of this audit, there are indications of historical gaps in activities related to the central review and monitoring of fund expenditures and business contracts to mitigate compliance, operational, and financial risks. We noted that SPH Business and Administrative Services management has been taking steps to strengthen procedures and controls in these areas through increased levels of communication with staff and faculty, as well as scrutiny of, internal business processes and operational and compliance concerns. However, based on our testing, we identified transactions that did not appear to be consistent with some aspect of policy or regulation, as well as process gaps, including the untimely or incomplete communication of information that would have bearing on fund management, and incomplete or outdated procedural documentation. Therefore, we believe that procedures and controls are not yet sufficiently formalized or consistently applied to optimize SPH's effectiveness in ensuring compliance with relevant policies, rules and regulations, as well as ensuring that risks related to business contracts are identified and mitigated. We also identified that current tools for processing and reviewing transactions are manual, increasing the level of process inefficiency and the risk of errors; however, given evolving centralized oversight functions within SPH and control improvement activities on campus related to Operational Excellence, we have not included this as a formal observation in our report.

We also noted opportunities for SPH management to strengthen processes related to ensuring the appropriate management and monitoring of health and safety compliance requirements and issues. In particular, certain required elements of the unit's IIPP were not in place, and findings from EH&S inspections were not consistently addressed on a timely basis.

Related to gift intake and recording, based upon our high-level review of procedures and controls, we did not identify any specific observations.

Our specific observations, along with management's responses, follow in descending order of significance.

SUMMARY OF OBSERVATIONS & MANAGEMENT RESPONSE AND ACTION PLAN

Fund Management

Observation

There are indications of, and management has acknowledged, historical gaps in activities related to supporting the compliance of contract, grant and gift fund expenditures with UC and campus policies, as well as with federal regulations and sponsor/donor rules. Through our interviews with SPH staff, as well as through our review of Business and Administrative Services procedure and training-related documentation, it is evident that management has been taking steps to evaluate and strengthen procedures and controls related to fund management, and that staff review transactions and funds. However, through our detailed testing, as well as based on information obtained by interview and by examination of procedure-related and other documentation, we noted opportunities to further enhance procedures and tools to help ensure compliance with policies, rules and regulations.

The specific exceptions and process gaps identified through our audit procedures have been communicated to management, and pertain to: (i) procurement policy exceptions, (ii) the direct charging of facilities and administrative type expenses to federal funds, (iii) fund manager decisions regarding how to process or record certain transactions, and (iv) the untimely or incomplete communication of information to or from Business and Administrative Services' teams, in particular related to gift funds and the frequency of communication with PIs in charge of large center grants with independent staffing. As well, procedural documentation and tools have not yet been fully evaluated, updated and communicated to ensure their appropriateness and consistent application.

We believe that the potential benefits of increased formality and consistency in process are further supported by the fact that SPH PIs receive funding for a wide variety of research, training and other activities, many of which occur in and involve the community at large and foreign organizations, and which necessitate transaction types that are often not straightforward to evaluate and process. As well, Business and Administrative Services personnel also depend in part on administrative personnel housed directly in the research centers and programs to assist in supporting the appropriate management of funds. Without a well-developed delineation and communication of procedural information, there is a risk that requirements may not be well understood at the center level.

In all cases, it appears that management had already identified and was beginning to address these issues prior to our audit.

Management Response and Action Plan

Over the past three years, there have been exceptional extenuating circumstances of retirements, layoffs, attrition and budget cuts both at SPH and Campus that have constrained some of our ability to accelerate the pace of current efforts to improve procedural deficiencies. Notwithstanding, SPH Business and Administrative Services will continue to formalize

procedures and controls and conduct ongoing trainings to ensure compliance with applicable policies and regulations.

We recently created the Financial & Administrative Services Unit (FASU) Purchasing Unit to improve controls over procurement processes and training. Our new centralized routing system routes financial transactions to employees with the business knowledge and skills best suited for managing the particular categories of transactions. Fund managers now have easy access to the financial transactions throughout the various processing stages. The Purchasing Unit facilitates the flow of communication and information as the point of communication with a single email address and uniform procedures memorialized in the SPH policies & procedures. We can now develop a more effective, targeted workshop and training curriculum on business processes and compliance.

Relating to the other areas noted in the observation, we will complete our review of and updates to SPH policies and procedures by February 1, 2012, and are further formalizing requirements related to the frequency of fund manager meetings with Center PIs. By the same date, we also plan to develop and implement the use of additional checklists and forms for staff related to key fund management activities, including, at present, fund set-up, expenditure review, cost transfers, and close-out. Recent updates to SPH policies & procedures included improved monitoring of the financial management of gifts; by October 1, 2011, SPH External Relations will work with the Business Office to ensure the timely communication of gift-related information.

Finally, trainings and information sessions for Business and Administrative Services and Center staff, as well as PIs, have already begun on various topics and a schedule of trainings for the academic year will be available by October 1, 2011.

Fund managers continually evaluate and document business processes to make the preparation, review and approval in each business process comprehensive.

Health and Safety Compliance Coordination

Observation

According to state law and the stated accountabilities of individual units according to central campus EH&S, each unit on campus is responsible for documenting and implementing its own Injury and Illness Prevention Program (IIPP), which is described on the EH&S website as “a department’s central program for creating a safe and healthful work environment”. There are certain requirements mandated by state law regarding what an IIPP must address and how it should be implemented. We noted that SPH has not fully addressed these requirements. Specifically, SPH does not currently have a named or functioning Department Safety Committee to help direct and monitor health and safety concerns, nor (with the exception of the documentation of new hires’ receipt of the IIPP by Human Resources (HR)) is there centralized coordination and monitoring of the health and safety-related trainings employees must receive. As well, the IIPP does not appear to have been updated since 2008 and includes outdated information. We also noted opportunities within SPH to better support the Department Safety Coordinator in her efforts to ensure compliance through the engagement of senior management to help ensure that EH&S inspection findings are remediated on a timely basis, as well as the communication of HR and procurement-related information that would give rise to a health and safety compliance requirement.

Management Response and Action Plan

SPH will improve its current internal program/systems to create a safe and healthy work environment through greater compliance with the current governing authorities and more effective communication and training of all requirements and standards.

By February 1, 2012, the Dean will revitalize the SPH Safety Committee. The membership will include at least one faculty member, lab representative, staff, and graduate student. The revitalized SPH Safety Committee will direct and monitor health and safety concerns and ensure that the SPH IIPP complies with governing authorities. The Committee and SPH Facilities will work closely with HR to share the relevant requirements for applicable safety related training to new hires on the basis of their job duties and classification (i.e., working in the lab or office).

New lab research employees and students are required to take and complete the EH&S laboratory safety training and training on individual lab protocols and chemical hygiene prior to working in the lab. SPH will develop a monitoring system to ensure the requirement and training opportunities are known and the training is completed by February 1, 2012.

SPH's Department Safety Coordinator (DSC) and Research Administration now inform each other of the purchase and location of certain equipment (e.g., freezer units). SPH HR and DSC will develop the content and schedule of applicable safety related training to new hires; the training will be designed and an ongoing schedule will be prepared by February 1, 2012. The IIPP will be updated by February 1, 2012.

Business Contracts

Observation

As of January 2011, Business and Administrative Services has instituted a process change that requires all SPH business contracts to flow through a central point of review. In our review of a small sample of recently executed SPH contracts, we noted the following observations related to contract administration and monitoring for management to address as the new business contract-related processes are formalized:

- In one agreement in our sample, we noted that work started before and will extend beyond the agreed-to term. Performing work outside the agreed-to period is contrary to unit policy and creates risk that related revenues may not be collectible, and potential liability related to failure to fulfill contractual obligations or performance without indemnification in place.
- For two of the agreements in our sample, we noted that expenses and/or revenues related to the contract work were not recorded to a unique chartstring in the general ledger. According to the units, expenses and revenues are specifically tracked to the contract outside of the general ledger; however, to facilitate profitability reviews and reporting, it is a best practice to segregate activity in the general ledger at the project level.

We also noted that planned process changes related to the centralization of contract review and administration have not yet been fully implemented. Finally, we believe there are certain process

areas that warrant the delineation of specific procedures and accountabilities including: (i) evaluating and monitoring the appropriateness of contract costing/pricing, (ii) distributing shared costs (e.g., rent) across funding sources to reflect any costs recovered through the contract, and (iii) higher-risk circumstances that should require additional levels of management review and approval.

Management Response and Action Plan

All contracts are now being managed directly by research administration in FASU/EHS. Unique chartstrings are a routine part of our process in allocating expenses for each contract or grant. This requirement is documented in the SPH policies and procedures. By February 1, 2012, FASU and EHS will check those project/units which had not accounted for expenses at this level to ensure that they comply with this requirement.

To complete its recent centralization of contract review, by August 1, 2011, SPH will use the new Business Contracts Management Systems (BCMS) action notifications to track project/billing milestones, close-out reminders, and reporting requirements.

In regards to implementation of centralized contracts review, the SPH Dean's Office will develop uniform costing procedures for contracts with consideration of the Sponsored Projects Office similar process and other Campus units with similar needs. Distribution of shared costs such as rent will be accounted for in the uniform costing in the pre-contract process. The SPH Dean's Office will develop a policy for evaluating the risks identified in the existing SPH policies and procedures and consult with the Business Contracts Office on risk management and risk mitigation. This will be completed by March 1, 2012.