

**Department of Health and Human Services**

**OFFICE OF  
INSPECTOR GENERAL**

**REVIEW  
OF  
UNIVERSITY RECHARGE CENTERS  
AT WASHINGTON UNIVERSITY**



**JUNE GIBBS BROWN  
Inspector General**

**SEPTEMBER 1995  
CIN: A-07-95-00908**



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General  
Office of Audit Services

Region VII  
601 East 12th Street  
Room 284A  
Kansas City, Missouri 64106

CIN: A-07-95-00908  
September 25, 1995

Mr. Ben Sandler  
Associate Vice Chancellor  
for Budget and Institutional Studies  
Washington University  
Campus Box 1034  
One North Brookings  
St. Louis, Missouri 63130

Dear Mr. Sandler:

This report provides you with the results of our *Review of University Recharge Centers* at Washington University, St. Louis, Missouri (University). Our review covered operations of selected University recharge centers during the period July 1, 1990 through June 30, 1994. The purpose of our review was to determine the adequacy of University procedures and controls over the operation of recharge centers.

For the recharge centers reviewed, we found the University did not (i) develop billing rates based on actual costs of providing services and (ii) utilize surplus and deficit fund balances in the calculation of subsequent billing rates. Also, surpluses and deficits were included in the indirect cost pools used to calculate the indirect costs. We are recommending that the University develop and implement certain procedures and controls over the operation of recharge centers.

The University did not concur with our finding and recommendations. A copy of the University's response is included in its entirety in the Appendix.

### **Background**

In FY 1991, the University was ranked number 22 in Federal research, receiving Federal funds in excess of \$125 million. The University operated *specialized service centers* and *service centers* which were defined as operating units established for the specific purpose of providing products or services to the University community. The University defined centers with annual billings of \$500,000 or more as *specialized service centers*. Centers with less than \$500,000 in annual billings were defined as *service centers*.

### **Scope**

Our review was made in accordance with general accepted government auditing standards. The review objectives were to determine whether the University had adequate internal

procedures and controls related to the operation of selected recharge centers (*specialized service centers* and *service centers*). Specifically, we determined whether the University: (1) had procedures and controls for establishing and monitoring billing rates used to charge services to federally sponsored research agreements, (2) accumulated surplus fund balances and deficits which were not adjusted in subsequent billing rates, and (3) included recharge center costs in the calculation of indirect cost rates.

We judgementally selected four recharge centers for our review which covered the period July 1, 1990 through June 30, 1994. The recharge centers were Chemistry Store; Comparative Medicine; Stockroom; and Tissue Cultures. The review was conducted at the University during December 1994.

## RESULTS OF REVIEW

### Billing Rates

The University did not develop billing rates based on actual costs of providing services. For the Comparative Medicine recharge center, rates were based on what the Principle Investigators were willing to pay. The Principal Investigators believed it would be too costly to the grants if full costs were to be recovered. For the other three recharge centers in our review, a 10 to 12 percent markup over the cost of materials was used to determine billing rates.

The Office of Management and Budget (OMB) Circular A-21, Section J, provides that universities are not allowed to recover more than the aggregate costs of recharge center services. The Circular provision also requires rates to be reviewed periodically and adjusted if necessary. Specifically, OMB Circular A-21, Section J.44.c states:

*The cost of such institutional services when material in amount will be charged directly to users, including sponsored agreements based on actual use of the service....*

*Charges...should be designed to recover not more than the aggregate cost of the services over a long-term period agreed to by the institution and the cognizant Federal agency.*

*...It is not necessary that the rates charged for services be equal to the cost of providing those services during any one [sic] year as long as rates are reviewed periodically for consistency with the long-term plan and adjusted if necessary.*

Because the University did not develop billing rates based on actual costs (including recharge center surpluses and deficits) of providing services, the rates were inaccurate and may be overstated or understated.

### Surplus and Deficit Fund Balances

The University transferred the surplus or deficit fund balances at year-end to school or departmental balance sheet accounts. Actual fund balances reported (to us) were inaccurate because of these transfers.

As previously discussed, Section J.44.c of OMB Circular A-21 states that universities are not allowed to recover more than the aggregate costs of recharge center services. The Circular also requires recharge center rates to be reviewed periodically and adjusted if necessary.

Actual and reported fund balances for the review period were: ↓

| FISCAL YEAR | CHEMISTRY STORE | COMPARATIVE MEDICINE | STOCKROOM  | TISSUE CULTURE |
|-------------|-----------------|----------------------|------------|----------------|
| 1991        | \$ (1,584)      | \$ (1,984,765)       | \$(24,393) | \$(178,381)    |
| 1992        | (13,509)        | (3,880,244)          | 10,104     | (24,775)       |
| 1993        | (1,315)         | (3,961,608)          | 2,773      | (111,235)      |
| 1994        | (8,319)         | (3,528,266)          | (12,199)   | (25,007)       |
| ACTUAL      | \$(24,626)      | \$(13,354,883)       | \$(23,715) | \$(339,398)    |

Surplus and deficit fund balances occurred because the University did not develop billing rates based on actual costs. The University also did not maintain records that identified accumulated surplus or deficit fund balances. Therefore, surplus and deficit fund balances were not properly accounted for and Federally sponsored research may not have been charged equitably for recharge center services.

### Indirect Cost Rate Calculation

The University included recharge center surplus and deficit balances in the calculation of their indirect cost rates. When surplus balances (revenues in excess of expenses) are included in an indirect cost pool, the indirect cost and rate may be understated. Conversely, deficit balances (expenses exceed revenues) may overstate an indirect cost rate.

Surplus fund balances occur when the costs of billed services exceed the costs for providing such services. Deficit fund balances occur when the costs of providing the services exceed the costs billed for the services.

The OMB Circular A-21, Section J.44.c, specifies that a recharge center is a specialized service facility which may charge users directly, including sponsored agreements, based on actual use of the services. It is only appropriate that any credits resulting from surpluses should be made to the original users.

The Compliance Supplement to OMB Circular A-133, Audits of Institutions of Higher Education and Other Nonprofit Institutions, states:

*The method used to adjust for accumulated over/under recoveries should be distributed in reasonable proportion to the same users as were originally billed for the services which created the accumulation.*

When surpluses are used to offset costs in indirect cost pools, related costs are not distributed to the users who were originally billed for the services which created the surplus. Transferring deficits to indirect cost pools may result in the duplicate recovery of related costs.

We believe the including of recharge center costs in the indirect cost rate calculation was due to the lack of written policies and procedures related to recharge centers. By including recharge center surpluses and deficits in the calculation of indirect cost rate, the proposed indirect cost rate may have been overstated and may have resulted in duplicate recovery of costs.

### **Recommendations**

We recommend that the University establish recharge center policies, procedures and controls which provide for:

- ① monitoring fund balances and billing rates,
- ② periodic rate studies supported by current cost data,
- ③ adjustment of the billing rates to eliminate the surplus or deficit fund balances,
- ④ accurate accounting of ending fund balances, and
- ⑤ excluding ending balances from the indirect cost rate calculation.

### **Auditee Comments - Billing Rates**

The University disagreed that billing rates were not based on actual costs of providing services. The University commented that... *the rates underlying the charges to the University's research grants do not fully recover the costs of animal care in the Department of Comparative Medicine (DCM). The University has chosen not to increase its DCM billing rates to research grants and other users, due to funding limitations imposed by awarding agencies (NIH in particular).* The University's response did not address the rates for the three other recharge centers discussed in our report.

### **OIG Response**

As stated in our report, the DCM rates were based on what the Principle Investigators were willing to pay. The Principle Investigators believed it would be too costly to the grants if full costs were recovered. We believe that funding limitations imposed by awarding agencies

are on total funding of the research grant and not on recharge center billing rates. We also believe that charging less than full costs to Federal grants for DCM costs is the University's choice and not due to funding limitations imposed by awarding agencies. Also, billing rates were not based on actual costs of providing services in the other recharge centers included in our review, but were based on cost of materials plus a 10 to 12 percent increase to costs.

### **Auditee Comments - Surplus and Deficit Fund Balances**

The University disagreed with our statements: actual fund balances reported (to us) were inaccurate because of these transfers; surplus and deficit fund balances occurred because the University did not develop billing rates based on actual costs; the University did not maintain records that identified accumulated surplus and deficit fund balances; and, surplus and deficit fund balances were not properly accounted for and Federally sponsored research may not have been charged equitably for recharge center services.

The University responded that they...*provided accurate and verifiable revenue, expense and net results information for each of the recharge centers reviewed...The net results for each year are not transferred to a separate balance sheet account at year-end.* The University also commented that the relatively small deficits in the three centers, other than comparative Medicine, occurred because it is impossible to predict the level of services with such precision that billing rates will always equal costs every year. Also, OMB Circular A-21 acknowledges this practical reality in Section J.44.c: *It is not necessary that the rates charged for the services be equal to the cost of providing those services during any one year as long as the rates are reviewed periodically and adjusted if necessary.*

The University also commented that none of the four centers had billing rates that produced revenues in excess of costs for the period reviewed. Therefore, there is no issue of excessive charges to Federal funds; in fact Federal funds have been substantially undercharged, particularly in the DCM.

### **OIG Response**

The University commented that net results are not transferred to separate balance sheet accounts. This contradicts statements made during our review by University officials and is not supported by Departmental balance sheets provided for our review. As discussed in our report (page 3), the University did not keep accumulated surplus and deficit totals. We calculated surplus and deficit totals for the review period by adding together the 4 years provided to us by the University. The deficits shown in our table represent the period from FY 91 through FY 94. Actual deficits may be more or less depending on what surplus or deficits were in years prior to FY91.

We do not disagree with the University's position on the necessity of rates charged for the service not being equal to the cost of providing those services during any 1 year as long as the rates are reviewed periodically and adjusted, if necessary. However, without including

accumulated surplus and deficits with actual cost of providing services each year, the University can not accurately adjust billing rates to reduce surplus or deficit balances.

We agree with the University comment that *...none of the four centers had billing rates that produced revenues in excess of costs for the period reviewed...Therefore, there is no issue here of excessive charges to federal funds; in fact, federal funds have been substantially undercharged, particularly in the DCM.* However, the primary issue in our report is compliance with OMB Circular A-21 and not excessive charges to federal grants.

#### **Auditee Comments - Indirect Cost Rate Calculation**

The University disagreed that including recharge center (i) costs in the indirect cost rate calculation was due to the lack of written recharge center policies and procedures, and (ii) surpluses and deficits in the indirect cost rate calculation may have overstated the proposed rate and may result in duplicate recovery of costs. The University believed that *...With respect to the non-DCM recharge centers, the impact of deficits on the University's indirect cost rate is immaterial. Section J44d of A-21 notes that "Where the costs incurred for such institutional services are not material, they may be allocated as indirect costs." In accordance with A-21 and the agreement between the University and its cognizant agency, recharge centers with less than \$500,000 in annual billings are accorded different accounting treatment (than SSFs) because the associated indirect costs are not material in the calculation of Washington University's indirect cost rate.*

#### **OIG Response**

We believe that the University's policy and procedures that allow surplus and deficit fund balances to be included in the indirect cost rate calculation are contrary to OMB Circular A-21, Section J.44.d which states: *Where the costs incurred for such institutional services are not material, they may be allocated as indirect costs. Such arrangements must be agreed to by the institution and the cognizant federal agency.* During our review, we contacted the Division of Cost Allocation (DCA) officials to determine whether there were any agreements in place between the University and DCA concerning the definitions of Service Centers and Specialized Service Centers and the use of surplus and deficits in the indirect cost rate computation. The DCA officials stated that there were no agreements in place with the University and expressed agreement with our position.

#### **Auditee Comments - Recommendations**

The University disagreed with our recommendation to establish recharge center policies, procedures and controls which provide for (1) monitoring fund balances and billing rates, (2) periodic rate studies supported by current cost data, (3) adjustment of billing rates to eliminate the surplus or deficit fund balances, (4) accurate accounting of fund balances and (5) excluding ending balances from the indirect cost rate calculation.

The University responded that functions related to monitoring of fund balances and billing rates, and, periodic rate studies supported by current cost data are already being performed. In addition, the University believes the adjustment of the billing rates to eliminate the surplus or deficit fund balances and accounting of ending balances is not required by OMB Circular A-21. As for excluding ending fund balances from the indirect cost rate calculation, the University believes its ... *treatment of recharge center ending balances is already fully in compliance with A-21, is appropriately treated in its indirect cost proposal, and is consistent with understandings with its cognizant agency.* They commented that in accordance with A-21 and the agreement between the University and its cognizant agency, recharge centers with less than \$500,000 in annual billings are accorded different accounting treatment than (SSFs) because the associated indirect costs are not material in the calculation of the indirect cost rate.

### OIG Response

Regarding the University response on monitoring of fund balances and billings, and periodic rate studies, the University did not keep accumulated surplus and deficit totals. In our review, we calculated cumulative surplus and deficit totals by adding together the 4 years provided to us by the University. In addition, billing rates were not based on a rate studies or actual costs of providing service. In three of the recharge centers, rates were based on cost of materials plus a 10 to 12 percent increase to costs.

Regarding the University response to adjustment of the billing rates to eliminate the surplus or deficit fund balances, and accurate accounting of ending fund balances, we do not agree with the University. The OMB Circular A-21, Section J.44.c states:

*The cost of such institutional services when material in amount will be charged directly to users, including sponsored agreements based on actual use of the service... and ...Charges...should be designed to recover not more than the aggregate cost of the services over a long-term period agreed to by the institution and the cognizant Federal agency....It is not necessary that the rates charged for services be equal to the cost of providing those services during any one [sic] year as long as rates are reviewed periodically for consistency with the long-term plan and adjusted if necessary.*

Because the University did not develop billing rates based on actual costs (including recharge center surpluses and deficits) of providing services, the rates were inaccurate and may be overstated or understated. We also do not agree that the University's treatment of recharge center ending balances is already fully in compliance with OMB Circular A-21, appropriate in the indirect cost proposal and consistent with understandings with the cognizant agency.

Section J.44.d of A-21 states... *Where the costs incurred for such institutional services are not material, they may be allocated as indirect costs. Such arrangements must be agreed to by the institution and the cognizant federal agency.* As discussed previously, we contacted

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DCA officials regarding any agreements in place between the University and DCA concerning definitions of Service Centers and Specialized Service Centers, and the use of surplus and deficits in the indirect cost rate computation. The DCA officials stated that there were no agreements in place with the University and agreed with our position.

When surpluses are used to offset costs in indirect cost pools, related costs are not distributed to the users originally billed for the services which created the surplus. Transferring deficits to indirect cost pools may result in the duplicate recovery of related costs.

\* \* \* \* \*

### INSTRUCTIONS FOR AUDITEE RESPONSE

Final determination as to actions to be taken on all matters reported will be made by the HHS action official identified below. We request that you respond to the recommendation in this report within 30 days from the date of this report to the HHS action official, presenting any comments or additional information that you believe may have a bearing on the final determination.

In accordance with the principles of the Freedom of Information Act (Public Law 90-23), OIG, OAS reports issued to the Department's grantees and contractors are made available, if requested, to members of the press and general public to the extent information contained therein is not subject to exemptions in the Act which the Department chooses to exercise. (See 45 CFR Part 5.)

Sincerely,



Barbara A. Bennett  
Regional Inspector General  
for Audit Services

Enclosure

HHS Action Official  
Acting Director, Region VI  
Division of Cost Allocation  
1200 Main Tower Building  
Room 1130  
Dallas, Texas 75202



Financial Planning Office

May 30, 1995

Ms. Barbara Bennett  
Regional Inspector General for Audit Services  
Office of the Inspector General  
Room 284A  
Region VII, Department of Health and Human Services  
601 East 12th Street  
Kansas City, MO 64106

Dear Ms. Bennett:

Thank you for the opportunity to review the draft report, *Review of University Recharge Centers* at Washington University (CIN: A-07-95-00908). (We assume that the phrase "recharge centers" refers also to Specialized Service Facilities.) Comments follow, under headings that correspond to the headings in the "Results of Review" section of the draft report.

### Billing Rates

From the draft report, 1st paragraph, 1st sentence: "The University did not develop billing rates based on actual costs of providing services." This statement implies that the University does not understand or accurately account for its recharge center costs. This implication is incorrect. During the site visit, your office's auditor reviewed detailed revenue and expense information for the years requested. We will be glad to review this information with you again, if that would be helpful.

It is true that the rates underlying the charges to the University's research grants do not fully recover the costs of animal care in the Department of Comparative Medicine (DCM). The University has chosen not to increase its DCM billing rates to research grants and other users, due to funding limitations imposed by the awarding agencies (NIH in particular). Rates that include the DCM's full direct and indirect costs would be more than double the present rates. This condition is common among universities with large animal care facilities.

We suggest that you delete the entire section on billing rates in the draft report, and substitute the following:

Washington University did not include all costs associated with comparative medicine in the billing rates due to funding limitations of the awarding agencies. As a result, federal grants were significantly undercharged for the costs of animal research.

### Surplus and Deficit Fund Balances

From the draft report, 1st paragraph, 2nd sentence: "Actual fund balances reported (to us) were inaccurate because of these transfers." This statement is incorrect. Washington University maintains separate operating accounts for all centers. At the site review, the University provided accurate and verifiable revenue, expense and net results information for each of the recharge centers reviewed, and for each of the four years for which information was requested. The net results for each year are not transferred to a separate balance sheet account at year-end. A-21 does not require this separation. The University believes its accounting for recharge centers is in compliance with A-21 and is an acceptable accounting practice.

From the draft report, 4th paragraph, 1st sentence: "Surplus and deficit fund balances occurred because the University did not develop billing rates based on actual costs." The implication of this statement is incorrect. With respect to the DCM, see comments under "Billing Rates" above. With respect to the relatively small deficits in the other three centers, these occur because it is impossible to predict the level of services with such precision that billing rates will always equal costs every year. A-21 acknowledges this practical reality in Section J44c: "It is not necessary that the rates charged for services be equal to the cost of providing those services during any one year as long as the rates are reviewed periodically and adjusted if necessary." The University believes its practices comply with A-21's requirements.

From the draft report, 4th paragraph, 2nd sentence: "The University did not maintain records that identified accumulated surplus and deficit fund balances." This statement is incorrect. As stated above, separate operating accounts are maintained for each center. Four years of accurate surplus and deficit information have been provided to your office. In fact, this information is included in your report, in the table at the top of page 3. (Also as stated above, it is worth noting that none of the four centers had billing rates that produced revenues in excess of costs for the period reviewed by your office. Therefore, there is no issue here of excessive charges to federal funds; in fact, federal funds have been substantially undercharged, particularly in the DCM.)

From the draft report, 4th paragraph, last sentence: "Therefore, surplus and deficit fund balances were not properly accounted for and Federally sponsored research may not have been charged equitably for recharge center services." This statement is incorrect. Surplus and deficit results are accounted for, are reconcilable to General Ledger accounts, and are in compliance with A-21. Therefore, Federally sponsored research *has* been charged equitably for recharge center services. (As noted above, the last sentence is not strictly

true. In reality, Federally sponsored research has been substantially *undercharged* for recharge center services, particularly in the DCM.)

We suggest you delete the entire section on surplus and deficit fund balances in the draft report, and substitute the following:

Separate operating accounts are maintained for each center during the fiscal year. The University provided four years of revenue, expense and net results information to insure that billing rates are based on actual costs and do not exceed these costs over a long term period. Deficits in these accounts, particularly the substantial deficits in the Department of Comparative Medicine, indicate that the federal government has been substantially undercharged for these services.

### Indirect Cost Rate Calculation

From the draft report, last paragraph, 1st sentence: "We believe the including of recharge center costs in the indirect cost rate calculation was due to the lack of written policies and procedures related to recharge centers." This statement is incorrect. Washington University has written policies and procedures that govern the operation of its service centers. These policies comply with the requirements of A-21. These policies were provided to your office. These policies require:

1. Separate operating accounts for the accumulation of direct costs and revenues.
2. Billing rates based on cost. The University's policy recognizes that it may be necessary to establish rates at less than full cost, but rates should not produce revenues that exceed costs over a five-year period. It is not necessary that rates be equal to the cost of providing the services during one fiscal year, since rates are reviewed annually for consistency with a long-term plan and are adjusted as necessary. This policy assures the federal government and other users that recoveries do not exceed costs.
3. Uniform application of billing rates to all users. This policy insures that the federal government is charged neither more nor less than other users for the same service or products.

From the draft report, last paragraph, 2nd sentence: "By including recharge center surpluses and deficits in the calculation of indirect cost rate [sic], the proposed indirect cost rate may have been overstated and may result in duplicate recovery of costs." This statement is incorrect. With respect to the non-DCM recharge centers, the impact of deficits on the University's indirect cost rate is immaterial. Section J44d of A-21 notes that "Where the costs incurred for such institutional services are not material, they may be allocated as indirect costs." In accordance with A-21 and the agreement between the

University and its cognizant agency, recharge centers with less than \$500,000 in annual billings are accorded different accounting treatment (than SSFs) because the associated indirect costs are not material in the calculation of Washington University's indirect cost rate. This accounting for recharge centers is documented in footnote g on page 90 of the University's February 25, 1994 indirect cost proposal.

The impact of classifying non-DCM recharge center deficits in an indirect cost pool has no effect on the University's indirect cost rate because the University's rate for administrative indirect costs is capped at 26%. If the University were not over the cap, the impact on the indirect cost rate would be approximately .0005%.

With respect to the DCM Specialized Service Facility (SSF), careful accounting treatment in the University's indirect cost proposal insures that none of the DCM's indirect costs are included in the indirect costs allocated to organized research. This treatment is explained on page 90 of the University's indirect cost proposal and has been developed in cooperation with the University's cognizant agency.

We suggest that you delete the entire section on indirect cost rate calculation in the draft report, and substitute the following language: "The accounting treatment for recharge centers in the indirect cost proposal should be included in the University's recharge center policy."

### Recommendations

The draft report recommends that the University should establish policies, procedures and controls in order to meet specified goals. The University believes these goals are either already met or are inappropriate. Therefore, we suggest that the recommendations be deleted. Following are the goals and the University's comments about them:

1. *Monitoring fund balances and billing rates.* The University already performs these functions. See previous comments.
2. *Periodic rate studies supported by current cost data.* The University already performs these functions. See previous comments.
3. *Adjustment of the billing rates to eliminate the surplus or deficit fund balances.* The University believes this goal is inappropriately stated. It is not required by A-21. See previous comments in the "Billing Rates" section.
4. *Accurate accounting of ending fund balances.* Ending fund balances are permitted by the University's recharge center accounting records and can be accounted for accurately. In any case, such accounting is not required by A-21.

5. *Excluding ending balances from the indirect cost rate calculation.* The University's treatment of recharge center ending balances is already fully in compliance with A-21, is appropriately treated in its indirect cost proposal, and is consistent with understandings with its cognizant agency. See comments above in the "Indirect Cost Rate Calculation" section.

For these reasons, we believe the recommendations in the draft report should be deleted.

If you have questions, please contact Mary Corcoran, Assistant Controller, at (314) 935-5723 or me at (314) 935-5103.

Sincerely,



Benjamin S. Sandler  
Assistant Vice Chancellor for Budget  
and Institutional Studies

cc: Mr. Allan Pewe