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REPORT BY THE
Comptroller General
OF THE UNITED STATES

Assuring Reasonableness Of Rising Indirect Costs On NIH Research Grants--A Difficult Problem

National Institutes of Health reimbursements to its grantees for indirect costs increased from \$166 million in 1972 to \$690 million in 1982. Moreover, indirect costs consumed an increasing proportion of the federal research dollar--rising from about 21 to 30 percent during the same period.

GAO believes that indirect cost rates have been established with grantees despite (1) difficulties involved in verifying the largest category of indirect costs (departmental administration expenses), (2) relatively few indirect cost audits, and (3) inadequate written explanations for significant year-to-year increases in indirect costs.

GAO recommends that the Office of Management and Budget (OMB) revise its Circular A-21 to establish a fixed allowance for large institutions' departmental administration expenses to replace the cost reimbursement method now used. This simplified means of establishing reimbursable departmental administration expense allowances should not require reliance on grantees' personnel activity reporting systems. It should also minimize difficulties encountered in independently verifying such expenses.



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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

B-213628

March 16, 1984

The Honorable Paula Hawkins
Member, Committee on Labor
and Human Resources
United States Senate

The Honorable William Proxmire
Ranking Minority Member
Subcommittee on Labor, Health and
Human Services, and Education
Committee on Appropriations
United States Senate

In accordance with your individual requests, we have prepared this report on the process used by the Department of Health and Human Services (HHS) for establishing the indirect cost rates used in making reimbursements to National Institutes of Health grantees.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 5 days from the date of the report. At that time we will send copies to interested Members of Congress and congressional committees and subcommittees; the Director, Office of Management and Budget; the Secretary of HHS; and others upon request.

A handwritten signature in cursive script that reads "Milton J. Fowler".

Acting Comptroller General
of the United States



D I G E S T

In fiscal year 1982, the federal government was the largest source of support for health research and development activities, providing \$5.0 billion for that purpose. The Department of Health and Human Services (HHS) provided about \$2.3 billion of this amount--\$1.61 billion in direct costs and \$690 million in indirect costs--through the National Institutes of Health's (NIH's) extramural research program grants. Between fiscal years 1972 and 1982, indirect costs as a percentage of total NIH research costs rose from about 21 to 30 percent. (See p. 1.)

Direct costs include costs for salaries and wages, equipment, and other expenses that can be assigned directly to a particular research project. Indirect costs--such as administration expenses, facility operation and maintenance expenses, and depreciation or use allowances--are those which cannot be specifically attributed to individual projects. Accountants have developed techniques, based on estimates, to distribute indirect costs among individual projects in accordance with Office of Management and Budget (OMB) guidelines. (See p. 3.)

The government-wide process used to establish indirect cost reimbursement rates for educational institutions is set forth in OMB Circular A-21. This circular defines allowable and unallowable costs. It also discusses indirect cost pools that should be established for accumulating such costs and acceptable methods for distributing these costs to research projects.

HHS has the responsibility for negotiating and auditing indirect cost rates with 98 percent of the nation's 2,600 educational institutions. The rates established by HHS for these institutions are applicable for grant funding purposes to all other federal departments and agencies. (See p. 4.)

Before the mid-1960s, federal reimbursement of grantees' indirect costs was limited to a specified percentage of direct costs. In 1966, the limit of 20 percent of direct research costs for NIH indirect cost reimbursements was removed by the Congress to allow grantees to recover full overhead expenses associated with federally sponsored research projects. (See p. 6.)

GAO's review of the process followed by HHS in establishing indirect cost rates was requested by Senator Paula Hawkins, Member of the Committee on Labor and Human Resources, and Senator William Proxmire, Ranking Minority Member of the Subcommittee on Labor, Health and Human Services, and Education, Committee on Appropriations.

The primary objectives of GAO's review were to

- identify HHS' efforts to contain the growth of indirect costs,
- assess HHS' accountability over indirect costs, and
- determine how often indirect cost audits were made and how the audit reports were used by HHS' indirect cost negotiators.

GAO reviewed a sample of 82 NIH grantees in four HHS regional offices. Each of these grantees generally receives annually federal funding for direct research costs of more than \$3 million. They received a total of \$601 million, or 26 percent of NIH's extramural research funds, in fiscal year 1982. Of this amount, 68 percent was for direct costs and 32 percent was for indirect costs. The ratio of fiscal year 1982 direct and indirect costs for the grantees included in GAO's sample was similar to that for the NIH research grant program costs as a whole. GAO also reviewed indirect cost audits of NIH grantees made by HHS and non-HHS auditors from October 1977 through April 1983. (See p. 7.)

CONCERNS RAISED REGARDING
ALLOCATION AND EXTENT OF
REIMBURSEMENT OF INDIRECT COSTS

In recent years, the proper allocation of an institution's indirect costs to its research activities and the extent to which institutions should be reimbursed by the government have been the subjects of much debate. The government has been concerned with the level of funding required to reimburse indirect costs, the complexity of accounting procedures used by educational institutions, and the overall need to maintain proper accountability. On the other hand, educational institutions have emphasized the need for increased recovery of their costs expended to conduct federally sponsored research activities. Several studies have addressed these issues. (See p. 11.)

The most recent discussion of these issues was included in a May 1983 National Academy of Sciences report. The Academy's report discussed recurring difficulties with indirect costs and concluded that:

- Resolution of the indirect cost conflict requires all parties to (a) develop a consensus on criteria for determining the actual costs of research, (b) examine and agree on methods for determining and apportioning indirect costs, and (c) agree on the rationale for sharing costs.
- Imposition of a uniform indirect cost rate on all universities would be both unsound and inequitable.
- A wider choice of mutually acceptable methods for treating indirect costs is needed, including methods that offer simplicity in accounting systems in exchange for less than full recovery of costs. (See p. 11.)

Congressional concern has focused on what can or should be done about the increasing payments for indirect costs. To comply with congressional direction, HHS proposed several policy options in

February 1982 and March 1983 to simplify the indirect cost reimbursement process and reduce indirect cost payments made on NIH grants. The House Appropriations Committee believes that the present system for calculating indirect costs is not equitable or sufficiently uniform to be fair to all grantees. The Senate Appropriations Committee believes it is time for all sides to work together to establish reasonable methods for reimbursing indirect costs. This report should contribute to future deliberations concerning the many issues related to indirect cost reimbursement. (See pp. 12 to 19.)

PROCESS USED TO ESTABLISH
INDIRECT COST RATES DOES
NOT ASSURE REASONABLENESS

GAO found that the process followed by HHS in negotiating indirect cost reimbursements does not assure that negotiated indirect cost rates are reasonable. It found this to be particularly evident for grantees' departmental administration expenses. In addition, few audits of grantees are made to verify indirect costs, and negotiation files often provide no written documentation to explain the reasons for significant indirect cost increases. (See pp. 20 to 34.)

Departmental administration
expenses are subjective and
not easily verified

Departmental administration expenses represent the largest and most controversial of the indirect costs reimbursed by NIH. According to HHS officials, it constitutes about 35 percent of the indirect cost rates at large institutions and involves the use of subjective estimates that cannot be easily verified.

HHS negotiators find it extremely difficult to question institutions' estimates of departmental administration expenses because this category of expenses is primarily comprised of the salaries and expenses of academic deans, academic department heads, and faculty, all of whom split their efforts among research and several other institutional activities. GAO's review substantiated this contention.

OMB's Circular A-21 recognizes the difficulties in distributing costs to this expense category. The circular states that:

". . . in an academic setting, teaching, research, service, and administration are often inextricably intermingled. A precise assessment of factors that contribute to costs is not always feasible, nor is it expected. Reliance, therefore, is placed on estimates in which a degree of tolerance is appropriate."

Two methods are permitted by OMB Circular A-21 to identify allowable departmental administration costs used in establishing indirect cost rates. Large institutions, such as those included in GAO's review, are reimbursed on the basis of personnel activity (time and effort) reporting systems, which are subjective and difficult to verify. However, small institutions--defined as those receiving \$3 million or less in federal funding for direct research costs--may compute their allowable departmental administration costs simply on the basis of 20 percent of salaries and expenses of deans and department heads. (See p. 20.)

Few audits are made to determine validity of indirect costs

HHS estimates that there are about 700 educational institutions that annually receive NIH indirect cost reimbursements. During a recent 5-1/2-year period, HHS auditors made a total of 50 indirect cost audits of 47 NIH grantees to assist HHS negotiators in their annual indirect cost rate negotiations with grantees. For the 82 grantees included in GAO's review, the HHS Office of Audit was able to satisfy one-half of the 48 requests made by negotiators during a 4-1/2-year period. HHS officials told GAO that negotiators are aware that few indirect cost audits are done and, as a result, negotiators are reluctant to request them.

In recent years, the HHS Inspector General has decided to spend more of HHS' audit resources on

such multibillion dollar programs as Social Security, Medicaid, and Medicare rather than individual indirect cost audits. However, in cases where indirect cost audits have been made, significant amounts of grantee proposed indirect costs have been questioned. GAO found that HHS negotiators sustained \$13.9 million of \$16.7 million questioned by HHS auditors over a 4-1/2-year period. The negotiators subsequently reduced indirect cost rates accordingly.

Recently, HHS has begun to rely on nonfederal auditors to conduct single organization-wide audits of institutions' financial management systems and internal control procedures to identify problem areas. While the single-entity audit approach will identify areas of potential weaknesses in these systems, they may not be sufficiently detailed to satisfy the need for specific indirect cost audits. The HHS Office of Audit believes that these audits should provide sufficient data to assist negotiators in analyzing indirect cost proposals and requesting additional audit assistance when it is needed. (See p. 24.)

Negotiation files do not always
contain written explanations
for cost increases

In fiscal years 1981 and 1982, HHS had finalized indirect cost rates for 69 of the 82 NIH grantees GAO reviewed. In fiscal years 1981 and/or 1982, 49 of the 69 NIH grantees' negotiation files contained no written explanation of the reasons for significant increases in indirect costs from the previous year(s).

For example, GAO found that departmental administration expenses at one university increased \$1.3 million, or 74 percent, from the previous year. However, neither the indirect cost proposal nor the HHS negotiator's notes on his analysis of the proposal explained why departmental administration costs rose so significantly. (See app. II.)

HHS has acted to improve the documentation of its negotiation files. To implement a GAO proposal contained in a draft of this report sent to HHS for comment, HHS instructed its regional

cost negotiators to request major research grantees who submit indirect cost proposals after March 31, 1984, to provide a written explanation of any significant increase in any category of indirect costs. (See p. 29.)

RECOMMENDATION TO THE
DIRECTOR OF OMB

Since departmental administration expenses are the largest category of indirect costs and consist of charges developed using subjective estimates that are not easily verified, they will undoubtedly be the source of continuing controversy.

GAO recommends that the Director, OMB, revise Circular A-21 to establish a fixed allowance for large institutions' departmental administration expenses to replace the cost reimbursement method now used. Such an allowance could be computed in a manner similar to that permitted by Circular A-21 for small institutions and could vary, if necessary, on an institution-by-institution basis, depending on their individual circumstances.

In any event, a fixed allowance for departmental administration expenses should not require reliance on institutions' personnel activity reporting systems. Implementation of the recommendation should minimize difficulties encountered in independently verifying this category of indirect costs. Such an allowance should represent a reasonable amount needed for effective research administration at the departmental level of each institution. To the extent possible, the allowance should be relatively simple to compute and not result in disproportionate annual fluctuations compared to the direct costs of research.

This recommendation is consistent with the May 1983 National Academy of Sciences report that concluded, among other things, that a single uniform indirect cost rate applicable to all universities and covering all indirect costs would be unsound and inequitable. In fact, the establishment of a fixed departmental administration allowance--possibly unique to each institution--could complement the Academy's call for alternate and more simplified methods of allocating indirect costs. (See p. 35.)

AGENCY COMMENTS
AND GAO EVALUATION

HHS generally agreed with GAO's findings and recommendations. HHS recognized the need for written summaries prepared by NIH grantees of the reasons for significant increases in indirect cost pools and has acted to implement the proposal contained in the GAO draft report sent to HHS and OMB for review and comment. Because of HHS' action, GAO did not include a recommendation on this matter in the final report. (See p. 35 and app. III.)

In the draft of the report, GAO recommended that OMB explore the feasibility of establishing an allowance for departmental administration to replace the cost reimbursement method now used. OMB stated that it had already explored this approach with other federal agencies and understood that fixed rates for departmental administration expenses have been negotiated with institutions. OMB indicated that this approach is consistent with its Circular A-21 (i.e., negotiating a fixed rate for a multi-year period.)

The fixed rates referred to by OMB continue to rely on personnel activity reporting systems as the basis for establishing multi-year rates. HHS has found that the data produced by these systems are subjective and difficult to independently verify. GAO believes that, absent a change to OMB Circular A-21, the manner in which reimbursable departmental administration expenses are determined will remain unchanged even though a fixed rate may be negotiated for multi-year periods. GAO has revised its recommendation to reflect this.

OMB believes it may be necessary to reassign some audit responsibilities from HHS to other federal agencies to increase the number of indirect cost audits being conducted. (See p. 36 and app. IV.)

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ABBREVIATIONS

DCAA Defense Contract Audit Agency
GAO General Accounting Office
HHS Department of Health and Human Services
NIH National Institutes of Health
OMB Office of Management and Budget

CHAPTER 1

INTRODUCTION

Over the years, the indirect costs incurred in support of federal health research grants have become a highly complex and controversial issue. These costs continue to consume an increasingly larger share of research dollars provided by the federal government.

In fiscal year 1982, the government provided an estimated \$5.0 billion--a 138-percent increase over the \$2.1 billion provided in fiscal year 1972--in support of health research and development activities. Of the \$5.0 billion, the National Institutes of Health (NIH) of the Department of Health and Human Services (HHS) provided \$3.6 billion. About \$2.3 billion of NIH's \$3.6 billion was expended on its extramural research program grants awarded to research institutions in the nonfederal sector.

From 1972 to 1982, NIH's total cost awards for extramural grants increased from \$808 million to \$2.3 billion (an increase of 185 percent). The direct cost portion of this total increased from \$642 million to \$1.61 billion, an increase of 151 percent. During this same period, NIH's indirect cost awards increased from \$166 million to \$690 million--an increase of 315 percent. Proportionately, indirect costs increased from 20.6 to 30.0 percent of total NIH grant costs during this period. As a percent of direct costs, indirect costs increased from 25.9 to 42.8 percent. Information concerning the increases in NIH's indirect costs from 1972 through 1982 is provided on page 2.

Senator Paula Hawkins, Member of the Senate Labor and Human Resources Committee, asked us to review and evaluate the monitoring of and accountability over indirect costs incurred by research institutions in conducting NIH-sponsored health research. Senator William Proxmire, the Ranking Minority Member of the Subcommittee on Labor, Health and Human Services, and Education, Senate Committee on Appropriations, asked us to update information contained in a previous report¹ we issued on indirect costs of health research. He expressed particular interest in HHS' efforts to audit indirect costs, including the extent to which such audits have resulted in indirect cost reductions.

¹Indirect Costs of Health Research--How They Are Computed, What Actions Are Needed (HRD-79-67, July 27, 1979).

Increases in Indirect Cost Reimbursements
to NIH Grantees for Fiscal Years 1972 Through 1982

<u>Fiscal year</u>	<u>Total grant costs</u>	<u>Total direct costs</u>	<u>Total indirect costs</u>	<u>Percent of indirect costs to direct costs</u>	<u>Percent of indirect costs to total costs</u>
—————(thousands)—————					
1972	\$ 808,108	\$ 641,865	\$166,243	25.9	20.6
1973	799,665	614,078	185,587	30.2	23.2
1974	985,738	745,547	240,191	32.2	24.4
1975	1,000,496	741,558	258,938	34.9	25.9
1976 ^a	1,444,630	1,058,466	386,164	36.5	26.7
1977	1,320,302	961,162	359,140	37.4	27.2
1978	1,529,066	1,112,973	416,093	37.4	27.2
1979	1,844,001	1,331,722	512,279	38.5	27.8
1980	2,050,074	1,463,768	586,306	40.0	28.6
1981	2,224,138	1,568,995	655,143	41.8	29.5
1982	2,300,534	1,610,679	689,855	42.8	30.0

^aIncludes transition quarter.

WHAT ARE DIRECT AND INDIRECT COSTS?

The total cost of any research project is usually expressed in two broad categories--direct and indirect costs.

Direct costs generally include costs for salaries and wages, equipment, and other expenses that can be directly assigned to a particular project.

Indirect costs are those costs which cannot be readily identified with specific projects. For this reason, accountants have developed techniques, based on estimates, to assign indirect costs to "cost pools."

At educational institutions, indirect costs are categorized into the following cost pools:

- General administration (salaries, expenses, and fringe benefits of university officials and university-wide offices, such as personnel, accounting, and payroll).
- Departmental administration (salaries, expenses, and fringe benefits of personnel (e.g., chairmen, secretaries, and faculty) in academic deans' offices, academic departments and divisions, and organized research units²).
- Sponsored projects administration (salaries, expenses, and fringe benefits of administrators and staff in offices set up especially to administer sponsored research programs).
- Operation and maintenance (utilities, janitorial services, routine maintenance, etc.).
- Use charges for buildings and equipment (or depreciation of institutional assets).
- Student administration and services (costs of registrar, deans of students, student advisors, health services, etc.).
- Library (books and materials and salaries, expenses, and fringe benefits of librarians and library staffs).

²Organized research units include such units as institutes, study centers, and research centers.

These indirect cost pools are allocated to each major university function (e.g., research, instruction) on the basis of benefits received (e.g., square feet of space, number of students and staff). All of the indirect costs allocated to the research function are generally divided by the modified total direct costs of research to obtain the grantee's research indirect cost rate. Modified total direct costs are defined as the following direct costs--salaries and wages, fringe benefits, materials and supplies, services, travel, and subgrants and subcontracts up to \$25,000 each. The research indirect cost rate is recomputed annually for each NIH grantee and used as the basis to reimburse grantees for indirect costs incurred on federally sponsored research projects.

POLICIES AND PROCEDURES
USED IN HHS' NEGOTIATIONS
AND AUDITS FOR REIMBURSEMENT
OF INDIRECT COSTS

For educational institutions, Office of Management and Budget (OMB) Circular A-21, effective October 1, 1979 (revised August 3, 1982), establishes principles for determining allowable costs for research grants. The OMB circular defines allowable and unallowable costs. It also discusses indirect cost pools that should be established for accumulating such costs and acceptable methods for distributing these costs to research projects. The circular's principles are designed to assure that the federal government bears its fair share of total costs, determined in accordance with generally accepted accounting principles.

The cost principles recognize that

- the accounting practices of recipient institutions must support the accumulation of costs as required by federal cost principles and must provide for adequate documentation to support costs charged to sponsored agreements;
- each institution, in fulfilling its obligations, should employ sound management practices; and
- cognizant federal agencies involved in negotiating and auditing indirect cost rates should assure that institutions apply federally prescribed cost principles on a consistent basis.

Under the provisions of OMB Circular A-88, HHS has the responsibility for negotiating and auditing indirect cost rates for 98 percent of the nation's 2,600 educational institutions. Within HHS, overall responsibility for the development and issuance of policies and procedures for the negotiation and

reimbursement of indirect costs is assigned to the Deputy Assistant Secretary for Procurement, Assistance, and Logistics, Office of the Assistant Secretary for Management and Budget. Audits are the responsibility of the Office of the Inspector General.

In order to be reimbursed for indirect costs, an NIH grantee must first establish an appropriate indirect cost rate. To do this, the grantee institution prepares an indirect cost rate proposal and submits it to the Division of Cost Allocation, Regional Administrative Support Center, for the HHS region in which the grantee is located. The institution is supposed to submit a proposal for each fiscal year for which indirect costs are claimed. Educational institutions must develop their indirect cost proposals in accordance with the OMB Circular A-21 cost principles. This proposal provides the basis for review, audit, and negotiation leading to the establishment of a grantee's indirect cost rate.

Division of Cost Allocation personnel review the indirect cost proposals and negotiate indirect cost rates with individual institutions. There are about 65 cost negotiators in the 10 HHS regional offices. According to HHS, they devote approximately 30 percent of their time to indirect cost negotiations with colleges and universities. Negotiations, which are conducted over the telephone or at face-to-face meetings, are based on one or a combination of desk reviews, on-site reviews of supporting documentation, or HHS Office of Audit reports.

The HHS publication Staff Handbook on Cost Negotiation sets forth departmental guidance governing (1) the review and negotiation of indirect cost proposals and (2) the use of audit assistance in such evaluations. The handbook states that the negotiator must perform a sufficient analysis of each proposal and supporting documentation to provide reasonable assurance of the agreement's fairness to both the government and the institution.

The handbook provides that because of limited audit resources, proposals will generally be evaluated without the assistance of audit, but that audits are necessary in some cases to help ensure that the rates or amounts negotiated are reasonable. The handbook states that the negotiator is to make a special request for an audit when one is deemed necessary and is not already scheduled by the audit agency. If an audit of a grantee's indirect costs is considered necessary, the HHS negotiator is to request an audit through the HHS Office of the Inspector General's Office of Audit. Audit findings are not binding on the negotiator and are for advisory purposes only.

In determining the time and effort that a negotiator will expend on an analysis, a number of interrelated factors must be considered, including:

- The approximate dollar amount involved in the negotiation.
- Whether an audit of the proposal has been conducted and the findings of the audit.
- The percentage relationship of federal funding to the total costs of the institution.
- Whether any significant increases in costs can be readily explained.
- Past problems in negotiations.
- Whether the proposal is adequately supported by accompanying documentation.
- Any information in the proposal to indicate a possible inequitable allocation of costs.
- Whether any significant changes have been made in the organization's accounting system or organizational structure which affect the proposal.

The HHS handbook allows the Director of the Division of Cost Allocation to establish, with the approval of the Director, Regional Administrative Support Center, dollar and rate thresholds for accepting proposals without review. In addition, the handbook sets forth procedures for documenting the results of the review of indirect cost proposals and explaining adjustments made in arriving at the rates negotiated.

The results of each negotiation are formalized by a negotiation agreement signed by the Director of the Division of Cost Allocation and an authorized grantee representative. Indirect cost rates established for a given institution by the federal agency responsible for the indirect cost rate negotiation at that institution are accepted for grant funding purposes by all other federal departments and agencies.

Federal reimbursement of indirect costs

For many years, the federal payment for indirect costs incurred in support of research grants was administratively determined through application of a single flat rate. For example, before 1955 HHS' (formerly the Department of Health,

Education, and Welfare) policy was to limit overhead costs on NIH research grants to 8 percent of direct project costs. After that date, HHS changed its policy to allow an amount equal to 15 percent. In 1958, HHS proposed to increase the indirect cost allowance to 25 percent, but the House Committee on Appropriations did not approve the increase. Instead, a statutory ceiling of 15 percent was imposed. In 1963, the Congress increased the maximum limit on indirect costs for research grants to 20 percent of direct project costs and applied this limit to both HHS and Department of Defense research grants. Beginning with the fiscal year 1966 appropriation act, the Congress removed this percentage limitation and included language which allows institutions to recover full overhead expenses for federally sponsored research projects.

OBJECTIVES, SCOPE, AND METHODOLOGY

The primary objectives of our review were to:

- identify HHS efforts to contain the growth of indirect costs,
- assess HHS' accountability over indirect costs, and
- determine how often indirect cost audits were made and how the audit reports were used by HHS indirect cost negotiators.

Our review was performed in accordance with generally accepted government auditing standards and focused on the HHS process for establishing indirect cost rates for grantees receiving NIH research grants. We did not evaluate the legitimacy of claims made for indirect costs.

Throughout our review, we examined pertinent legislation, regulations, policies, and procedures governing indirect cost reimbursements. We reviewed HHS' documentation (including negotiation files on grantees) relating to audits, negotiations, and indirect cost reimbursements at the NIH headquarters office, Bethesda, Maryland, and HHS' regional offices in Atlanta, Boston, Denver, and Philadelphia. These regional offices were selected for broad geographical coverage.

We monitored the activities of the NIH Director's Advisory Committee in order to identify NIH's efforts to contain the growth of indirect costs. At the time our review was initiated, the committee was examining alternative approaches for containing research expenditures, promoting cost sharing, and simplifying administrative procedures.

We discussed the matters contained in this report with OMB, the National Science Foundation, the American Association of Medical Colleges, the Federation of American Societies for Experimental Biology, and the Council on Government Relations of the National Association of College and University Business Officers--an organization representing more than 100 research institutions.

In the four HHS regions visited, we selected for detailed analysis and discussion with regional office personnel the available documentation on 82 grantees (of the approximate total of 200 on a nationwide basis) that generally receive federal funding for direct research costs of \$3 million or more a year. While our sample of 82 grantees (see app. I) was nonrandom, the ratio of direct and indirect costs for our grantee sample was similar to the ratio of these costs for the program as a whole. The grantees in our review collectively received \$601 million, or 26 percent, of the \$2.3 billion NIH spent on extramural health research grants in fiscal year 1982. Of the \$601 million, \$191 million (or 32 percent) was for indirect costs. Trend data for increases in indirect cost categories over a 3-year period were developed using documentation in the negotiation files for the 82 grantees.

In the HHS regions visited, we interviewed 13 negotiators to determine (1) the procedures being used in recent negotiations, (2) the rationale used in decisions to make site visits, and (3) the extent to which indirect cost pools were analyzed. We also interviewed these negotiators to obtain their views on the need for, the adequacy of, and the use made of audits in the negotiation process.

To determine the frequency and benefit to HHS negotiators of indirect cost audits, we identified all the indirect cost audit reports issued on NIH educational institution grantees by the HHS Office of Audit during a 5-1/2-year period ended April 30, 1983. We examined the HHS audit reports issued during this period to determine the amount and percentage of proposed costs the auditors disallowed and the reasons for disallowance. To the extent possible, we identified indirect cost audits of NIH grantees conducted by non-HHS audit organizations during the same period.

CHAPTER 2

CONCERNS ABOUT RISING INDIRECT COSTS CONTINUE--

FUNDAMENTAL ISSUES NEED RESOLUTION

Concern has been expressed in the Congress, at HHS, and by university officials about the increasing proportion of health research funds used to pay indirect costs. These concerns will continue until researchers, academic administrators, and the federal government resolve differences concerning what is the proper allocation of institutional indirect costs to federally sponsored research activities and who should pay for them.

To comply with congressional direction, HHS proposed several policy options in February 1982 and March 1983 on how to simplify the indirect cost reimbursement process and reduce the amount of federal indirect cost reimbursement on NIH grants. The House and Senate Appropriations Committees recommend further cooperative study between the federal government and educational institutions of the issues before adoption of new policies.

INDIRECT COSTS CONTINUE TO INCREASE

The total amount of NIH indirect cost reimbursements was \$690 million in fiscal year 1982. At the time, this amount represented the largest amount of NIH indirect costs ever reimbursed both in absolute terms and as a percentage of indirect costs to direct costs (42.8 percent) and to total grant costs (30.0 percent).

As the overall level of federal participation in the payment of indirect cost reimbursements has grown, so too have concerns that (1) nonresearch costs are included in indirect cost reimbursements, (2) educational institutions have no incentive to control indirect costs, (3) indirect costs are not affected by budget reductions, and (4) indirect costs have grown faster than necessary. However, university administration officials argue that most institutions bear the major burden of indirect costs and that constraints on resources, faculty pressure, and administrative and/or state oversight for public institutions provide adequate incentive to control costs.

HHS officials told us that the increases in the level of federal indirect cost reimbursements made to educational institutions have been due largely to the following factors:

- The need for additional funds has caused grantees to adopt more sophisticated cost allocation techniques which maximize the amount of allowable reimbursements for indirect costs.

- Inflation, which has had a greater impact on the types of costs included in indirect costs (for example, utility rate increases) than those included in direct costs.
- Increased administrative and legal costs associated with federally mandated social programs, such as equal employment opportunity, affirmative action, pension benefits, occupational safety and health, protection of human subjects, and care of laboratory animals. According to HHS, this is based on contentions by institutions which have not been quantified, but which HHS is inclined to accept.

Based on our analysis of the entire amounts of indirect costs which were incurred by the 82 NIH grantees in our review and used during the fiscal years 1980 and 1982 negotiations, the cost pools for sponsored project administration, departmental administration, and operations and maintenance had the largest percentage increases during this period. From 1980 to 1982, the departmental administration pool, for the 82 NIH grantees included in our review, had the largest dollar increase. Overall, our analysis showed that from 1980 to 1982, grantees' direct costs increased by about 22 percent, while the overall increase in indirect cost pools was 30 percent. This 30-percent increase in the indirect cost pools amounted to \$98 million.

The following table indicates the changes which occurred in the 82 NIH grantees' individual indirect cost pools.

Increases in Indirect Cost Pools
from 1980 to 1982

<u>Indirect cost pools</u>	<u>Dollar amount</u> <u>FY 1980</u>	<u>Dollar amount</u> <u>FY 1982</u>	<u>Dollar increase</u>	<u>Per-centage increase</u>
	----- (millions) -----			
Sponsored project administration	\$ 26	\$ 35	\$ 9	35
Departmental administration	101	135	34	34
Operations and maintenance	93	125	32	34
Use allowance for buildings and equipment	27	35	8	30
Library	16	20	4	25
Other	4	5	1	25
General administration	<u>60</u>	<u>70</u>	<u>10</u>	17
Total	<u>\$327</u>	<u>\$425</u>	<u>\$98</u>	30

Although we did not determine the reasons for the increases in the cost pools noted above, the Higher Education Price Index, which is most often used to measure average price changes at research institutions, showed that between 1980 and 1982 there were price changes affecting these cost pools. According to the price index, personnel costs--such as salaries, wages, and fringe benefits--went up 20.2 percent, while nonpersonnel costs--such as utilities, equipment, supplies, and books--increased 27.0 percent. The greatest increases were recorded by utilities (up 44.1 percent), fringe benefits (up 29.0 percent), and services (up 24.2 percent). The price index showed that the costs for professional salaries in research and development increased by 18.1 percent in the same period.

NEED TO RESOLVE BASIC ISSUES CONCERNING
ALLOCATION OF INDIRECT COSTS TO RESEARCH
AND WHO SHOULD PAY FOR THEM

In recent years, the proper allocation of an institution's indirect costs to its research activities and the sharing of these costs between the government and universities have been the subjects of much debate. Studies by the U.S. Commission on Government Procurement (1972), the President's Biomedical Research Panel (1976), the American Council on Education (1976), the Commission on Federal Paperwork (1976), the National Commission on Research (1980), and the management consulting firms of Peat, Marwick, Mitchell and Company (1977), and Coopers and Lybrand (1982), among others, have raised a number of fundamental issues concerning what constitutes indirect costs on federally sponsored research projects and who should be responsible for paying them.

The most recent report which included a discussion of this subject was issued by the National Academy of Sciences. The May 1983 National Academy of Sciences report Strengthening the Government-University Partnership in Science gave added impetus to the need to more fully address the issue of indirect costs.

In its report, the National Academy of Sciences' Ad Hoc Committee on Government-University Relationships in Support of Science addressed the issue of indirect costs, among other things, because of its impact on the productivity of scientific research and education in the United States. The ad hoc committee recommended and the National Academy of Sciences subsequently established a new and independent body--the Forum on Government-University Relationships--to (1) improve communications between the government and universities and (2) facilitate resolution of the problems they share.

Regarding the recurring difficulties among academic administrators, investigators, and the federal government over indirect costs, the committee concluded in its report that, among other things:

"Resolution of the conflict over indirect costs requires that representatives of all parties to the government-university relationship:

- o Develop consensus on criteria for determining the actual costs of research, regardless of who pays.
- o Examine current and alternative methods for apportioning costs among functions of the university and among individual projects.
- o Agree on methods for determining and apportioning costs.
- o Agree on the rationale for sharing of costs by government and the universities."

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"Imposition of a uniform indirect cost rate on all universities would be both unsound and inequitable."

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"A wider choice of mutually acceptable methods for treating indirect costs is needed. Such methods should include some that offer simplicity in accounting procedures in exchange for less than full recovery of costs."

PROPOSED POLICY OPTIONS TO REDUCE
INDIRECT COST REIMBURSEMENTS

Concern expressed in the Congress about indirect health research costs has focused on the recurring topic of what can or should be done about the increasing payments for indirect costs. To comply with congressional direction, HHS has studied the issues and has recommended policy options to simplify the indirect cost reimbursement process and implement reduced payments to NIH grantees for indirect cost reimbursements. The House and Senate Appropriations Committees recommend further cooperative study between the federal government and educational institutions of the issues before adoption of new policies.

In recent years, a major HHS effort to address NIH indirect cost-related matters was conducted by the Advisory Committee to the Director, NIH. At its meeting in October 1980, the Advisory Committee considered several alternatives for funding and accounting for research activities. These included:

- The adoption of a "Fixed-Obligation Grant" which would alter the existing grantee funding mechanism. In this regard, an award would be made on a fixed obligation basis, not a cost reimbursement basis. This means that NIH would establish, through negotiations, the total amount of the award for the initial budget and would obligate itself to pay that amount to the institution. In return, the institution and the principal researcher would accept the responsibility to pursue the research proposed for the budget period and would have full use of the total amount awarded.
- The adoption of the National Science Foundation model for payment of NIH indirect costs, which would require NIH and the grantee to establish the indirect cost rate and the total project cost before the award. Increases in the indirect cost rate during the life of the project would be permitted, but the total project cost would not be increased.

At the Advisory Committee's March 1981 meeting, the Director, NIH, announced the creation of a Working Group on Costs of Biomedical Research to address the issues raised by the committee. The Working Group prepared an interim report in September 1981 after meeting on four separate occasions to consider the complex issues of research cost and accountability raised by the Advisory Committee.

In October 1981, the Advisory Committee adopted recommendations made by the Working Group in its September 1981 report. These recommendations included:

- development of a plan for a limited trial of the Fixed-Obligation Grant concept and
- development of a plan to (a) eliminate retrospective adjustment of indirect cost rates and (b) redefine eligible indirect costs (e.g., eliminating some or all expenses for "departmental administration" and permit increased reimbursement for more measurable indirect costs).

In November 1981, the Senate Committee on Appropriations asked HHS to report on measures taken or planned for containing the growth of indirect costs. While recognizing the legitimacy of such costs, the Committee was concerned that such costs may not always be subject to the same rigorous review or budgetary constraints applied to direct costs.

In its February 1982 report to the Committee on this matter, NIH discussed two possible steps to limit reimbursements for indirect costs, as follows:

". . . using the negotiated indirect cost rate applicable at the time of each award, NIH could set the allowance for indirect cost at that level and rescind the current practice which allows for settlement adjustments based on final rates (usually upward). This would be similar to the practice of the National Science Foundation, the Department of Defense, and virtually all other Federal agencies. If NIH were to adopt this approach, it collectively would reduce its grantees' claim for additional indirect costs by an estimated \$10-15 million annually. . .

"Another step that could be taken would be to re-define the categories of eligible and ineligible expense with respect to reimbursement of indirect costs. For example, certain university administrative expenses could be defined as ineligible expenses, thus eliminating indirect cost recovery for these cost elements from grant and contract support. Conversely, amortization of the capital costs of research equipment, now an ineligible item, could be made eligible.¹ Such a pattern of charges could be effected so that indirect costs were easier to understand and justify and that total Federal outlays were reduced. Again, grantees would receive less reimbursement for indirect costs and would have to eliminate some expenses or find other sources of funding."

¹HHS officials advised us that this statement refers to interest expense on the acquisition of equipment, which was an unallowable cost when the February 1982 report was written by NIH. Interest expense on the acquisition of buildings and of equipment costing \$10,000 or more acquired after June 30, 1982, was made allowable by the August 3, 1982, revision of OMB Circular A-21.

NIH also indicated in its February 1982 report that it planned to reduce fiscal year 1983 reimbursements for indirect costs by 10 percent, thus limiting the allowance to 90 percent of actual indirect costs based on each negotiated rate. HHS expected this to be an efficient and uncomplicated way to achieve budget economies in the immediate future and allow time to consider alternative approaches that may be more suitable as a basis for long-term policy. The Congress subsequently did not approve the proposed 10-percent reduction of indirect costs. None of the other recommendations made by NIH were approved.

In September 1982, the House Committee on Appropriations requested the Secretary of HHS, in cooperation with the Director, NIH, to review the matter of indirect costs and submit a report containing conclusions and recommendations to the committee. In March 1983, NIH prepared a report in response to this request.

In its report, NIH recognized that expenditures for the indirect costs of federally sponsored biomedical and behavioral research have been growing at a faster rate than direct costs in recent years. NIH indicated that the consequence of this trend has been that proportionately fewer federal dollars have been available each year to meet the direct costs of research. Accordingly, NIH stated that HHS believed that expenditures for indirect costs should be subjected to new restraints. In keeping with this proposed change in policy, the fiscal year 1984 NIH budget submitted to the Congress assumed reductions of \$72 million in indirect costs from the levels NIH grantees would otherwise receive under current policy.

One policy change recommended, in conjunction with whichever other indirect cost containment approach(es) might be adopted, was to rescind the practice of allowing subsequent adjustments, usually upward, to negotiated rates. This same change had been suggested in NIH's February 1982 report to the Senate Committee on Appropriations concerning measures taken or planned for containing the growth of indirect costs.

In addition, NIH cited several other ways in which indirect cost expenditures could be limited in fiscal year 1984. These included both short- and long-term policy options.

The short-term options were:

1. Across-the-Board Reduction--a 10-percent reduction to each grantee's allowable indirect cost reimbursement.

2. Capping Selective Indirect Cost Components--a selective limitation for reimbursements for those components of indirect costs that seem least related to research (e.g., departmental administration) and are the most difficult to measure and evaluate.

3. Establishment of a Standard Fixed Allowance--a fixed allowance for indirect costs established on a government-wide basis.

4. Establishment of a Fixed Allowance Tailored to Each Institution's Historical Level--an individualized allowance for indirect costs established for each grantee by fixing the indirect cost/total cost ratio based on the experience of recent years.

Of the short-term options presented, HHS indicated a preference for a variation of short-term option 4 for fiscal year 1984. In implementing the proposed variation of this option, HHS informed the Committee that each institution's reimbursement level would be tailored to its own historical experience.

The long-term options proposed in the March 1983 NIH report were:

1. Redefinition of Reimbursable Indirect Costs--a redefinition of certain types of currently allowable indirect costs in OMB Circular A-21 which are frequently considered to have little relevance to research programs. Specifically, this option would involve (a) a more restrictive definition of allowable departmental administration indirect costs (for example, limit reimbursement to only departmental administrative committees which benefit federal research programs), not only to reduce indirect cost rates but also to lessen recordkeeping for salary costs, (b) a tightening of the definitions of general and sponsored projects administration indirect costs to avoid the shifting of costs from one administrative cost pool to another, and (c) a more liberal reimbursement for facility costs associated with research activities which are relatively easy to verify.

2. Choice of a Fixed Allowance or a Negotiated Rate--an approach whereby a grantee would choose either a fixed allowance or continue the "rate negotiation" process. Under this option, (a) all direct and indirect cost categories would be standardized and an explicit determination made of what types of expenditures could be classified within the categories claimed as indirect costs and (b) institutions' accounting systems would be standardized.

Of the long-term options presented, HHS believed that serious consideration should be given to option 1 which called for a redefinition of reimbursable indirect costs. In this regard, an internal HHS staff paper proposed that the components of university indirect cost rates in OMB Circular A-21 be modified, as follows.

"Use a standard formula to determine the amount allowed for department administration expenses. The recommended formula would allow 20% of the salaries and expenses of deans and department heads, which is the same as the formula currently used by 'small institutions' under Circular A-21 (i.e., those spending less than \$3 million a year in Federal funds).

"Establish more restrictive definitions of other administrative cost components in Circular A-21 to prevent a shifting of costs from departmental administration to other cost pools.

"Liberalize reimbursement for costs of university facilities (e.g., more liberal allowances for the use of buildings and equipment, interest expense, etc.) to moderate the impact of the departmental administration formula."

The staff paper showed the estimated annual dollar impact of possible changes on HHS' Public Health Services (primarily NIH) research grants. A proposed decrease of \$162 million due to a limitation allowed for reimbursement of departmental administration expenses was offset by increased reimbursements in other categories of indirect costs which would range in total from \$87 to \$183 million, depending on the amounts of proposed increases chosen. Specifically, HHS' paper showed the following:

<u>Description</u>	<u>Indirect cost changes</u>
Limit allowable departmental administration expenses to 20 percent of the salaries and expenses of deans and department heads	- \$162 million
Increase annual use allowances on equipment from the current 6-2/3 percent to between 10 and 20 percent of equipment cost	+ \$14 to \$58 million

<u>Description</u>	<u>Indirect cost changes</u>
Increase annual use allowances on buildings from the current 2 percent to between 2-1/2 and 4 percent of building cost	+ \$6 to \$25 million
Allow interest expense	Unknown at this time
Permit allowance for imputed interest on funds used to purchase buildings and equipment at 8 to 12 percent a year on one-half of asset cost	+ \$67 to \$100 million

The staff paper cited the following advantages of the proposal.

"Targets reduction on 'softest' part of indirect cost rates.

"Alleviates concerns about the relevance of departmental administration to research programs and makes the institutions' overall indirect cost rates easier to justify to Congress, program officials and faculty as representing costs which truly benefit the programs.

"Reduces documentation problems and paperwork for the institutions, particularly in the area of 'effort reporting.'

"Reduces disputes in audit and negotiation of rates."

The staff paper also stated that specific changes to OMB Circular A-21 would be based on discussions with OMB, the Office of Science and Technology Policy, and the university community.

For fiscal year 1984, the Congress approved full funding of indirect cost reimbursements for NIH grantees. None of the policy options proposed by NIH in March 1983 to reduce indirect cost reimbursements in fiscal year 1984 and beyond were approved.

In the House Report No. 98-357, the House Appropriations Committee stated that it was not convinced that the present system for calculating indirect costs was equitable or sufficiently

uniform to be fair to all educational institutions. Further, the Committee believed the problem was not unique to NIH and should be addressed on a government-wide basis. Accordingly, the Committee recommended that the administration, in consultation with representative grantee institutions, take the necessary steps to formulate a government-wide plan for calculating indirect costs on research supported by all federal research and development agencies.

In Senate Report No. 98-247, the Senate Appropriations Committee noted that the extramural research community was working with HHS to achieve a resolution of the indirect cost problem. The Committee supported the position, tentatively agreed to by government and university officials, to ask the President's Science Adviser to undertake a study of the problem of indirect costs. The Committee expressed its belief that it is time for all sides to work effectively together to finally establish reasonable methods for reimbursing indirect costs of biomedical research.

CHAPTER 3

INADEQUATE ASSURANCE

THAT HHS NEGOTIATED INDIRECT COST RATES

ARE REASONABLE

Our review of the process used to establish indirect cost rates on NIH's research grants disclosed that it does not provide adequate assurance that the negotiated rates are reasonable because:

- The basis established by OMB for reimbursing departmental administration expenses, which make up the largest indirect cost pool, involves the use of subjective estimates made by grantees that are not easily verified.
- NIH grantees' indirect cost proposals are seldom audited.
- Negotiation files do not always contain a written explanation of the specific reasons for significant increases in individual indirect cost pools. Grantees have not been required to provide such explanations when they submit their proposals.

DEPARTMENTAL ADMINISTRATION EXPENSES
ARE SUBJECTIVE AND NOT EASILY VERIFIED

According to HHS officials, departmental administration expenses, unlike the expenses for most other indirect cost pools, such as operation and maintenance or building and equipment use allowances, cannot be independently verified by its negotiators or auditors. As a result, this indirect cost component, which comprises about 35 percent of the indirect cost rate at large institutions, is based primarily on estimates developed by NIH grantees of personnel time spent on administrative activities, such as committee, departmental, and faculty meetings and other departmental level administration that institutions contend benefit federally sponsored research projects. Estimates of the charges to this cost pool are subjective and are not easily verified because teaching, research, and administrative activities in an educational institution are frequently intermingled and unseparable.

Regarding the inherent difficulties of distributing salaries and wages, OMB Circular A-21 states that:

". . . in an academic setting, teaching, research, service, and administration are often inextricably intermingled. A precise assessment of factors that contribute to costs is not always feasible, nor is it expected. Reliance, therefore, is placed on estimates in which a degree of tolerance is appropriate."

Much has been written about the inherent difficulty of distributing salaries and wages (time and effort reporting) within an academic setting. Several sources have indicated that:

- It is impossible to segregate teaching from research from administration in doing basic research and to assign precise percentages to these activities.
- It is well established that time and effort reporting for academic staff is meaningless.
- The university is very much a mixed product environment--where research, teaching, and service are meant to be so closely entwined that they cannot be disentangled. In such an environment, any documentation of faculty effort inherently will be imprecise.

HHS officials told us that their concern with the departmental administration cost pool was expressed during the development of the 1979 revision to OMB Circular A-21. At that time, HHS made a series of recommendations to OMB for changes to the circular. HHS indicated that departmental administration was the largest of the cost pools at most institutions and the one most susceptible to excessive charges, particularly in regard to documenting the appropriate faculty effort relevant to the sponsored research projects. To control charges to this cost pool, HHS recommended that charges for faculty (and other professional) salaries allowed in the departmental administration cost pool be limited to those related to administrative committees and specific formal assignments which benefit federal programs. OMB Circular A-21, however, does not contain such specific restrictions.

HHS officials believe that its negotiators are at a disadvantage in negotiating indirect costs for departmental administration expenses because it is difficult to question estimates of personnel administrative efforts when an institution's payroll distribution system meets prescribed criteria set forth in OMB Circular A-21. These officials told us that indirect cost charges for departmental administration expenses will continue to increase unless some effective control is established. HHS' concerns about departmental administration costs were substantiated throughout our review.

The following example illustrates the problems one HHS negotiator found in trying to evaluate departmental administration costs. More specifically, it illustrates the difficulty in trying to verify a significant increase in a grantee's departmental administration cost pool.

At one university, total indirect costs negotiated for 1981 increased \$3.1 million, or 41 percent, over 1980. The university's direct cost base increased \$2.3 million, or 13 percent, during the same period. Departmental administration expenses--the university's largest indirect cost pool--increased \$1.6 million, or 52 percent, over the previous year. However, neither the grantee's indirect cost proposal nor HHS' negotiation file contained a written explanation of why the indirect costs increased at a seemingly disproportionate rate in comparison to the direct costs.

It appeared that the university properly documented departmental administration costs for 1981 in accordance with the requirements of OMB Circular A-21. Similarly, the HHS negotiator appeared to conscientiously review the costs proposed by the university. The negotiation file showed that the negotiator made a site visit to the grantee to review its 1981 proposal. The file showed that the negotiator made a comparative analysis of indirect cost pools and identified cost increases in them. In this regard, he found that a major reason for the university's overall increase of \$1.6 million in departmental administration was a 185-percent increase in the School of Medicine's departmental administration expense from 1980 to 1981.

The negotiator noted in the file that he took no exception to the \$1.6 million increase over 1980 because the grantee substantiated these costs using a personnel activity reporting system which HHS had approved as complying with Circular A-21. He noted, however, that

". . . Since the individuals complete the (personnel activity forms) and certify as to their effort it is unlikely that any exception could be taken in this area. The only possible area of contention appears to rest in what constitutes a full teaching load or percentages thereof based on the number of courses being taught by instructors in the various departments. Results of reviews in this area would be highly subjective and since the basic data was not in a format that would lend itself to statistical sampling techniques this matter was not pursued at this time."

There are two methods permitted by OMB Circular A-21 to identify allowable departmental administration costs used in establishing overall indirect cost rates. One method is generally used for large institutions and another for small ones.¹ The OMB circular allows large institutions to be reimbursed for departmental administration costs on the basis of institutions' personnel activity reporting systems which HHS has found to be subjective and difficult to verify. On the other hand, small institutions may compute their allowable departmental administration expenses simply on the basis of 20 percent of the salaries and expenses of deans and department heads. This standard allowance requires no further documentation and eliminates the subjective judgments which must be made in identifying departmental administration costs of large institutions which rely on personnel activity reporting systems.

It is important to note that an August 3, 1982, revision to OMB Circular A-21 has further relaxed the documentation required to substantiate salary costs contained in indirect cost proposals. The revision was made as a result of numerous expressions of concern by faculty members and university spokespersons about the requirements for documentation of salary costs and was based primarily on recommendations by the American Association of Universities and the Council of Scientific Society Presidents.

In a draft of this report sent to OMB for review and comment, we proposed that the Director, OMB, explore the feasibility of establishing a fixed allowance for departmental administration expenses to replace the cost reimbursement method now used. In its comments on this proposal, OMB pointed out that it had explored this approach with several agencies and believed that fixed rates were currently being negotiated with a number of institutions.

In response to our inquiry concerning the extent of fixed rate negotiations taking place in connection with NIH grants to educational institutions, HHS headquarters officials told us that Yale University is the only institution with whom HHS negotiates that has a fixed rate for departmental administration expenses. This rate was negotiated for a multi-year period based on data provided through a personnel activity reporting system authorized by OMB Circular A-21. As a result, the manner in which reimbursable departmental administration expenses are determined will remain unchanged even though a fixed rate may be negotiated for a multi-year period.

¹A small institution is one where the total direct cost of work covered by OMB Circular A-21 does not exceed \$3 million in a fiscal year. Large institutions are those which exceed that amount.

FEW AUDITS ARE MADE TO DETERMINE
VALIDITY OF INDIRECT COSTS

In recent years, the HHS Office of Audit has made relatively few audits of the indirect cost proposals prepared by the educational institutions receiving NIH funding. According to HHS audit officials, HHS reduced its efforts because multi-billion dollar HHS programs, such as Social Security, Medicare, and Medicaid, had higher audit priority, and emphasis was placed on organization-wide audits of grantees by nonfederal auditors.

During the 5-1/2-year period ended April 30, 1983, the HHS Office of Audit issued 50 indirect cost audit reports on educational institutions.² These audits involved 47 of the estimated 700 grantees who annually receive NIH research funds. The table below shows the number of reports issued in each fiscal year during this period.

Number of Indirect Cost Audit Reports
Issued by HHS Office of Audit

<u>Fiscal year</u>	<u>Reports issued</u>
1978	17
1979	9
1980	3
1981	11
1982	9
1983 (through 4/30/83)	<u>1</u>
	<u>50</u>

Information obtained from the Defense Contract Audit Agency (DCAA)--the other major federal agency responsible for auditing educational institutions--showed that DCAA, from October 1, 1977, through June 30, 1981, issued 73 indirect cost audit reports on 25 NIH grantees. Similar statistical information was not readily available from DCAA for the period July 1, 1981, through April 30, 1983.

In addition to indirect cost audits of NIH grantees performed by the HHS Office of Audit and DCAA, public accountants also perform such audits. For the 5-1/2-year period from

²An additional 15 indirect cost audit reports on nonprofit organizations and hospitals were issued by the HHS Office of Audits during this period.

October 1978 through April 1983, we identified three indirect cost audit reports issued by public accountants to educational institutions.

HHS Office of Audit was unable to satisfy negotiators' requests for audits

Due to higher priority audit areas, the HHS Office of Audit has not been able to conduct all indirect cost audits requested by HHS' negotiators. In fiscal year 1982, the HHS Office of Audit devoted about 8 staff years of its overall effort of 100 staff years of audit at educational institutions to auditing indirect costs at colleges and universities. This audit effort was expended out of a total of 550 staff years of audit effort conducted by the HHS Office of Audit.

From the beginning of fiscal year 1978 through mid-1982, negotiators in the four HHS regional offices visited had the assistance of indirect cost audit reports on 24 of the 82 grantees whose negotiation files we reviewed. Of the remaining 58 grantees who were not audited, HHS negotiators had requested audits on an additional 24 grantees, but the audits were not conducted because of higher priority audit work.

HHS audit officials told us that the indirect cost audits they perform are generally conducted at educational institutions with large amounts of indirect cost reimbursements. Other HHS officials told us that negotiators are aware that few indirect cost audits are performed, and as a result, negotiators are reluctant to request them.

Significant amounts of proposed indirect costs not accepted by HHS auditors

The HHS indirect cost audit reports we examined discussed significant amounts of proposed indirect costs which were not accepted by the HHS auditors. We reviewed the 50 audit reports issued from October 1977 through April 1983, of which 42 contained sufficient detail to identify the dollar amounts not accepted for inclusion as research indirect costs. Since 1 of the 42 audit reports we examined questioned significant amounts of indirect costs solely because of inadequate documentation, we excluded the amounts from further analysis.

The other 41 audit reports discussed \$515 million in proposed indirect costs, of which \$64 million (or 12.4 percent) was not accepted by the auditors. According to data provided by the HHS Office of Audit, 7,530 staff days (or an average of 184 days per audit) were expended on these 41 audits. Consequently,

about \$8,500 was not accepted by HHS auditors for each staff day spent on the 41 audits.

One of the 41 audit reports did not have the indirect costs broken out by individual cost pools. However, the other 40 audit reports showed that the auditors did not accept proposed research-related indirect costs totaling \$57.8 million, of which \$30.3 million was in the three administration cost pools.

The amounts not accepted by the auditors in the 40 audit reports are listed below:

<u>Indirect cost pool</u>	<u>Amounts not accepted</u> (millions)
Departmental administration	\$20.2
Operation and maintenance	11.1
Library	7.7
General administration	6.2
Sponsored projects administration	3.9
Equipment use allowance	3.3
Building use allowance	2.9
Student services	2.2
Miscellaneous other cost pools	<u>.3</u>
Total	<u>\$57.8</u>

We inquired into the negotiators' disposition of audit findings in the 24 audit reports issued for the 82 grantees in our review. The 24 audit reports questioned proposed indirect research costs totaling \$29.3 million. Of this amount, the negotiators' disposition of \$12.6 million was not determinable because the negotiation records had been sent to storage. Of the other \$16.7 million, involving 17 grantees, the negotiators sustained \$13.9 million, or 83 percent, of the amounts questioned and reduced indirect cost rates accordingly.

The following examples illustrate the recommended audit disallowances that the negotiators sustained.

--A grantee proposed about \$8 million for departmental administration covering a 2-year period. The auditors recommended disallowance of \$998,342 representing primarily clinical service costs that related solely to patient care activities and not to sponsored research.

- A grantee proposed \$6.7 million for departmental administration covering a 4-year period. The auditors recommended disallowance of \$804,953, in most part, because the grantee did not allocate a proportionate share of these costs to other activities that benefited from departmental administration.
- The auditors concluded that a grantee overstated departmental administration expenses by \$397,398 because the grantee claimed (1) indirect costs that had already been charged as direct costs to federal projects and (2) personnel costs that were not related to sponsored research.
- A grantee proposed \$4.9 million for operation and maintenance covering a 4-year period. The auditors recommended disallowance of \$650,883 resulting from unallowable costs, such as capital expenditures and sinking fund payments, and improper methods of allocating costs to federally sponsored programs.

Negotiators in the four HHS regional offices generally stated that an indirect cost audit is a valuable tool in the negotiation process. Directors of the Divisions of Cost Allocation in the HHS regional offices stated that a further reduction in audit coverage would make it more difficult to negotiate acceptable rates because audits provide more in-depth analysis of proposed indirect costs than can be accomplished in a 2- to 5-day site visit by a negotiator.

Nonfederal auditors to conduct audits of educational institutions

The HHS Office of Inspector General Audit Work Plan for fiscal years 1982-83 indicated that HHS will no longer perform routine indirect cost audits at educational institutions. Instead, nonfederal auditors will conduct periodic organization-wide audits required by OMB Circular A-110. HHS will perform special audits on request, when possible.

The Circular A-110 audits are intended to ascertain the effectiveness of the financial management systems and internal procedures that have been established to meet the terms and conditions of grants and agreements with federal agencies. Generally, the audits are conducted on an organization-wide basis to test the fiscal integrity of financial transactions as well as compliance with appropriate laws and regulations.

While the scope of the review of indirect cost matters conducted by nonfederal auditors under the Circular A-110 single audit approach will not include the same level of detailed

transaction testing as in a specific indirect cost audit, the single audit approach will determine whether:

- An indirect cost proposal has been submitted.
- An indirect cost rate has been negotiated for the year under review.
- Indirect cost recovery was (1) based on the proper indirect cost rate negotiated between HHS and the institutions, (2) allowable under the terms of the agreement, and (3) accurately computed using the correct indirect cost rate applied to the proper base.
- The institution has a reliable system for the preparation of the indirect cost proposal. Under this procedure the auditor will use primarily inspection, observation, and confirmation of procedures as opposed to detailed testing of indirect costs. In reviewing the system and controls the auditor will determine whether:
 - a. The institution has an orderly system for compilation of data and statistics for preparation of the indirect cost proposal.
 - b. The preparers of indirect cost proposals are knowledgeable of OMB Circular A-21 cost principles and are properly supervised.
 - c. Financial data in the proposal agree with or can be reconciled to audited basic general-purpose financial statements or the accounting records.
 - d. Statistical data in the proposal are based on documented surveys or other special studies (e.g., documented space surveys are available to support square footage rental charges).
 - e. Cost sharing had been identified and appropriately included in the base data used to calculate the proposed indirect cost rate.

To carry out its plan for nonfederal auditors to conduct organization-wide audits at educational institutions, HHS has developed draft guidelines. These guidelines, drafted by HHS in June 1982 and expected to be issued in final form by OMB in June 1984, state that the basic purpose of the audits is to determine whether an institution is fulfilling its accountability standards and whether additional auditing is necessary.

HHS audit officials told us that if instances of noncompliance are found, the auditor is supposed to determine whether the instances were for isolated nonrecurring reasons or represented deficiencies either in the design of the controls or in their implementation. The deficiency, the deficiency's actual or potential impact, together with the recommendation(s) to correct any deficiency are to be discussed in the audit report. Based on an evaluation of these data, the HHS Office of Audit will determine whether additional work by HHS auditors is warranted.

HHS audit officials believe that better audit coverage will be obtained by the Circular A-110 audits because the audits will screen a large number of institutions to identify problem areas. Thus the Circular A-110 single audit will serve as a building block for additional audit work, including indirect cost audits, by or on behalf of HHS. According to HHS audit officials, the Circular A-110 audits are intended to identify problems and should provide data to assist individual negotiators in analyzing indirect cost proposals and requesting additional audit assistance when desired.

The HHS Office of Audit plans to provide technical assistance and guidance to help implement the single audit concept. It also plans to review all audit reports issued for conformance with established audit standards and examine selected audit working papers to verify the quality of the audit work.

NEGOTIATION FILES DO NOT
ALWAYS CONTAIN WRITTEN
EXPLANATIONS FOR COST INCREASES

Although total indirect costs continue to increase each year, negotiations we reviewed generally resulted in reductions to the indirect costs proposed by institutions. According to HHS officials, total reductions to proposed indirect costs amount to \$150 million to \$200 million annually on a nationwide basis for nonprofit organizations, hospitals, and educational institutions. HHS attributes approximately \$100 million of this total to negotiations with educational institutions. However, our review of HHS negotiation files showed that the negotiations were often concluded without a written explanation of the specific reason(s) for significant increases from one fiscal year to the next in indirect cost pools. Also, the scope and depth of analyses performed in establishing indirect cost rates were not always documented in the negotiation files.

Examination of documentation in HHS regional office files for the annual negotiations conducted over a 3-year period (1980 through 1982) for the 82 NIH grantees in our review showed an overall net negotiated reduction of about 6 percent of the total

of sponsored research indirect costs contained in cost proposals submitted for approval. This percentage reduction was calculated based on our examination of documentation available for 199 of the 246 annual negotiations for the 82 grantees and amounted to about \$44 million. In all, the 199 indirect cost proposals totaled \$744.1 million.

Of the 199 indirect cost proposals submitted by NIH grantees, 142 resulted in negotiated reductions. Of the \$574.1 million in indirect costs included in the 142 proposals, \$44.3 million was not allowed as a result of the negotiation process. Of the remaining 57 proposals, 51 totaling \$158.0 million were submitted by grantees and negotiated with no change, and 6 proposals were negotiated with relatively small increases, totaling \$276,000 over the \$12.0 million proposed. Although HHS negotiated actual reductions to about 71 percent of the indirect cost proposals we examined, the overall indirect costs negotiated increased from year to year because the indirect cost proposals submitted annually increased.

According to HHS headquarters officials, HHS negotiators perform a trend analysis to compare the amount of each proposed indirect cost pool to the amount negotiated for the prior year or years. These officials indicated that special scrutiny is given at this time to the cost pools which increased significantly from the amounts negotiated for the prior year, and as part of this review, a negotiator is usually able to identify the reasons for the increase. However, at the time of our review no government-wide or HHS requirements called for institutions to provide written explanations of the specific reasons for cost increases in indirect cost proposals. In most of the cases we reviewed, this information was not included in the negotiation files. Consequently, we were generally unable to identify the specific reasons for indirect cost increases at individual institutions.

To determine the extent to which HHS negotiation files provided written explanations of the reason(s) for significant³ increases in indirect cost pools, we analyzed the files for

³We judgmentally determined a "significant" indirect cost pool increase to be a particular cost pool (i.e., departmental administration) which increased by at least 10 percentage points more than the increase in the direct cost base as compared to the previous year. For example, if the direct cost base increased 15 percent from 1 year to the next, a particular indirect cost pool would have to increase by at least 25 percentage points from the previous year to be considered a significant indirect cost pool increase.

negotiations HHS conducted in recent years. We concentrated on negotiations which took place in 1981 and 1982 with the 82 grantees in our review. Our analysis was limited to grantees whose indirect cost rates had been finalized. At the time of our review, 13 of the 82 grantees had costs that had not been finalized for the years in which the indirect cost rates negotiated in 1981 and 1982 were based. Therefore, our analysis of significant increases in indirect cost pools without an explanation of the reason for the increase was limited to the other 69 grantees.

We found that 49 of the 69 grantees reviewed had significant indirect cost pool increases in fiscal years 1981 and/or 1982 for which written explanations were not contained in the HHS negotiation files. These 49 grantees collectively had 165 individual cost pools with unexplained increases. Of the 165 cost pools, 80 were administration cost pools (34 departmental administration, 24 sponsored project administration, and 22 general administration).

The table on the following page shows the number of grantees we identified that had indirect cost rates established in 1981 and/or 1982 without written explanations for significant increases in indirect cost pools.

In reviewing the negotiation files, we noted that the reasonableness of negotiation adjustments to the proposed indirect costs often could not be independently assessed because such adjustments appeared to be arrived at judgmentally. Although mutually agreed to by the negotiator and the educational institution, the basis for the adjustment sometimes was not readily evident from the documentation in the negotiation file. The negotiation files also disclosed evidence that the negotiator accepted significant increases in cost pools on the basis of offsetting decreases in other cost pools or by comparing rates of increase at a particular institution to a nationwide average for that type of institution (i.e., public or private) rather than a detailed analysis of the reason(s) for the specific increase in a particular cost pool.

Several illustrative instances in which written explanations of significant increases in individual indirect cost pools were not available in HHS negotiation files are provided in appendix II.

Written Explanations for
Significant Increases in Indirect Cost Pools Not Included
in Negotiation Files

<u>HHS region</u>	<u>Number of grantees</u>	<u>Number of grantees with finalized in- direct cost rates</u>	<u>Number of grantees with unexplained significant indirect cost pool increase(s)</u>			
			<u>FY 1981 only</u>	<u>FY 1982 only</u>	<u>Both FYs 1981 and 1982</u>	<u>Total</u>
I (Boston)	20	16	1	6	7	14
III (Philadelphia)	21	12	1	4	1	6
IV (Atlanta)	29	29	5	5	14	24
VIII (Denver)	<u>12</u>	<u>12</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>5</u>
	<u>82</u>	<u>69</u>	<u>9</u>	<u>16</u>	<u>24</u>	<u>49</u>

Matters relating to documentation in regional office negotiation files were discussed with the Director of HHS' Office of Procurement and Assistance Financial Management. He agreed that problems existed in the area of file documentation. However, based on previous evaluations of the Divisions of Cost Allocation by technical staff from the HHS Office of Procurement, Assistance and Logistics, the Director expressed the opinion that the negotiators' cost proposal reviews were generally adequate even though this could not always be ascertained solely from a review of the negotiation files.

HHS has acted to improve the documentation of negotiation files. To reemphasize and expand the file documentation requirement contained in the Staff Handbook on Cost Negotiations, the Director of the Office of Procurement and Assistance Financial Management issued a directive to all Divisions of Cost Allocation on February 23, 1983, which required that negotiation files be documented to show:

- what aspects of an indirect cost proposal were reviewed,
- the significant aspects of a proposal that were not reviewed and why,
- the adjustments that were made and why, and
- how the approved rates were computed.

File documentation was also a major topic of discussion at national training workshops for HHS negotiators in September 1982 and 1983 and in several telephone conference calls with negotiators. HHS is monitoring regional compliance with the February 1983 directive as part of its onsite reviews of regional operations.

In a draft of this report sent to HHS for review and comment, we proposed that the Secretary require NIH grantees to include in the indirect cost proposals submitted to HHS negotiators, a written summary of the reasons for significant increases in individual indirect cost pools. In addition, we proposed that the Secretary require HHS negotiators to determine the reasonableness of these summaries as part of their evaluations of indirect cost proposals and discuss this matter in their summary of negotiations. HHS has acted on our proposed changes.

On December 12, 1983, HHS instructed its Divisions of Cost Allocation to request grantees to provide a written explanation or analysis of any significant proposed increase in any category of indirect costs. Additional explanations of rate increases are to be requested on a case-by-case basis if they are needed

in the analysis of a proposal and the reasons for the increase are not readily apparent in the grantee's proposal. A grantee's explanation is supposed to be evaluated as part of the overall analysis of the proposal and the results of the evaluation documented.

These actions are to be taken for all indirect cost proposals received after March 31, 1984, from major NIH research grantees receiving total federal research funds exceeding \$5 million a year. Because of HHS' action, we have not included a recommendation on this matter in our final report.

CONCLUSIONS

We believe the process used to establish indirect cost reimbursement rates has not provided adequate evidence to fully assure that the negotiated rates are reasonable. Based on our review, rates are being established and subsequent reimbursements made to NIH grantees despite (1) difficulties involved in independently verifying the largest category of indirect costs, (2) relatively few HHS indirect cost audits being performed, and (3) inadequate written documentation in HHS negotiation files to explain the specific reasons for significant increases in indirect cost pools from the previous year.

Our review substantiated the difficulty experienced by HHS negotiators in attempting to measure and evaluate departmental administration expenses during the negotiation process. As a result, we believe that NIH grantees' indirect cost proposals will continue to contain estimates for about one-third (see p. 20) of the large institutions' indirect costs which are difficult to independently verify unless improvements can be made to the method by which the amount of departmental administration reimbursement is currently determined.

Although relatively few HHS indirect cost audits have been conducted in the past, these audits have resulted in significant amounts of indirect costs being questioned and subsequently disallowed by HHS negotiators. The decision by the HHS Inspector General to spend more of HHS' audit resources on reviews of multibillion-dollar HHS programs, such as Social Security, Medicare, and Medicaid, rather than individual indirect cost audits is one which the Inspector General must consider annually in setting his priorities, assigning staff, requesting additional staff resources from the Congress, and advising the Congress of where the resources will be applied.

HHS has acted to improve the documentation of its negotiation files. In reaction to a proposal contained in the draft of

this report sent to HHS for its review and comments, HHS instructed its cost negotiators to request grantees to provide a written explanation or analysis of any significant proposed increase in any category of indirect costs. This action will better assure the reasonableness of the amounts involved and provide a basis for fully explaining increases from year to year in individual indirect cost pools.

RECOMMENDATION TO
DIRECTOR OF OMB

We recommend that the Director, OMB, revise Circular A-21 to establish a fixed allowance for large institutions' departmental administration expenses to replace the cost reimbursement method now used. Such an allowance could be computed in a manner similar to that permitted by OMB Circular A-21 for small institutions. The allowance could vary, if necessary, on an institution-by-institution basis, depending on their individual circumstances.

Such an allowance should represent a reasonable amount needed for effective research administration at the departmental level and, to the extent possible, be both relatively simple to compute and not result in disproportionate annual fluctuations compared to the direct costs of research.

This recommendation is consistent with the May 1983 National Academy of Sciences report that concluded, among other things, that a single overall uniform indirect cost rate applicable to all universities and covering all indirect costs would be unsound and inequitable. In fact, the establishment of a fixed allowance for departmental administration expense could contribute to other National Academy of Sciences report conclusions that called for alternate and more simplified methods of allocating indirect costs.

AGENCY COMMENTS
AND OUR EVALUATION

In commenting on a draft of this report, HHS generally agreed with our findings and recommendations. HHS indicated that the department and university community had tentatively agreed that a study of indirect costs should be undertaken or arranged by the Executive Office of the President's Office of Science and Technology Policy. HHS planned to discuss arrangements for this study with Office of Science and Technology Policy officials. If such a study is undertaken, HHS suggested that the feasibility of establishing a fixed allowance for departmental administration expenses be considered in the study.

HHS concurred in the proposal contained in our draft report for the Secretary of HHS to require NIH grantees to include in the indirect cost proposals submitted to HHS negotiators a written summary of the reason for significant increases in individual indirect cost pools. As discussed on page 33, HHS later issued a directive to its regional cost negotiation offices that this information be included in future indirect cost proposals from NIH grantees.

HHS suggested in its comments that an effort be made to lower the overall level of indirect costs incurred by grantees by examining the requirements of recordkeeping, etc., imposed by the federal government. HHS believed this effort should also be included in the Office of Science and Technology Policy study.

OMB stated that the proposed recommendations in our draft report for OMB to explore the feasibility of establishing a fixed allowance for departmental administration expenses and for HHS to require grantees to justify significant increases in indirect costs were similar to those made recently by the President's Private Sector Survey on Cost Control and consistent with its Circular A-21.

In regard to the fixed allowance recommendation, OMB believed that negotiations of fixed rates rather than detailed recordkeeping of actual expenses by educational institutions could reduce paperwork while maintaining accountability for federal funds. In fact, OMB pointed out that it had already explored this approach with several agencies and believed that fixed rates had been negotiated with a number of institutions.

As discussed on page 23, the fixed rate negotiation within HHS, to which OMB made reference in its comments, is the establishment of a departmental administration rate for a multi-year period. While this process eliminates the annual difficulty of determining the proper allocation of a university's departmental administration expenses to its research function, it retains the same difficulties inherent in properly distributing salaries and wages whenever such a fixed rate is established. In our opinion, a revision to OMB Circular A-21 is needed to (1) eliminate the need to rely exclusively on personnel activity reporting systems and (2) minimize difficulties currently encountered in attempts to independently verify departmental administration expenses.

In commenting on the number of HHS indirect cost audits conducted, OMB expressed concern that the increasing emphasis being placed by HHS on organization-wide grantee audits might result

in HHS falling behind in its OMB Circular A-88 audit responsibilities. In that event, OMB stated that it may be necessary to contemplate reassigning some of these audit responsibilities to other federal agencies.

LIST OF 82 NIH GRANTEES INCLUDED
IN GAO'S REVIEW OF INDIRECT COST REIMBURSEMENTS AND
NIH DIRECT COSTS AND INDIRECT COST REIMBURSEMENTS RECEIVED
IN FISCAL YEAR 1982

<u>NIH grantees</u>	<u>FY 1982</u> <u>Direct costs</u>	<u>FY 1982</u> <u>Indirect costs</u>
(thousands)		
<u>HHS Region I (Boston)</u>		
Boston College	\$ 488	\$ 205
Boston University	11,835	6,863
Brandeis University	3,730	2,275
Clark University	118	44
Dartmouth College	5,072	2,368
Harvard University	} 32,694	22,912
Harvard University School of Public Health		
Harvard University School of Medicine		
Northeastern University	617	281
Tufts University	\$ 5,407	\$ 3,130
University of Connecticut (Storres)	2,481	1,164
University of Connecticut Health Center	8,542	3,538
University of Lowell	41	29
University of Maine	246	96
University of Massachusetts (Worcester)	3,621	2,569
University of Massachusetts (Amherst)	1,567	715
University of New Hampshire	265	116
University of Vermont (College of Medicine)	6,347	2,551
Wesleyan University	603	266
Yale University	32,984	17,635

Source: NIH Indirect Cost Management System Grant Fiscal Status Report By Vendor (dated 9/30/82).

<u>NIH grantees</u>	<u>FY 1982 Direct costs</u>	<u>FY 1982 Indirect costs</u>
(thousands)		
<u>HHS Region III (Philadelphia)</u>		
American University	\$ 106	\$ 35
Catholic University	110	61
Drexel University	307	192
George Washington University	3,098	1,657
George Washington University School of Medicine		
Georgetown University	3,318	1,361
Hahnemann Medical College	2,851	1,474
Howard University	2,892	2,295
Johns Hopkins University	35,083	16,234
Lehigh University	110	82
Temple University	7,760	3,829
Thomas Jefferson University	2,967	2,091
University of Delaware	858	451
University of Maryland (College Park)	818	335
University of Maryland (Baltimore)	10,052	3,167
University of Pennsylvania	33,532	18,477
University of Pittsburgh	11,856	5,279
University of Virginia	9,957	4,011
Virginia Commonwealth University	2,349	824
Virginia Polytechnic Institute	962	425
West Virginia University	1,150	455
<u>HHS Region IV (Atlanta)</u>		
Alabama A&M University	250	83
Auburn University	49	15
Clemson University	56	39
Duke University	23,528	10,823
Emory University	10,115	3,837
Florida State University	1,480	634
Memphis State University	112	42
Mississippi State University	119	35
North Carolina State University	1,224	474
Tennessee State University	449	144
Tuskegee Institute	458	106
University of Alabama (Birmingham)	18,226	6,160

<u>NIH grantees</u>	<u>FY 1982</u> <u>Direct costs</u>	<u>FY 1982</u> <u>Indirect costs</u>
(thousands)		
<u>HHS Region IV (Atlanta) (cont'd)</u>		
University of Alabama (Huntsville)	\$ 69	\$ 28
University of Alabama (Tuscaloosa)	183	84
University of Florida	7,517	3,055
University of Georgia Research Foundation	1,998	739
University of Georgia School of Medicine	1,221	497
University of Kentucky Research Foundation	3,098	1,397
University of Louisville	1,532	745
University of Mississippi	91	37
University of Mississippi Medical Center	3,199	936
University of North Carolina	19,279	6,963
University of South Carolina	2,024	737
University of South Carolina School of Medicine	4,592	1,209
University of South Florida	1,380	663
University of Tennessee	1,841	785
University of Tennessee Center for the Health Sciences	4,350	1,445
Vanderbilt University	15,460	7,868
Wake Forest University (Bowman Gray School of Medicine)	5,417	1,683

<u>NIH grantees</u>	<u>FY 1982</u> <u>Direct costs</u>	<u>FY 1982</u> <u>Indirect costs</u>
	(thousands)	
<u>HHS Region VIII (Denver)</u>		
Brigham Young University	\$ 224	\$ 78
Colorado State University	2,320	784
Montana State University	219	81
North Dakota State University	160	44
South Dakota State University	145	47
University of Colorado	4,336	1,614
University of Colorado School of Medicine	12,448	2,827
University of Montana	284	113
University of North Dakota	355	111
University of Utah	12,165	4,694
University of Wyoming	393	134
Utah State University	411	128

ILLUSTRATIVE EXAMPLES OF LACK OF
WRITTEN DOCUMENTATION IN HHS NEGOTIATION FILES
FOR SIGNIFICANT INCREASES IN
INDIVIDUAL INDIRECT COST POOLS

The following examples illustrate instances where specific reasons for significant increases in indirect cost pools were not documented in the HHS negotiation files. (The general, departmental, and sponsored projects administration cost pools are referred to collectively as administrative costs).

UNIVERSITY A

In 1982, the university's negotiated total indirect costs increased \$1.7 million, or 26 percent, from the previous year, while its direct cost base increased \$4.5 million, or 23 percent. However, the university's largest indirect cost pool--departmental administration--increased \$1.3 million, or 74 percent, from the previous year. Neither the grantee's indirect cost proposal nor the HHS negotiator's notes on his analysis of the proposal explained why departmental administration costs increased disproportionately.

In establishing the university's indirect cost rate, the negotiator visited the university. He noted in the negotiation file that the departmental administration pool was allocated improperly (i.e., on a school-by-school rather than a department-by-department basis). However, during the negotiation no changes were made to the costs proposed by the university for this cost pool.

An HHS regional official told us that in establishing the indirect cost rate, the negotiator considered that (1) the overall indirect cost rate increased from 35.0 to 35.8 percent, which HHS indicated is a relatively low rate compared to other universities, (2) the total indirect cost increase was in line with the direct cost base increase, and (3) the administrative cost increases were offset by minor fluctuations in other indirect cost pools compared to the previous year.

UNIVERSITY B

Total indirect costs negotiated for 1982 increased \$415,000, or 11 percent, over 1981. The largest indirect cost pool--departmental administration--increased \$411,000, or

30 percent. The direct cost base increased \$213,000, or 3 percent. Documentation in the negotiation file did not explain why the indirect costs negotiated for the departmental administration pool increased 30 percent while the direct cost base increased only 3 percent.

The negotiation file showed that the negotiator made a site visit to the university to review its 1982 proposal. The file showed also that the negotiator made a comparative analysis and identified cost increases by indirect cost pool. The negotiator's written summary of negotiations, however, did not mention the departmental administration pool or the reasons for significant increases negotiated for the pool. The negotiator accepted the costs proposed for the pool without adjustment. The last audit of this grantee covered direct costs incurred in fiscal year 1976.

UNIVERSITY C

Total indirect costs negotiated for 1980 increased \$390,000, or 16 percent, over 1979. The largest indirect cost pool--departmental administration--increased \$373,000, or 69 percent. The direct cost base increased \$1.3 million, or 37 percent.

The negotiator noted in the negotiation file that the university's effort reporting system was quite complicated and difficult to understand. He noted that he believed many of the effort reports reviewed overstated time claimed as departmental administration and, based on his review, he negotiated a \$50,000 reduction to the \$964,000 proposed for departmental administration.

The negotiator further noted that, although federal funds at this university were relatively small, he regarded the indirect cost rate he negotiated to be too high, and he was convinced an audit would prove this to be true. He noted that without an audit, the university administrators were very adamant about the accuracy of their indirect cost study even when presented with evidence to the contrary. He also noted that the last audit of this university was in 1970 and every effort should be made to get an audit of the university. Information in the negotiation files indicated that an audit was requested in October 1978, but the audit was never begun because of higher priority audit work.

UNIVERSITY D

The university's direct cost base for 1979 and 1980 increased 17 percent and 14 percent, respectively, over the previous year. On the other hand, the operation and maintenance cost pool increased 84 percent and 36 percent, respectively, during the same period. The increases in operation and maintenance indirect costs for the 2-year period were \$583,000.

The negotiator stated in the negotiation file that he required a \$50,000 reduction in proposed operation and maintenance costs for 1979 because his site visit showed that the university's square footage space review did not account for the joint use of rooms. That is, if a room was used mostly for one function, such as research or instruction, it was considered to be used exclusively for that function. The negotiator indicated in the file that:

". . . in the absence of a space survey, we will never know for sure what the figure should be. And since time did not permit an extensive space review, I estimated that as much as 10 percent of the (square footage) claimed for research was questionable. Based on this estimate I negotiated the . . . (\$50,000) reduction in the O&M (operations and maintenance) pool."

In negotiating the 1980 costs, the negotiator made no site visit and accepted the university's proposed 36-percent increase in operation and maintenance costs without change and without documenting in the negotiation file the reasons for the significant increase in cost. The negotiator also accepted the university's proposed \$325,000, or 25 percent, increase in administrative costs without documenting the reasons for the increase. The negotiator noted in the file that he accepted proposed costs for 1980 because no travel funds were available for a site visit and the costs appeared reasonable.

UNIVERSITY E

Total indirect costs negotiated for 1982 increased \$668,000, or 41 percent, over 1981. The three administration indirect cost pools increased \$379,000. Of this amount, the largest administration cost pool--departmental administration--increased \$286,000, or 70 percent. Another indirect cost pool--operation and maintenance--increased \$270,000, or 50 percent over the previous year, but there was no negotiated reduction to this cost pool. The direct cost base increased 23 percent.

The negotiation files disclosed that the negotiator made a site visit to the university to discuss the proposal. During the discussion, a university official explained that department heads and their secretaries did not complete personnel activity reports. Instead, their entire salary costs were included in the departmental administration pool. As a result of this disclosure, the negotiator required a \$268,000 reduction to proposed costs for departmental administration but provided no documentation to explain the basis for the amount of the adjustment.

In commenting on the facts presented above, the acting director of the regional Division of Cost Allocation informed us that the negotiator was justified in negotiating the departmental administration pool in the manner described because:

- the negotiator would have had to spend several weeks reviewing the entire time reporting system to make any further adjustments, and in the negotiator's judgment such a review was not warranted and
- the cost negotiated for the pool, as a percentage of the direct cost base, was 10 percent lower than the average for all public institutions for 1982.

Regarding the operations and maintenance cost pool, the acting director indicated that the negotiator felt that it would be in the best interest of the government not to pursue this matter because the university had previously agreed not to initiate a study which would have resulted in the allocation of substantial amounts of increased utility costs to sponsored research. Also, the acting director stated that the operation and maintenance cost pool negotiated was not out of line with similar institutions in the region.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

FEB - 1 1984

Mr. Richard L. Fogel
Director, Human Resources
Division
United States General
Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

The Secretary asked that I respond to your request for our comments on your draft of a proposed report "No Easy Solutions on How to Control and Assure Reasonableness of Rising Indirect Costs on NIH Research Grants." The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,

Richard P. Kusserow
Inspector General

Enclosure

Comments of the U.S. Department of Health and Human Services (HHS) on GAO Draft Report "No Easy Solutions on How to Control and Assure Reasonableness of Rising Indirect Costs on NIH Research Grants"

GAO Recommendations

1. The Director of OMB should "... explore, in conjunction with educational institutions and federal agencies involved in the funding of research activities ... the feasibility of establishing an allowance for departmental administration to replace the cost reimbursement method now used."

As indicated in the Senate Report on the Department's FY 1984 Appropriations Bill, the Department and the university community have tentatively agreed that a study of indirect costs should be undertaken or arranged by the Office of Science and Technology Policy. The Department plans to discuss arrangements for this study with OSTP officials in the near future. If the OSTP study is undertaken, we suggest that the feasibility of establishing an allowance for university departmental administration expenses along the lines recommended by GAO be considered in the study.

2. The Secretary should "... require NIH grantees to include in the indirect cost proposals submitted to HHS negotiators, a written summary of the reason for significant increases in individual indirect cost pools. The Secretary should require HHS negotiators to determine the reasonableness of these summaries as part of their evaluations of indirect cost proposals and discuss this matter in their summary of negotiation."

We concur in this recommendation and have already issued a directive to our regional cost negotiation offices that this information be included in future indirect cost proposals from NIH grantees where the proposal reflects a significant increase in an indirect cost pool. The directive also requires that the negotiator's evaluation of this information be documented in the negotiation files. This information will further strengthen the documentation of negotiation files in line with the actions the Department initiated in September, 1982 and February, 1983 to improve file documentation as noted on page 33 of the GAO report.

Additional Comments

In addition to the actions recommended by GAO, we believe that an effort should be made to lower the overall level of indirect costs incurred by grantees by examining the requirements of recordkeeping, etc. imposed by the Federal Government. Any

GAO note: Page reference has been changed to correspond to page number in the final report.

effort to deregulate should be across the entire Federal Government to avoid the necessity of separate negotiations with each Federal agency and varying requirements which would tend to increase indirect costs. We therefore suggest that this effort be included in the OSTP study mentioned earlier.



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

FEB 16 1984

Mr. Richard L. Fogel
Director
Human Resources Division
United States General
Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

This is in reply to your letter of November 28, 1983, which enclosed the draft report entitled, "No Easy Solutions on How to Control and Assure Reasonableness of Rising Indirect Costs on NIH Research Grants." The draft report recommends that OMB and the Department of Health and Human Services explore the feasibility of establishing a fixed allowance to cover the departmental administration component of university indirect cost rates. The draft report also recommends that HHS require grantees to justify significant increases in indirect cost pools.

These are similar to recommendations made recently by the President's Private Sector Survey on Cost Control, and are consistent with our Circular A-21, "Cost principles for educational institutions." We believe that negotiation of fixed rates in lieu of detailed record-keeping of actual expenses could reduce paperwork while maintaining strict accountability for Federal funds. In fact, we have already explored this approach with the agencies, and it is our understanding that such rates have been negotiated with a number of institutions. We understand that HHS has already implemented the second recommendation.

The draft report also notes that HHS has made relatively few audits of indirect cost proposals recently. It cited as reasons that audit emphasis has shifted to other programs within the department, and that emphasis has been placed on organization-wide audits of grantees by non-Federal auditors, i.e., "single audits." Although we appreciate the need for these shifts, we are nonetheless concerned that they may result in HHS falling behind in its responsibilities under Circular A-88, "Indirect cost rates, audit, and audit followup at educational institutions." In that event, it may be necessary to contemplate reassigning some cognizance responsibilities to other agencies.

We appreciate the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. R. Wright, Jr.", written over a typed name and title.

Joseph R. Wright, Jr.
Deputy Director

(103968)



2/1/55

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