

Document Downloaded: Monday July 27, 2015

COMPENSATION EFFORT COMMITMENTS AND CERTIFICATION

Author: COGR

The focus of this document is to address issues related to salary compensation, effort commitments, and certification policies and practices, as well as the federal regulations governing these issues. In light of several significant audit findings resulting in multi-million dollar settlements, discussion on the troublesome issues needs to progress, and the core issues clarified. University and research institution administrators and faculty are committed to addressing these issues, and will continue to carry out the important stewardship responsibilities associated with managing federal funds.

Published Date: 03/01/2007

COUNCIL ON GOVERNMENTAL RELATIONS

MARCH 1, 2007

POLICIES AND PRACTICES

COMPENSATION, EFFORT COMMITMENTS, AND CERTIFICATION



TABLE OF CONTENTS

A. ABOUT THIS DOCUMENT	4
B. EXECUTIVE SUMMARY	5
A BALANCED APPROACH ORGANIZATION OF THE COGR PAPER NEXT STEPS Faculty Workload and Compensation The Intent of OMB Circular A-21 Inter-related Projects and Cost Transfers	6 7 7 8
C. REGULATORY BACKGROUND AND HISTORICAL CONTEXT	
D. EFFORT REPORTING BASICS, WITH ROLES AND RESPONSIBILITIES	
WHAT IS EFFORT REPORTING?	12
WHY MUST EFFORT BE CONFIRMED/CERTIFIED?	12
WHO MUST REPORT EFFORT?	12
HOW MUST EFFORT BE REPORTED?	12
WHEN MUST EFFORT BE REPORTED?	12
IS THERE A "BEST WAY" TO DO EFFORT REPORTING?	13
ROLES AND RESPONSIBILITIES	13
E. COMPENSATION, EFFORT COMMITMENTS, AND CERTIFICATION	14
Organizational Notes	14
1. COMPENSATION	
Chapter 1a. Defining Full Workload and the Institutional Base Salary	
Full Workload	
40-hour Week and/or the "Hours-worked" Approach	
Other Institutional Documents that Capture Work Activity	
Institutional Base Salary	
Chapter 1b. Management of Multiple Pay Sources; Clinical Practice Plans	
Chapter 1c. Special Care for Supplemental Compensation	20
Intra-university Consulting	
Incidental Work	
Dean and Department Chair Appointments	
Teaching an Evening/Weekend Class	
Bonus Pay	
Predominantly Teaching Institutions and Research Foundations Supplemental Compensation, Conditions for Allowability	
Chapter 1d. Appointments, Summer Salary, and Related Issues	
Summer Salary and Periods Outside the Academic Year	
Part-time Faculty	
Nine Month Appointments, Nine over Twelve, and Similar Arrangements	
Vacation and Sick Leave	
Multiple Appointments	
Hourly Employees	
2. EFFORT COMMITMENTS AND CERTIFICATION	
Chapter 2a. Accountability and Stewardship of Federal Funds	26
Examples, Work Fluctuations and Agency Approval	
After-the-fact Confirmation	
Chapter 2b. Faculty Effort, Special Circumstances	
Research Faculty Position	
Contribution of Effort	
Timing of Effort, Academic Year and Summer	
Chapter 2c. Level of Precision	30

De minimis Activity	
Clinical Trials	
Defined "Sub-activities" in A-21	
Chapter 2d. Proposal Commitments and Overcommitments	32
Chapter 2e. Cost Sharing, K Awards, Salary Limitations (Caps), and No-Cost Extensions	34
Mandatory Cost Sharing	
Committed Cost Sharing	
Voluntary Uncommitted Cost Sharing	
K Awards	
Salary Limitations (Caps)	
No-Cost Extensions	
Chapter 2f. Cost Transfers and Confirmations of Effort Distribution	
Post Certification Changes and Other Guidance	
Chapter 2g. Consistency in Estimating and Reporting Costs	
Proposing in Person Months	
Chapter 2h. Education and Training Programs	40
3. TECHNICAL CONSIDERATIONS	42
Chapter 3a. Payroll Distribution System Requirements	
Chapter 3b. From Payroll Distribution to Effort Reporting	
Chapter 3c. The Three Examples	
Plan Confirmation (J10c(1))	
After-the-fact Activity Records (J10c(2))	
Multiple Confirmation Records (J10c(3))	
Chapter 3d. Responsible Person With/Using Suitable Means of Verification	
Graduate Students	
Chapter 3e. Frequency of Reporting	
Chapter 3f. Standard Format, Use of Percentages, and the Residual Category	
Use of Percentages	
Residual Category	
Chapter 3g. Confirmation and Reconciliation	
F. CONCLUDING THOUGHTS: EVALUATING QUALITY AND COMPLIANCE OF TH	
SYSTEMS	
APPENDIX 1 - OMB CIRCULAR A-21, SECTION J10	
APPENDIX 2 - JANUARY 5, 2001 OMB CLARIFICATION MEMO	APP. 2 - 1
AUTHORS AND CONTRIBUTORSBAG	CK PAGE

*If you are viewing this electronically, ctrl + click will bring you to the relevant section of the document.

A. ABOUT THIS DOCUMENT

The Council On Governmental Relations (COGR) is an association of leading research institutions. One of COGR's important activities is assisting institutions to develop policies and effective practices that reflect the mutual interests of the research community (research institutions, their representative associations, federal agencies, and other sponsoring entities).

The focus of this document is to address issues related to salary compensation, effort commitments, and certification policies and practices, as well as the federal regulations governing these issues. In light of several significant audit findings resulting in multi-million dollar settlements, discussion on the troublesome issues needs to progress, and the core issues clarified. University and research institution administrators and faculty are committed to addressing these issues, and will continue to carry out the important stewardship responsibilities associated with managing federal funds.

Our objectives in this paper are twofold: 1) To provide the research community with a comprehensive description of federal policies and corresponding institutional practices for managing payroll distribution and effort reporting systems, and 2) To use the detailed discussions in the paper as a springboard to advise decision-makers, leaders, and officials from the research community of the need to restore the balance between accounting oversight requirements and the necessary regulatory flexibility to produce good science.

Policies and practices at research institutions vary, and this document does not attempt to set standards. Rather, when appropriate, this document suggests good management policies and practices that some institutions may find useful. The practices and policies in this document are not an exhaustive list of good approaches, and an institution's decision not to adopt them does not, in any way, mean that the institution is failing to meet legal requirements, or even research institution norms. This document also does not provide legal advice. Accordingly, if legal and/or other professional advice is sought, the advice of a lawyer or other professional should be obtained. COGR cannot and does not warrant that the approaches and information discussed in this paper are legally sufficient, and is not suggesting that other approaches are not equally sufficient from a legal or any other perspective.

The *Executive Summary* discusses the current environment, the importance of the partnership between research institutions and the federal government, and addresses several of the more important findings presented later in this publication. It is followed by a discussion on the *Regulatory Background and Historical Context*. Next, *Effort Reporting Basics* are provided to introduce several concepts on effort reporting. The main body of the document, *Compensation, Effort Commitments, and Certification*, addresses the core topics of salary compensation and effort reporting. Finally, *Concluding Thoughts* suggests several ideas that may help an institution begin to evaluate the quality and compliance of its payroll distribution and effort reporting systems. *Appendices 1 and 2* allow the reader to have ready reference to the Office of Management and Budget (OMB) Circular A-21, Section J10, and the January 5, 2001 OMB Clarification Memo, both of which contain important federal guidance, and which are referenced throughout this document.

COGR appreciates the contribution of all its members in bringing new challenges, and strategies for addressing them, to the attention of its colleagues across the country. For this document, the COGR Costing Committee, the COGR Board, and volunteers in the research administration community made important contributions. *Special recognition is given to the authors of and contributors to this paper , as shown on the back page of the publication.*

Reproduction of this document for purposes of sale or profit is prohibited without the written consent of the Council on Governmental Relations. Reproduction for educational and related purposes, however, is encouraged.

B. EXECUTIVE SUMMARY

The University – Research Institution – Federal Government partnership has been a successful relationship for over fifty years. According to the National Science Foundation (also see http://www.nsf.gov/statistics/infbrief/nsf07311/), science and engineering research and development expenditures at universities and colleges were over \$45 billion in fiscal year 2005, with the federal government share exceeding \$29 billion. These programs fuel economic growth and contribute to the country's position as a technological leader in the world.

Many factors can be attributed to the positive alliance, including a focused and committed national research policy, open communication between research institutions and federal agencies, and strong leadership throughout the research community. In addition, one of the pillars of the successful partnership has been an effective and productive balance between accounting oversight requirements and the necessary regulatory flexibility to produce good science. However, this balance is being threatened.

It is significant to note that approximately two-thirds of direct program expenditures are for salaries, wages, and employee benefit costs applicable to faculty and staff. Accordingly, a major element of demonstrating accounting and oversight responsibility relates to the treatment of these costs. Unfortunately, a combination of *qui tam* suits initiated under the False Claims Act, voluntary disclosure by selected institutions, and findings through federal audits have raised the concern that institutional policies and accounting practices may be inadequate and/or out of compliance. From 2003 to 2006, more than ten institutions have sustained financial settlements related to research administration exceeding \$1 million, and a number of other institutions have experienced disallowances on grant-specific audits. In at least seven of the cases exceeding \$1 million in settlements, salaries charged, effort commitments, and certification of effort (i.e., effort reporting) for individuals paid on federal awards have been at issue.

This paper does not attempt to argue the facts of these audit findings and settlements. University and research institution administrators are keenly aware of the public trust and stewardship responsibilities associated with managing federal funds. However, the aftermath of these settlements has created a tension in the time-tested research partnership. While research institutions must accept responsibility for infractions driven by substandard management practices, the history and hallmark of the research community has been a commitment to sound financial management, consistent application of good costing principles, and ongoing development of best administrative practices. This obligation is taken seriously.

The underlying theme of this paper is to remind decision-makers, leaders, and officials from the research community of the need to restore the balance between accounting oversight requirements and the necessary regulatory flexibility to produce good science. If federal regulatory and oversight entities see the recent findings and violations as a systematic, industry-wide problem that requires heightened federal supervision and regulation, the partnership will be threatened and the practice of science will suffer.

A BALANCED APPROACH

The environment that fosters successful research programs within a research institution is markedly different from the environment found with many commercial contractors who provide concrete goods and services to the federal government. The discovery process, so critical to productive research and higher learning, is integrally connected to the teaching and service programs within research institutions. An important discovery or insight might occur to a faculty member at the office, at home, while helping a graduate student learn to do research, or while scrutinizing results in the laboratory. Consequently, any method used to demonstrate accountability must take into account the fluid nature of the environment that creates successful research, rather than trying to force it into an approach consistent with the strict accounting requirements of the commercial service contractor industry.

The Office of Management and Budget (OMB) Circular A-21, Cost Principles for Educational Institutions, is the primary federal guidance on cost principles and requirements applicable to grants, contracts, and other agreements. The language in Circular A-21 has been fine-tuned over its fifty-year history to recognize the unique characteristics and challenges of conducting and accounting for scientific research.

Each institution, possessing its own unique combination of staff, facilities, and experience, should be encouraged to conduct research and educational activities in a manner consonant with its own academic philosophies and institutional objectives ... (A-21, A.2.b)

In the use of any methods for apportioning salaries, it is recognized 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. (A-21, J10b(1)(c))

Regulations, such as Circular A-21, were written to strike balance, and federal funding agencies have supported a tempered approach to implementing strict accounting and oversight models. However, in a climate of audit findings and financial settlements, those federal officials responsible for oversight understandably increase their collective levels of scrutiny. Unfortunately, this has resulted in audits and reviews of academic institutions that have taken on characteristics of the audits and reviews of commercial service contractors, which most agree is not conducive to meeting the nation's research goals and policies.

ORGANIZATION OF THE COGR PAPER

While the underlying theme of this paper is to emphasize the need to restore the balance, the approach used is to present a comprehensive discussion of the critical issues related to institutional polices on compensation, effort commitments, and certification of effort, as they relate to federal awards.

The Regulatory Background and Historical Context (Section C) and the Effort Reporting Basics (Section D) provide the introductory context of the paper. The main body of the document, Compensation, Effort Commitments, and Certification (Section E), addresses the core issues. Finally, Concluding Thoughts (Section F) suggests several ideas that may help an institution begin to evaluate the quality and compliance of its payroll distribution and effort reporting systems.

Section E is organized into nineteen chapters. At the end of each chapter are two summaries, "Hot Buttons and Key Considerations" and "Policy and Practice Suggestions," which provide reviews of the important discussion points, as well as effective practices. Though the research community strives for effective practices, the reality is that solutions are not always straightforward, and can be achieved only through active and creative engagement between research institutions and the federal government.

NEXT STEPS

At a minimum, this paper can be used as a resource for those individuals at the institution responsible for managing the payroll distribution and effort reporting processes. Federal policies and institutional interpretations of those policies, as well as technical considerations related to compensation, effort commitments, and certification of effort have been addressed in significant detail.

Furthermore, several of the issues raised as "Hot Buttons" can be springboards for discussions between decision-makers, leaders, and officials from the research community. The underlying theme of this paper is to remind those industry leaders of the need to restore and maintain the balance between accounting oversight requirements and the necessary regulatory flexibility to produce good science. Recently, the balance has been disrupted. However, if balance can be reestablished, the continuing success of the University – Research Institution – Federal Government partnership is ensured.

COGR has identified the following issues presented in this paper as the most significant. If constructively addressed by leaders and officials in the research community, this could result in reducing institutional and faculty uncertainty, without compromising the public trust and stewardship responsibilities associated with managing federal funds.

FACULTY WORKLOAD AND COMPENSATION

- Strict interpretations of full workload and institutional base salary result in little flexibility for faculty members to volunteer time or engage in other institutional or academic activities. Under the strict interpretations, any institutional activity in which a faculty member engages would have to be accounted for, and institutional funding provided. This situation creates a tension where faculty members feel the institution "owns" them 24 hours a day, including weekends. (See Chapter 1a, Defining Full Workload and the Institutional Base Salary)
- Several institutions have begun to struggle with the situation where full-time, non-tenured faculty, working solely on sponsored awards, lose grant support. These institutions may not have institutional funding available to replace the lost support. If the base salary (and base rate of pay) is subsequently reduced, a question arises as to what salary base should be used to propose future salary support. If a reduced rate is used, it becomes difficult to restore salary to the original base level when the new funding comes in. This results in a disincentive to the full-time, non-tenured faculty to continue to pursue careers in research. (See Chapter 1a, Defining Full Workload and the Institutional Base Salary)
- Regulations governing the allowability of supplemental pay are clear in some situations, and not so in others. An institution must have uniform and consistently applied policies in place to support supplemental compensation. These policies include: a definition of full workload that sufficiently enumerates full workload requirements (such that it is obvious when full workload is exceeded), and the amount paid as the revised base salary must be calculated and paid in accordance with salary policies of the institution and be commensurate with the devoted effort. In the past, inconsistencies in interpretation by various federal agencies and officials have created uncertainty as to when supplemental pay is allowable. (See Chapter 1c, Special Care for Supplemental Compensation)
- The NSF, through a number of its directorates, has historically funded research with the expectation that an individual conduct his/her research in the summer months, and that

2/9ths of his/her salary be charged during the same summer period. In reality, individuals funded in these situations provide significant effort during the academic year. However, in the summer months, NSF expectations seem to indicate that in order to have salary charged solely to the NSF award(s), the individual can be engaged only in NSF-related activity. If promised commitments are provided, and in many cases exceeded, over the course of the academic year and summer months, it would be beneficial to the research community to establish NSF-endorsed solutions. This could include "applying credit" to the summer months for effort contributed during the academic year, or even standardizing payment of academic year salaries. (See Chapter 2b, Faculty Effort, Special Circumstances)

Because many proposal submissions are not funded, it is accepted practice for a faculty member to have "potential commitments" that exceed 100% of full time effort (based on the institutional definition of full workload). However, auditors may view this situation negatively, even though institutions and the awarding agencies have procedures in place to implement and approve downward adjustments to committed effort on awarded projects. (See Chapter 2d, Proposal Commitments and Overcommitments)

THE INTENT OF OMB CIRCULAR A-21

- Criteria for the timing and what constitutes an *"independent internal evaluation"* of an effort reporting system, the definition of who has *"suitable means of verification"* of an effort report, and the requirements for "timeliness" (how long after the effort reporting period should the report be completed) are all examples of where Circular A-21 is either silent, or is not specific in its guidance. Without specific guidance, the institution must define criteria based both on its interpretation of A-21, and generally understood practices used throughout the research community. **(See Chapters 2a, 3d, and 3e)**
- If the institution has developed reasonable policies in those situations where specific criteria in Circular A-21 are not provided, these policies should be acceptable. In such situations, Circular A-21 was written to allow the institution to develop internal standards and apply those standards in a consistent manner. If the institution's internal standards are reasonable and being followed, an audit finding may be inappropriate. (See Chapters 2a, 3d, and 3e)
- The "level of precision" discussion embodies much of the confusion that surrounds effort reporting. Where accounting requirements are clearly defined, research institutions are responsible for following the guidelines and demonstrating compliance. Where Circular A-21 allows for reasonable estimates, federal guidance clearly allows institutions to implement corresponding policies and practices. Furthermore, practices such as the 5 percent reporting variance threshold (i.e., establishment of a reasonableness range) should be formally recognized by appropriate federal officials so that institutions can confidently implement like practices. (See Chapter 2c, Level of Precision)

INTER-RELATED PROJECTS AND COST TRANSFERS

Within a given principal investigator's laboratory, projects are often closely related, and differentiating effort between closely related projects can be difficult. Though borrowing funds from one project to support charges on a second project is unallowable, the research community could be well-served by expanding the definition on the "interrelatedness of research," and applying a more realistic standard as it relates to effort

reporting and cost transfer requirements (see Chapter 2f, Cost Transfers and Confirmations of Effort Distribution).

• Corrections necessary because reported effort is different from the estimated payroll distribution represent legitimate transactions to finalize provisional charges. Because excessive cost transfers are sometimes synonymous with poor internal controls, it would be more appropriate to characterize these transactions as "confirmations of effort distribution," rather than "cost transfers" (see Chapter 2f, Cost Transfers and Confirmations of Effort Distribution).

COGR and its member institutions are committed to implementing and supporting institutional policies and practices that will meet and exceed federal expectations related to accounting and oversight requirements. However, when federal interpretation of these requirements potentially affects the quality of science, it is important for COGR and other leaders in the research community to respond and initiate communications with the appropriate officials. This paper addresses the important issues of compensation, effort commitments, and certification of effort as they relate to federal awards, and sets the stage for further dialogue on these topics.

C. REGULATORY BACKGROUND AND HISTORICAL CONTEXT

Effort reporting regulations are defined primarily in OMB Circular A-21 (see Appendix 1). In addition, OMB Circular A-110, as well as other OMB policy releases (for example, the January 5, 2001 OMB Clarification Memo, see Appendix 2) have an effect on the effort reporting process. Grant Policy Statements specific to each funding agency further contribute to effort reporting expectations (in this paper, we focus most on requirements specific to the National Institutes of Health and the National Science Foundation, as these are the two largest research funding agencies. However, there are more than twenty-five federal agencies that fund research and sponsored programs, and the reader is cautioned to appreciate that there are policy implementation nuances associated with each funding agency).

In developing this document, it is important for COGR to present an historical context for effort reporting, as well as understand the perspective of the federal officials and university representatives who have contributed to OMB Circular A-21 over the course of fifty years. The Circular was first issued September 10, 1958, by the Bureau of the Budget, and was revised in 1967 when the Bureau of the Budget introduced amendments to address faculty salary distribution and methodologies for reporting direct costs – see "Strengthening the Government-University Partnership in Science," as published in Appendix C, History of Effort Reporting, 1984 National Academy of Sciences, "Report of the Workshop on the Effort Reporting Requirements of OMB Circular A-21."

Effort reporting concerns are not new, and discussions have had consistent themes over the fifty-year history. The same report, "Strengthening the Government-University Partnership in Science," documented the following milestones, through 1982:

- The 1967 amendments to Circular A-21 required detailed documentation of faculty effort.
- Faculty reactions were so intense to the 1967 amendments, a 1968 report titled *"Time and Effort Reporting by Colleges and Universities in Support of Research Grants and Contracts"* was commissioned and released (the *"Goode report"*) by a task force chaired by Cecil Goode of the Bureau of the Budget, involving 22 universities and more than 350 individuals.
- As a result of the Goode report, Circular A-21 was revised, resulting in two available salary distribution methodologies, which were more manageable for the research community.
- Through the 1970s, Circular A-21 allowed for the "Stipulated Salary Method" (fixed salary support determined on an individual-by-individual basis, based on agreements with federal officials and university representatives), and the "Payroll Distribution Method" (which allowed for methods similar to the current plan-confirmation and after-the-fact methods).
- By the mid- to late- 1970s, federal officials were questioning institutional compliance with the Circular's payroll requirements. The 1979 revisions to Circular A-21 were an attempt to tighten salary reimbursement requirements. The revisions introduced the "Monitored Workload Method" (similar to the current Plan Confirmation method, requiring monitoring/documenting of workload changes, including indirect cost activities), and the "Personnel Activity Report" method (similar to the current after-the-fact method).
- Faculty strongly objected to certain provisions of the 1979 revisions, though the 1982 revisions that followed (described below) ultimately included many of the same concepts from the final 1979 version.
- In response to faculty concerns, a task force headed by Glenn R. Schleede, Associate Executive Director at the Office of Management and Budget, and Harold Shapiro, President of the University of Michigan, and representatives from the Association of American Universities, the Council of Scientific Society Presidents, and COGR, proposed modifications to A-21. Most of the proposed revisions (some of which were nearly identical to the final 1979 version) were incorporated into the 1982 revisions to Circular A-21.
- The final 1982 version of Circular A-21 included several revisions, as well as rewording of a number of principles from the final 1979 version. The final 1982 version included:

- Precision is not always feasible; instruction, research, service, and administration are intermingled.
- "Suitable means of verification that the work was performed" could be used; "first-hand knowledge" language was eliminated.
- "Accounting for 100% of activity for which the employee is compensated ..." language was removed, though accounting for an employee's activity compensated by the institution still was required.
- A "residual category" could be utilized and indirect activity could be accumulated through other means (e.g., statistical sampling, negotiated fixed rates, etc.)
- o "No best method" exists; general principles and criteria were sufficient.
- o When criteria for acceptable methods were met, no additional documentation required.
- "Monitored Workload" and "Personnel Activity Report" terminology was replaced with "Plan Confirmation" and "After-the-fact Activity Records," respectively.

The final 1982 version of Circular A-21 is the foundation of today's section J10 (see Appendix 1), as it relates to effort reporting. Subsequent revisions in 1986, 1991, 1993, 1996, 1998 and 2004 resulted in no major changes to effort reporting requirements, with the exception of the 1986 revisions, which introduced the 3.6% "faculty administrative allowance (FAA)." This important change eliminated the need for faculty members to report their administrative activity. In effect, faculty administrative effort to be recovered through the institution's facilities and administrative rate would be set at the 3.6% FAA, with no need for further documentation.

An Office of Management and Budget (OMB) Clarification Memo dated January 5, 2001 (see Appendix 2) also is important when defining the current effort reporting requirements. The OMB memo eliminated the requirement to document voluntary uncommitted cost sharing (VUCS), applicable to faculty and senior researchers, for purposes of effort reporting (as well as in defining the organized research base when developing an institution's facilities and administrative rate). Other forms of cost sharing (e.g., committed cost sharing, including voluntary committed) must still be documented. However, simplifying the treatment of VUCS further simplified effort reporting.

Interestingly, Circular A-21 does not utilize the term "effort reporting." However, the core accounting and oversight requirement for institutions requesting reimbursement for work performed by their employees on federal awards is that the commitment promised, and the salaries charged via the payroll distribution system, are supported and accounted for.

At the same time, many federal officials and other knowledgeable commentators reiterate that Circular A-21 provides for a balance between strict accounting and oversight standards, with a flexibility that preserves accountability and stewardship responsibilities (while not creating unnecessary administrative burden):

... the effort reporting rules ... were deliberately designed to free researchers as much as possible from the trouble and aggravation of traditional timekeeping, while at the same time giving federal sponsors reasonable assurance that they are receiving the grant effort they were promised and for which they are being charged. ("Time and Effort Reporting: Overview and Risk Assessment," Report on Research Compliance, National Council of University Research Administrators, Atlantic Information Services, Inc., Robert J. Kenney Jr., January 2006)

The value of the historical context is that it shows a strong partnership and working relationship between federal and university/research institution officials, over many years. Effort reporting will never be popular, but it can be effectively managed to minimize the administrative burden on researchers, while simultaneously strengthening the quality of the research enterprise.

D. EFFORT REPORTING BASICS, WITH ROLES AND RESPONSIBILITIES

This section defines and describes effort reporting, and includes a short explanation of the roles and responsibilities of various offices and positions at an institution.

WHAT IS EFFORT REPORTING?

Effort reporting is the mechanism used to confirm that salaries and wages charged to each sponsored agreement are reasonable in relation to the actual work performed. Certification of an effort report must reasonably reflect the activity for which the employee is compensated by the institution. Cost sharing commitments must also be confirmed, either through the effort report, or through some other reporting mechanism.

Some institutions do not use the terms "effort reporting" and "effort report." However, these institutions still require a confirmation (certification) that the salaries and wages charged to each sponsored agreement are reasonable in relation to the actual work performed. The mechanism for certification may be through a payroll action form, a salary certification form, or other official institutional document. *For simplification purposes, "effort reporting" and "effort report" are the terms used throughout this document.*

WHY MUST EFFORT BE CONFIRMED/CERTIFIED?

Federal regulations (e.g., Circular A-21) require that institutions receiving federal awards maintain systems and procedures documenting the distribution of activity, and associated payroll charges, to each individual sponsored agreement.

WHO MUST REPORT EFFORT?

Any person paid (or with a commitment) on a federally sponsored award must certify that the salary paid (or the commitment) is reasonable in relation to the effort (activity) devoted to the award. The individual faculty or staff member may report his/her own effort, or a *"responsible person with/using suitable means of verification that the work was performed"* may report for the individual.

HOW MUST EFFORT BE REPORTED?

The government does not prescribe a standard method for providing the assurances required under Circular A-21, but identifies specific criteria for an acceptable method and provides examples of acceptable methods (e.g., Plan-Confirmation, After-the-Fact Activity Records). Each institution must develop its own system for effort reporting.

WHEN MUST EFFORT BE REPORTED?

The timing of effort reporting is determined by the method the institution chooses to confirm the effort. For example, the Plan Confirmation methodology requires that "at least annually a statement will be signed...," and that some form of verification take place whenever there is a "significant change in work activity that is directly or indirectly charged to sponsored agreements..." The After-the-fact Activity Records methodology requires that for "professorial and professional staff ... each academic term, but no less frequently than every six months. For other employees, unless alternate arrangements are agreed to ...no less frequently than monthly ..."

IS THERE A "BEST WAY" TO DO EFFORT REPORTING?

There are effective approaches, though no "best way." Circular A-21, in its policy guidance, states: "Each institution ... should be encouraged to conduct research and educational activities in a manner consonant with its own academic philosophies and institutional objectives." Though this language provides for institutional discretion, certain standards must be followed. For example, Circular A-21 states: "The method must recognize the principle of after the fact confirmation or determination so that costs distributed represent actual costs..."

ROLES AND RESPONSIBILITIES

An institution should have an effort reporting policy that defines roles and responsibilities of various offices and individuals at the institution. Upon establishing the policy, a number of offices might have the day-to-day responsibility for managing the effort reporting process. Responsibility could rest with one, or a number of the following offices: Research Administration, the Controller's Office, the Vice President of Research, Grant and Contracts Accounting, Sponsored Programs Administration, Cost Analysis, Payroll, or the Budget Office. Regardless of where responsibilities lie, an effective effort reporting system requires coordination between two or more of the offices listed above. Furthermore, those offices with responsibility must also have the authority to enforce institutional policies.

Effort reporting requires active engagement with the business administrators from the academic dean and department offices. Those offices responsible for managing the process should establish a mutually supportive relationship with these business administrators.

The methodology used by an institution (e.g., Plan Confirmation, After-the-fact Activity Records) affects the roles and responsibilities of those involved with effort reporting. Generally, however, effort reports are generated at the central level and are made available at the department level. Ideally, departmental business administrators play an active role in pre-reviewing, distributing, and monitoring the confirmation of effort reports. Faculty members and other individuals responsible for the actual certification should work with their respective administrators when there are questions.

All effort reports should be certified by the individual, or a "responsible person with/using suitable means of verification that the work was performed." The certification should include language to the effect that the report reasonably reflects the activities for which the employee is compensated for the applicable time period, and/or that the reported salary allocations are reasonable in relation to the work performed. A recommended practice is to retain the original certified effort reports at the responsible central level.

When effort is less than the salaries and wages charged to a sponsored agreement, or less than the cost sharing commitments, additional actions, such as a salary reallocation or cost transfer could be necessary. This could involve actions from the department business administrator, individuals from the payroll office, and/or other applicable offices, and requires well-defined accounting procedures to properly document any applicable transactions.

Effort reports must be archived according to the institution's record retention policies, agency requirements, Federal Acquisition Regulations (i.e., FAR, 52.215-2(f), "The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence ... for examination, audit, or reproduction, until 3 years after final payment ... or for any shorter period specified in subpart 4.7 ... or for any longer period required by statute or by other clauses of this contract"), and Circular A-110 requirements (i.e., section .53, Retention and access requirements for records. – "Financial records ... shall be retained for a period of three years from the date of submission of the final expenditure report...")

Education is a critical component of the effort reporting process. Central administration should have the primary responsibility for implementing an educational program. The program may need to vary by the effort reporting role or responsibility of an individual. Regardless of the role or responsibility, the program should include, at a minimum, the principle concepts of effort reporting and the effort reporting processes.

E. COMPENSATION, EFFORT COMMITMENTS, AND CERTIFICATION

Section E addresses the challenging issues that have affected compensation and effort reporting policies and practices at institutions. When appropriate, effective management policies and practices are suggested. Section E is divided into three subsections:

- 1. **Compensation.** Clearly defined compensation policies and practices are the cornerstones of compliant payroll distribution and effort reporting systems. There is no "one-policy-fits-all" approach that is applicable to all institutions, however, the important compensation issues should be considered.
- 2. Effort Commitments and Certification. Policies and practices related to effort commitments and certification should also be clearly defined. Once again, a "one-policy-fits-all" approach does not exist, though the issues described in this section should be considered by an institution.
- 3. **Technical Considerations.** There are a number of fundamental requirements associated with payroll distribution and effort reporting systems. This part of the paper discusses some of the technical processes that an institution should address.

The three subsections described above include references to OMB Circular A-21. Other applicable federal regulations (e.g., OMB Circular A-110) and policy releases are also referenced when applicable.

ORGANIZATIONAL NOTES

Regulations specific to Non-profit Organizations and Hospitals (Circular A-122 and HHS Cost Principles for Hospitals in 45 CFR Part 74, Appendix E, respectively) share similarities to Circular A-21, as well as differences. Many of the topics covered in this paper are applicable to non-profit organizations and hospitals, and include discussions that are relevant to these organizations. *At the same time, there are differences, and these organizations should consult their applicable regulations. Where there are differences, these can be addressed in future COGR publications.*

The reader should also note that throughout this report the common reference is made to "faculty." Most of the issues, and corresponding risk areas, addressed in this paper are most applicable to faculty, principal investigators, and other key personnel. However, in many cases the reference to "faculty" is also applicable to other professional and exempt staff, including senior researchers, post-doctoral employees, graduate research assistants, and other relevant personnel. In effect, the issues discussed often are applicable to all individuals.

The terms "effort reporting" and "effort report" are used throughout the document. Some institutions do not use this terminology, and instead complete confirmations (certifications) through other mechanisms such as payroll action forms, salary certification forms, or other official institutional documents. *Because "effort reporting" and "effort report" have become the most common terminology in the research community, these terms are used in this paper.*

Also note, the terms "sponsored agreement," "sponsored project," "sponsored program," "sponsored award," and other similar terms are used interchangeably throughout the document.

Each of the three subsections under Section E includes separate chapters addressing specific topics. For example, the first chapter under subsection 1, Compensation, is 1a, Defining Full Workload and Institutional Base Salary. At the end of each chapter are two summaries: <u>Hot Buttons and Key</u> <u>Considerations</u>, followed by <u>Policy and Practice Suggestions</u>. "Hot Buttons and Key Considerations" identifies topics that have been the focus of many discussions and concerns at institutions across the country. "Policy and Practice Suggestions" lists specific actions an institution can undertake, with a focus on compliance.

1. COMPENSATION

Office of Management and Budget (OMB) Circular A-21 (*hereinafter referred to as A-21*) states that compensation for personal services:

... are allowable to the extent that the total compensation to individual employees conforms to the established policies of the institution, consistently applied... (J10a)

Furthermore:

There is no single best method for documenting the distribution of charges for personal services. Methods for apportioning salaries and wages, however, must meet the criteria specified in subsection J10b(2)... (J10b(1)(d))

Finally:

The distribution of salaries and wages ... will be based on payrolls documented in accordance with the generally accepted practices of colleges and universities. (J10b(1)(a))

Assuming the "Criteria for Acceptable Methods" (J10b(2)) are met, and generally accepted accounting practices are followed, an institution has discretion to define and implement compensation policies that reflect and support the organizational and financial structure of the institution. The institution's compensation policies must be consistently applied, irrespective of funding sources. The chapters that follow address the key policy and practice items that should be understood and defined by the institution.

CHAPTER 1A. DEFINING FULL WORKLOAD AND THE INSTITUTIONAL BASE SALARY

Full Workload

A-21 recognizes that "Practices vary among institutions and within institutions as to the activity constituting a full workload." (J10b(2)(d)) This acknowledgement gives the institution latitude in defining compensation policies, though demonstrating accountability and compliance with certain principles is equally, if not more, important. An institution must clearly define full workload (i.e., total professional effort), faculty effort, and institutional base salary. As stated by Robert J. Kenney, Jr., Director, Grants & Contracts Practice, Hogan & Hartson LLP, Washington DC: "Under A-21, the proper base for determining an individual's effort percentages is the total activity for which the individual is compensated by the grantee institution". (Medical Research Law & Policy Report, Robert J. Kenney Jr., Vol. 2, No. 4 dated 12-19-03)

For many institutions, full workload includes instruction, research, public service, administration, and clinical activity (if applicable). Activities such as outside professional work, volunteer community work, service on peer review panels and other advisory activities for sponsors, and leadership in professional organizations are examples of activities that are typically excluded from institutional definitions of full workload.

It is the responsibility of the institution to define which activities are "in" or "out." Factors to consider include how closely the activities are tied to the institution's compensation and reward structure (e.g., are the activities considered for merit raises, promotion, and/or tenure?), and whether the activities are compensated by outside sources. The more removed the activities are from the compensation and reward structure, particularly if compensated by outside sources, the more likely they should <u>not</u> be included.

40-hour Week and/or the "Hours-worked" Approach

Often, a discussion on full workload turns to a discussion on the "average" work week. Some faculty members view their work week as a set number of hours, for example, 40 hours. However, use of a 40 hour work week would almost always violate the cost principles in A-21. Robert J. Kenney's report (referenced above) states:

A faculty member working 30 hours a week on a sponsored project and 30 hours a week on teaching would, using such a base, report total effort of 150 percent (75 percent on the sponsored project and 75% on teaching). This would result in more than 100 percent of the faculty member's salary being allocated between the two activities-not only an anomaly and a violation of A-21, but also impossibility from a cost accounting standpoint. If, alternatively, 75 percent of the salary were charged to the sponsored project and only the remaining 25 percent were allocated to teaching activity, there would be a disproportionate charge to research because the sponsored project would be charged three times as much salary as the teaching activity, even though the amount of time spent on each activity was the same.

In this example, using a 40 hour base to define full workload would be inappropriate. Once a faculty member works more than 40 hours, this would create an interpretation that more than 100% effort is being expended, and could result in inequitable cost allocations.

Beyond the potential issues of creating inequitable cost allocation, should faculty compensation policies based on "hours worked" even be considered? Compensating some types of employees based on hours worked, and through use of timecards, is appropriate. For example, some bargaining unit employees work under a timecard system. Furthermore, A-21 states that timecards are an acceptable practice (J10c(2)(f)). However, applying this approach to faculty ignores that professional employees are normally compensated for completing their professional responsibilities. In addition, teaching and research are intermingled making it difficult to segregate these activities. Finally, the issue can be further complicated if the faculty or staff is covered under the Fair Labor Standards Act, and, for example, overtime pay is required to be considered.

Though timecards are rarely used for faculty, the concept of daily schedules and logbooks is not foreign in an academic setting. In fact, reimbursement related to other institutional activities (such as reimbursement related to Medicare) is based on hours worked and often supported by schedules and other records. Medicare reimbursement reflects a more "contractual" relationship between the institution and Medicare, and the hours worked approach is appropriate. If an institution chooses to use an hours worked approach in the research environment, significant effort would be required to address potential compliance issues and to work with faculty to successfully implement and manage this practice.

Other Institutional Documents that Capture Work Activity

For a faculty member, there may be a variety of sources that report on activity or document the expectations of his or her appointment. They may include any of the following:

- Appointment Letters
- Faculty Workload Reports (often targeted at teaching effort)
- Teaching Schedules
- Clinic, On Call, and/or Surgery Schedules
- Productivity Reports
- Appointment Calendars
- Medicare Cost Reports
- "Current and Pending" (i.e., "Other Support") pages in the grant proposal

Though these documents should not be directly applicable to federal concerns related to full workload, they can help to provide varying pictures and perspectives of a faculty member's activities. Furthermore, while reconciling these diverse and multi-purpose documents to full workload is impractical, institutions should take care to understand why there might be inconsistencies.

Institutional Base Salary

Institutional Base Salary (IBS) is defined in the NIH Grants Policy Statement (December 2003) as "The annual compensation paid by an organization for an employee's appointment, whether that individual's time is spent on research, teaching, patient care, or other activities. Base salary excludes any income that an individual is permitted to earn outside of duties for the applicant/grantee organization" (Part I. Glossary). For most institutions, the base salary would exclude salary paid to the faculty member by a separate organization (e.g., a Veteran's Administration appointment, consulting, outside lectures). These activities are not considered part of institutional compensation and workload expectations.

Reimbursement from the federal government for faculty compensation is allowable at the **base** salary rate. Compensation for work charged to federally sponsored programs during an academic year can only be charged at the individual's base rate of pay for the continuous period:

Salary rate for academic year. Charges for work performed on sponsored agreements by faculty members during the academic year will be based on the individual faculty member's regular compensation for the continuous period which, under the policy of the institution concerned, constitutes the basis of his salary. Charges for work performed on sponsored agreements during all or any portion of such period are allowable at the base salary rate. ([10d(1))

For institutions that have faculty members with a variety of salary sources (Veteran's Administration, affiliated organizations, clinical practice plan) and a variety of salary components (e.g., base or regular pay, incentive compensation), it is important to clearly define which salary sources and salary components are included (and excluded) from IBS.

When linking IBS to full workload, total IBS must be distributed across all of a faculty member's instruction, research, public service, administration, and clinical activities (if applicable). Faculty members should understand that this requirement cannot be avoided by characterizing such activities as "unfunded" or "volunteer" activity.

The faculty appointment letter is the important document that ultimately specifies duties and activities. Federal funding agencies rely on the appointment letter to establish compensation and establish responsibilities. Clearly written appointment letters can help set the definitive basis for full workload, faculty effort, and institutional base salary.

Finally, the discussion in J10e, "Non-institutional professional activities," reinforces the concept that institutional policies are necessary to define IBS. When institutional policies do not exist, the institution is more open to the risk of the federal government determining "appropriate arrangements."

Unless an arrangement is specifically authorized by a Federal sponsoring agency, an institution must follow its institution wide policies and practices concerning the permissible extent of professional services that can be provided outside the institution for noninstitutional compensation. Where such institution wide policies do not exist or do not adequately define the permissible extent of consulting or other noninstitutional activities undertaken for extra outside pay, the Federal Government may require that the effort of professional staff working on sponsored agreements be allocated between (1) institutional activities, and (2) noninstitutional professional activities. If the sponsoring agency considers the extent of noninstitutional professional effort excessive, appropriate arrangements governing compensation will be negotiated on a case by case basis. (J10e)

Hot Buttons and Key Considerations

- Strict interpretations of full workload and IBS result in little flexibility for faculty members to volunteer time or engage in other institutional or academic activities. Under the strict interpretations, any institutional activity in which a faculty member engages would have to be accounted for, and institutional funding provided. This situation creates a tension where faculty members feel the institution "owns" them 24 hours a day, including weekends. While establishing standard work weeks (e.g., 40 hours, 60 hours, etc.) is not a practical solution, the research community could be well-served by developing allowable exceptions to full workload, while still maintaining equitable salary charges to federal awards.
- Several institutions have begun to struggle with the situation where full-time, non-tenured faculty, working solely on sponsored awards, lose grant support. These institutions may not have institutional funding available to replace the lost support. If the base salary (and base rate of pay) is subsequently reduced, a question arises as to what salary base should be used to propose future salary support. If a reduced rate is used, it becomes difficult to restore salary to the original base level when the new funding comes in. This results in a disincentive to the full-time, non-tenured faculty to continue to pursue careers in research.

Policy and Practice Suggestions

- Institutions should define and clarify the following:
 - Full workload, using guidance from A-21 and other federal publications.
 - IBS, with examples of what is included and excluded. These examples may vary from institution to institution, and could even address differences within colleges, schools, and departments within the same institution.
 - o Activities that are part of IBS must be included for effort reporting purposes.
 - Faculty appointment letters, which can help set the definitive basis for full workload, faculty effort, and institutional base salary.
- If considering an "hours worked" policy for faculty, be aware of the difficulties in supporting such a policy. This includes potential for inequitable cost allocations when a faculty member works more than 40 hours, as well as other inherent difficulties in implementing such a policy.
- Reasonable estimates are allowed to determine activity distributions. This is discussed in more detail in subsequent chapters.

CHAPTER 1B. MANAGEMENT OF MULTIPLE PAY SOURCES; CLINICAL PRACTICE PLANS

The most common example of a faculty member being paid by a separate pay entity is when the individual is paid from the institutional clinical practice plan. Depending on the legal status of the practice plan, as well as the organizational and financial structures, a faculty member may receive a single paycheck capturing all activities, or multiple paychecks.

On August 4, 2005, the National Institutes of Health (NIH) issued a notice (<u>NOT-OD-05-061</u>) that clarified the treatment of clinical practice compensation and its inclusion (or exclusion) as part of IBS:

For investigators receiving compensation from the institution (grantee/contractor) and separately organized clinical practice plans, compensation from such sources may be included in the institutional base salary (IBS) budgeted and charged to NIH sponsored agreements if all of the following criteria are met:

- Clinical practice compensation must be set by the institution.

- Clinical practice activity must be shown on the institution's payroll or salary appointment forms and records approved by the institution.

- Clinical practice compensation must be paid through or at the direction of the institution.

- Clinical practice activity must be included and accounted for in the institution's effort reporting and/or payroll distribution system.

- The institution must assure that all financial reports and supporting documents associated with the combined IBS and resulting charges to NIH grants are retained and made available to Federal officials or their duly authorized representatives consistent with the requirements of <u>45 CFR Part 74.53 (A-110 Subpart C 53)</u>.

Set by the institution means that the grantee/contractor institution must be in a position to document and certify that the specified amount of clinical practice compensation is being paid in essentially the same manner as other specified amounts of the committed IBS (compensation) of the investigator. Further, this requires that the IBS not vary based on the specific clinical services provided by the investigator within the periods for which total IBS is certified by the grantee institution.

The NIH recognizes that reimbursement for investigator effort on grants must be provided consistent with the actual institutional costs of these services in accord with applicable Federal Cost Principles and other limitations for such reimbursement, such as the legislative cap on salary reimbursement. The revised criteria support conformance with applicable cost principles and consistency in the treatment of compensation across the institution regardless of the source of support for compensated activities.

Institutions must clarify for faculty members whether their clinical practice plans (or other, similar "outside entity") are included in IBS using the NIH criteria above, and ensure that they are included or excluded consistently for proposal preparation, charging, and effort reporting purposes.

Hot Buttons and Key Considerations

 While the issue of including clinical practice plan compensation in IBS has been resolved for many institutions with the NIH clarification, inclusion (or exclusion) of compensation from entities other than clinical practice plans is not addressed. An institution can use the NIH notice (<u>NOT-OD-05-061</u>) as a guide; however, each institution's situation may be unique and require more caution and clarification.

Policy and Practice Suggestions

• Clearly define the treatment of the clinical practice plan compensation (or other, similar outside entity compensation) in relation to IBS, and consistently apply the treatment to proposal preparation, charging, and effort reporting.

CHAPTER 1C. SPECIAL CARE FOR SUPPLEMENTAL COMPENSATION

The discussion on IBS in chapter 1a is critical to the discussion on supplemental compensation. In accordance with section J10d(1), compensation for work charged to federally sponsored programs during an academic year can only be charged at the faculty member's base rate of pay for the continuous period: ... In no event will charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period."

When a faculty member's regular appointment is less than the 100% full-time workload, as defined by the institution, additional assignments can increase compensation at the base rate of pay, up to a 100% basis. If additional assignments are undertaken in support of sponsored programs, they may be charged on a proportionate basis to the sponsored agreement. However, when a faculty member is at 100% full-time workload during a continuous period of employment, additional assignments normally cannot result in an increase in compensation.

Intra-university Consulting

Intra-university consulting generally occurs without additional compensation, and should not result in an increase of the rate of pay.

Since intra university consulting is assumed to be undertaken as a university obligation requiring no compensation in addition to full time base salary, the principle also applies to faculty members who function as consultants or otherwise contribute to a sponsored agreement conducted by another faculty member of the same institution... ([10d(1)))

Some forms of intra-university consulting are allowable as supplemental compensation when clearly defined in institutional policy. When the consultation is across departmental lines (or with a remote operation) and when the consultation is in addition to the regular departmental load, supplemental compensation above the base salary is allowable. It must also be provided for in the sponsored agreement or approved in writing by the sponsoring agency (examples might include "consulting" related to statistical work or foreign language assistance, as applicable to specific needs of an award). Such consultation must be separately identified and appropriately documented in the financial accounting system. It is not required that it be included in the effort system and must not be commingled in allocations to other projects.

... in unusual cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the consultant is in addition to his regular departmental load, any charges for such work representing extra compensation above the base salary are allowable provided that such consulting arrangements are specifically provided for in the agreement or approved in writing by the sponsoring agency. (J10d(1))

Incidental Work

When an individual's regular workload meets the institution's definition of full workload, incidental work is allowed to be considered supplemental and result in additional compensation. In general, these assignments are not related to sponsored programs and are not included as part of IBS. Incidental work need not be included in effort reporting, although it can be if the institution so chooses. Section J10a provide some guidance:

Incidental work (that in excess of normal for the individual) for which supplemental compensation is paid by an institution under institutional policy, need not be included in the payroll distribution systems described below, provided such work and compensation are separately identified and documented in the financial management system of the institution. (J10a)

Examples of incidental work are not provided in A-21, though one criterion might include the "regularity" of the assignment. If the assignment is not regular, then it might be construed as incidental.

Dean and Department Chair Appointments

Dean and Department Chair appointments are additional to the individual's academic appointment, and normally include an administrative supplement to the base compensation. In most situations, this would require a redefinition of full workload and the institutional base salary to include the administrative activities.

Teaching an Evening/Weekend Class

Activity related to teaching an evening or weekend class (e.g., a continuing education class), on a nonregular basis, is interpreted by some as a situation where supplemental compensation is appropriate. Special care is required in these situations, and well-defined policies and procedures are necessary.

Bonus Pay

Bonus payments are normally excluded from IBS, though the NIH Grants Policy Statement (December 2003) states that bonus (incentive) payments are *"allowable as part of a total compensation package, provided such payments are reasonable and are made according to a formal policy of the grantee that is consistently applied regardless of the source of funds"* (Part II, Subpart A, Cost Considerations, Selected Items of Cost). As such, a bonus payment could be charged to sponsored programs. However, the institution would need to have a policy that clearly articulates the conditions for allowability, while ensuring consistent application regardless of the source of funds. One practical problem with charging a bonus to a sponsored agreement is that a bonus typically is not awarded until many months after the work to which it relates was performed. It is often difficult, therefore, to develop a workable mechanism for charging bonuses to sponsored agreements.

If bonus pay is determined to be unallowable, an institution could still provide bonus pay, though these payments could not be charged to sponsored programs. If unallowable, most institutions identify bonus payments as a separate item in their payroll systems, which facilitates excluding it both as an allocation to sponsored programs, and from effort reporting.

Predominantly Teaching Institutions and Research Foundations

Institutions founded as teaching institutions may not have a developed research program. In some situations, institutional charters or even state laws may prohibit the use of institutional funds for other

than teaching purposes. Furthermore, faculty release time may not be permitted or feasible. Upon receipt of a sponsored award, and to compensate the individual for a redefined workload, base salary could be adjusted and supplemental compensation could be allowable.

On the other hand, salary supplements occur on an exception basis at institutions with established research programs. These institutions usually provide for release time when a faculty member obtains federal, or other sponsored funding.

Some institutions have created related research foundations to keep the research mission segregated from instruction (in several cases, teaching institutions have done this). When a faculty member secures a sponsored award, the award is managed through the research foundation. However, because a research foundation has been established does not necessarily mean that upon receipt of a sponsored award an individual's workload can be redefined. Instead, institutional charters or state laws, once again, are the important consideration, as well as institutional policies that clearly and consistently define the allowability of supplemental compensation (see below).

Supplemental Compensation, Conditions for Allowability

The following conditions should be met to determine situations where full workload may be redefined, where base salary may be adjusted, and where supplemental compensation may be allowable. These steps have been reviewed, and accepted, by federal officials in a number of situations. However, due to the sensitivity of this topic, the institution should be clear when proposing supplemental compensation in a grant application, and consult the appropriate federal agencies and officials.

- a. In accordance with A-21, J10, salary policies must be uniform and consistently applied.
- b. A definition of full workload must be established that sufficiently enumerates full workload requirements, such that it is obvious when full workload is exceeded.
- c. The amount paid as the revised base salary must be calculated and paid in accordance with salary policies of the institution, as stated in point a) above, and be commensurate with the devoted effort.
- d. The total salary and full workload must be considered the full activities of the individual, accounted for within his or her 100% effort, and be accounted for in the effort reporting system of the institution.

Hot Buttons and Key Considerations

- Regulations governing the allowability of supplemental pay are clear in some situations, and not so in others. An institution must have uniform and consistently applied policies in place to support supplemental compensation. These policies include: a definition of full workload that sufficiently enumerates full workload requirements (such that it is obvious when full workload is exceeded), and the amount paid as the revised base salary must be calculated and paid in accordance with salary policies of the institution and be commensurate with the devoted effort. In the past, inconsistencies in interpretation by various federal agencies and officials have created uncertainty as to when supplemental pay is allowable.
- Institutional incentive programs can be an important and allowable tool to encourage research. However, institutional administrators must convey clearly to faculty members under what circumstances supplemental compensation is allowable.

Policy and Practice Suggestions

• Clearly define activities associated with full workload, those activities where supplemental compensation is appropriate, and those activities that should be included as part of IBS. Apply

these policies consistently and across all situations. If situations arise that may require an exception, establish a process for review and approval.

- Special attention should be paid to "intra-university consulting." It is normally not allowed as supplemental pay, though certain types of work might be allowable.
- Incidental work may be excluded from full workload, though examples are not provided for in A-21. Institutions could use a criterion of "regularity" of the assignment and create examples to provide guidance.
- The treatment of administrative supplements for Dean and Chair duties varies across institutions, though within an institution, institutional policy should be clear and consistently applied. In most situations, this would require a redefinition of full workload and the institutional base salary to include the administrative activities.
- Teaching an evening or weekend class (e.g., a continuing education class), on a non-regular basis, is interpreted by some as a situation where supplemental compensation is appropriate. However, special care should be exercised and well-defined policies and procedures are necessary.
- Bonus pay is normally excluded from IBS, and is neither chargeable to sponsored programs, nor
 included in effort reporting. However, the NIH Grants Policy Statement describes conditions for
 allowability. If a bonus (incentive) payment were to be claimed as an allowable charge, the
 institution would need to have policies that clearly articulate the conditions for allowability, while
 ensuring consistent application regardless of the source of funds.
- Teaching institutions, and institutions with related research foundations, have unique circumstances that require clear and consistent policy application. In regard to supplemental pay, the conditions for allowability (see points a) though d)) defined in the chapter should be followed.
- Faculty members might expect to see all forms of compensation when reviewing effort reports. Faculty should receive the necessary education as to why some forms of compensation are included and others excluded.

CHAPTER 1D. APPOINTMENTS, SUMMER SALARY, AND RELATED ISSUES

It is a significant undertaking to manage the wide range of appointment types and pay arrangements at an academic institution (e.g., 12 month, 11 month, 10 month, 9 month, X month-paid over Y number of months, Joint appointments, Summer, Part time, etc.). Even within a single institution, appointment types may vary between schools and colleges. Intertwined with varying appointment types are the previously discussed topics of full workload, IBS, supplemental compensation, incidental work, and related areas.

Each institution will maintain its own appointment policy appropriate to its mission. Federal agencies will accept various appointment types as long as the principles of consistency are applied as they relate to full workload, IBS, supplemental compensation, incidental work, and in due course, effort reporting.

Summer Salary and Periods Outside the Academic Year

For summer months or other periods outside the academic year, A-21 stipulates that charges for work performed may be charged at a rate that does not exceed the base rate for the academic period. A-21 defines the rate as the *"base salary divided by the period to which the salary relates"* (J10d(2)(a)) The "period" is the base academic year (e.g., 9 months, 12 months, etc.). By example, a 9-month appointment (base academic year) at a base salary of \$90,000, results in a monthly rate of \$10,000. Therefore, summer salary at a monthly rate of \$10,000 or less would comply with A-21.

Salaries for teaching activities during the summer months (or other periods outside the base salary period), applicable to faculty members also paid on sponsored agreements, may be made based on the *"normal policy of the institution governing compensation to faculty members for teaching during such periods."* (J10d(2)b)).

Payments to individuals performing work on sponsored agreements for these time periods must be captured in the institution's payroll system, and are likewise subject to the standard effort reporting and certification requirements prescribed for academic periods.

Summer salary, as it relates to conducting research, is often associated with programs sponsored by the National Science Foundation (NSF). In a number of its directorates, NSF has historically funded research with the expectation that an individual conduct his/her research in the summer months, and up to 2/9ths of his/her salary be charged during the same summer period. Consistent with the example above, the individual could charge \$20,000 (\$10,000 rate, times 2 months) during the summer. There are several intricacies associated with NSF summer salary, and these are discussed in more detail in chapter 2b, Faculty Effort, Special Circumstances.

Part-time Faculty

Consistent with the prorated approach discussed above to determine summer salary, a similar example is applicable to part-time salary. The example in J10d(3) states: "... an institution pays \$5000 to a faculty member for half time teaching during the academic year. He devoted one half of his remaining time to a sponsored agreement. Thus, his additional compensation, chargeable by the institution to the agreement, would be one half of \$5000, or \$2500." In this example, base salary for the part-time faculty member is \$5,000. If one-half of his/her time is devoted to a sponsored agreement, then a \$2,500 charge is appropriate.

Nine Month Appointments, Nine over Twelve, and Similar Arrangements

A 9-month (or 10-month, etc.) appointment for faculty is a common practice. The important principle in these situations is to ensure that a consistent, monthly base rate of pay is used. Other appointment arrangements, such as a 9-month appointment, with pay spread over 12 months, should not be difficult issues when discussing full workload or IBS. If the appointment period covers 9 months, the 9-month period would constitute the full workload period of time, and consequently, the issues discussed in previous chapters would be applicable to the 9-month period. However, special care could be required for effort reporting purposes. The payroll system should have a mechanism to associate the cash payment amounts (e.g., 12 months of payments) with the appointment period (e.g., 9 months of work). This will allow salary to be properly tied to the appointment period, and subsequently, will result in effort reports that are consistent with the appointment period.

An individual on a 9-month appointment could either have a summer appointment added, or the original 9-month appointment could be amended to cover the summer period. In both cases, the monthly rate from the original appointment would be maintained. In this situation, it might be intuitive to have a separate effort report for the summer work, however, this is not a requirement. The important requirement is that the effort report consistently captures the defined time period and the salary associated with that time period.

Vacation and Sick Leave

Vacation and leave policies vary greatly across institutions, and are often implemented differently for varying classes of employees. These differences are permitted, though an institution is advised to clearly define its vacation and sick leave policies, and ensure that vacation and sick leave charges to federal awards are done in a consistent and equitable manner.

Multiple Appointments

Multiple appointments, with different pay rates (e.g., a graduate student with a teaching assistant and research assistant appointment), require special care when reconciling compensation and devoted effort. Some institutions require a separate effort report to be produced and certified for each appointment, whereas others maintain each appointment on single report. These situations need to be identified and

reviewed for equitable treatment. As necessary, effort reports and/or compensation should be adjusted accordingly.

Hourly Employees

Hourly employees paid from sponsored funds require unique treatment. Hours worked must be documented in accordance with the institution's pay policy, including hours worked in excess of the normal work week for the individual. Standard payroll practice dictates that hours worked must be authorized by an individual with knowledge that the work was performed. Overtime pay must be paid in accordance with the Fair Labor Standards Act and the institution's pay policy. In some cases, overtime pay could be for hours worked in excess of 40 hours in one week, in excess of eight hours per day, or based on some other metric depending on the staff classification and the normal work schedule for the individual.

The cost distribution for hourly employees should be certified at the same time as the certification of the hours worked. Charges to sponsored program accounts should not exceed the actual effort (hours) expended on the sponsored project. When the hours worked involve overtime pay, the overtime hours should be distributed to all projects on a proportionate basis with the total effort for the payroll period. In other words, overtime should not be attributed entirely to a single project when costs are distributed over multiple projects.

One generally cannot claim that the last project worked "caused" the overtime. Instead, all projects share in the overtime burden on a proportionate basis for the pay period. If a timesheet adequately allows for identifying overtime hours to a specific project, and this can be definitively supported, an institution could consider charging overtime hours to the specific project. However, this is not a standard practice, and special care should be taken if this practice is considered.

Hot Buttons and Key Considerations

• Summer salary, as it relates to conducting research sponsored by the National Science Foundation (NSF), includes several intricate issues requiring further discussion. These issues are discussed in more detail in chapter 2b, Faculty Effort, Special Circumstances.

Policy and Practice Suggestions

- Treatment of salary rates for the academic year, periods outside the academic year, and part-time faculty are explicitly described in J10d of A-21. Those requirements should be strictly followed.
- Institutional compensation policies and practices related to the other areas discussed in the chapter (nine over twelve, vacation and sick leave, multiple pay rates, and hourly employees) are not addressed in A-21. These situations require special care and review.

2. EFFORT COMMITMENTS AND CERTIFICATION

The compensation issues discussed in the previous section are cornerstones of compliant payroll distribution and effort reporting systems. However, compensation issues do not exist in isolation. Equally important to the discussion are the issues and questions related to effort commitments and certification. Circular A-21 is relatively silent on a number of related risk areas, and this requires the institution to address these issues through well-defined policies and practices. The chapters in this section focus on effort reporting issues as they relate to effort commitments and certification.

CHAPTER 2A. ACCOUNTABILITY AND STEWARDSHIP OF FEDERAL FUNDS

Accountability and stewardship of federal funds are responsibilities taken seriously by research universities and institutions. The federal regulations (A-21, A-110, and other applicable policy releases) were written to provide accounting and oversight standards, while recognizing the important role that academic and research institutions undertake in society.

Accounting and oversight requirements specific to payroll distribution systems are documented in A-21 under "General Principles" (J10b(1)) and "Criteria for Acceptable Methods" (J10b(2)). The distribution of salaries and wages must be documented in accordance with generally accepted accounting principles (GAAP) for colleges and universities. The apportionment of salaries must comply with the policy requirements of A-21 as described in section A.2, which calls for the use of sound management practices and adequate documentation to support costs.

A-21 requires that the payroll distribution system be part of the "official records" of the institution and "reasonably reflect" the activities for which employees are compensated. All activities, sponsored and other, must be included in the distribution system or subsidiary records. The method chosen to document payroll charges must include an "after-the-fact" confirmation such that the distributed costs represent actual costs, unless a satisfactory alternative agreement is reached with the federal government. The system must also provide for "independent internal evaluation," though characteristics of an evaluation are not described in A-21.

A-21 also encourages, on an institution-by-institution basis, that policies and practices be established to provide important flexibility so as not to require academic professionals and their institutions to follow the more strict requirements of the commercial service contractor industry.

Each institution, possessing its own unique combination of staff, facilities, and experience, should be encouraged to conduct research and educational activities in a manner consonant with its own academic philosophies ... (A2b)

In the use of any methods for apportioning salaries, it is recognized 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. (J10b(1)(c))

Section A2e of A-21 further demonstrates that the costing principles were constructed to preserve accountability without creating unnecessary administrative burden.: "The application of these cost accounting principles should require no significant changes in the generally accepted accounting practices of colleges and universities." Similarly, section J10b(2)(g) stipulates 'For systems which meet these standards, the institution will not be required to provide additional support or documentation for the effort actually performed."

Examples, Work Fluctuations and Agency Approval

A-21 indicates that charges to sponsored programs may be made initially on the basis of estimates before the work is performed, and that short term fluctuations in the workload (e.g., one or two months) need not be considered provided the distribution is reasonable over the longer term (such as an academic period). The frequency of reporting guidelines described in the "*Examples of Acceptable Methods*" in J10c (also see chapter 3e, Frequency of Reporting) provide some direction for defining the effort reporting period (e.g., by academic period). Depending on the frequency of reporting, fluctuations in effort will either be more noticeable (e.g., if monthly reporting is used), or averaged out and less noticeable (e.g., if semester reporting is used).

Nonetheless, A-21 still requires that "*significant changes in work activity*" must be identified and entered into the payroll distribution system. Circular A-110 (section .25, Revision of budget and program plans) further states: "...*recipients shall request prior approvals from Federal awarding agencies for one or more of the following program or budget related reasons ... (3) the absence for more than three months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator.*" For example, if planned effort on a specific project was 40%, a reduction of 10 percentage points (down to 30%) would represent a 25% reduction in effort.

Technically, a reduction of 25% (or greater) would not require agency prior approval, if over the entire budget period, the net reduction would not reach 25%. Note, however, there is compliance risk if the reduction takes place early in the budget period, with the assumption that the effort will be made up later in the budget period. If there is no mechanism to ensure increased effort takes place later in the budget period, there would be no way to retroactively acquire prior approval.

After-the-fact Confirmation

Many accounting and oversight requirements are discussed in this paper. The most crucial may be related to "after-the-fact confirmation" of salary charges to sponsored agreements. This is the mechanism by which institutions demonstrate that individuals who are paid on federal funds have contributed the required effort. As stated in section J10b(2)(b): "The method must recognize the principle of after-the-fact confirmation or determination so that costs distributed represent actual costs, unless a mutually satisfactory alternative agreement is reached." In addition, the institution's effort reporting system must ensure that charges to federal programs have been reviewed and confirmed by "responsible persons with/using suitable means of verification" that the work was performed (also see chapter 3d).

Hot Buttons and Key Considerations

- Accountability and stewardship of federal funds is a responsibility taken seriously by research universities and institutions. Federal regulations were written to provide accounting and oversight standards, while recognizing the important role that academic and research institutions assume in society. Federal officials and representatives from research universities and institutions should periodically find venues to meet, communicate, and reaffirm the intent of the federal regulations.
- Criteria for the timing of, and what constitutes an "independent internal evaluation" are not discussed in A-21. Without specific guidance, the institution must define criteria based both on its interpretation of A-21, and generally understood practices used throughout the research community.
- If the institution has developed reasonable policies in those situations where specific criteria in A-21 are not provided, these policies should be acceptable. In situations as such, A-21 was written to allow the institution to develop internal standards, and apply those standards in a consistent manner. If the institution's internal standards are reasonable and are being followed, an audit finding may be inappropriate.

Policy and Practice Suggestions

- Institutional policies must adhere to the accounting and oversight requirements in section J10. At the same time, A-21 language, such as the language that permits academic institutions "to conduct research and educational activities in a manner consonant with its own academic philosophies" (A2b) can be used to support policies and practices unique to the culture of the institution.
- Distribution of salaries and wages must follow GAAP, and the system must provide for *"independent internal evaluation to ensure effectiveness and compliance."* In the absence of A-21 guidance on what constitutes an independent internal evaluation, the institution should establish a policy that defines the criteria of the evaluation so as to maintain credibility with section J10b(2)(f).
- Estimates are the basis for initial payroll charges, and short-term fluctuations need not be considered. However, the institution must have a system to identify and manage when significant reductions in effort occur.
- If key personnel (e.g., the project director or principal investigator) will have a 25% (or greater) reduction in effort and/or absences of three months or longer on a specific project, this requires prior agency approval. This situation, requiring definitive prior approval from the agency, should not be confused with short-term fluctuations (not requiring prior approval) described in the prior bullet point and the following two bullet points.
- If certification is monthly and effort is less than the amount charged for a given month, this may be a short-term fluctuation and no adjustment may be necessary. However, if effort is less than the amount charged for more than two or three months, this may no longer be a short term fluctuation. The institution would need to have a process to ensure that month-to-month fluctuations can be compared so that short-term fluctuations are correctly identified. Or alternately, adjustments could be made on a monthly basis.
- If certification is by semester (or by six-month period, or annual as can be applicable under the Plan Confirmation method, see chapter 3c), monthly fluctuations might be averaged out over the reporting period. If effort is less than the amount charged for the semester (or six-month, or annual period), then the fluctuation most likely is not short-term, and an adjustment is required.
- The institution must have an "after-the-fact" effort reporting system to ensure that charges to federal programs have been reviewed and confirmed by "responsible persons with/using suitable means of verification" that the work was performed.
- When an award expires in the middle of an effort reporting period, the institution should have a process to produce and review the final effort reports before submitting final agency reports (normally due within 90 days of completion of the award). In fact, some institutions require certification as part of the award termination process. Though it may not be practical to immediately produce the effort reports, a final confirmation of salaries charged is still required.

CHAPTER 2B. FACULTY EFFORT, SPECIAL CIRCUMSTANCES

Work expectations and standard models of faculty effort have evolved over the history of the research partnership. One example is where a faculty member devotes 100% of his/her time to research, and the corresponding need for the institution to administer these situations. A second example relates to the fact that faculty members are required to perform many duties throughout the year, including teaching and training, engaging in research and extension activities, treating patients, writing grant proposals, and completing administrative duties. The institution must manage varying appointment terms and the time of year these activities are performed, as well. Issues related to these examples are addressed in the remainder of this chapter.

Research Faculty Position

Some research institutions have created the "research faculty" position. Each institution must take special care in developing its practices to determine if the research faculty position can be charged 100%

to sponsored awards. If the position includes responsibilities for competitive proposal writing or participation in well-defined, regular administrative duties (e.g., committee work, advising, tenure review, etc.), a 100% allocation of the salary to sponsored awards would be prohibited during the effort reporting period in which the competitive proposal writing or regular administrative activity occurs. Note, where the proposal writing involves non-competitive, continuation award proposals (progress reports), this activity may be charged to the applicable federal award. Proposal writing for new competitive awards and competitive renewal awards may not be charged to federal awards.

Because competitive proposal writing and regular administrative duties usually are required of faculty, some institutions have established policies that restrict faculty from being charged 100% to sponsored awards. As a result, some form of institutional funding source is required to account for these other duties. The institution should conduct a periodic assessment to determine if 100% salary charges to sponsored awards are appropriate for applicable individuals. Chapter 2c discusses "de minimis" activity, which is activity that would normally be considered "so small" that it cannot (and should not) be accounted for. Activities such as competitive proposal writing and well-defined, regular administrative activity would normally not be considered "so small," and therefore are not normally defined as "de minimis" activity. (Note, institutions and faculty continue to strive for solutions. For example, competitive proposal writing is part of faculty responsibilities and full workload. However, are there situations where a "de minimis" definition would be appropriate, or where it may be considered outside of full workload? As described in chapter 1a, it is the strict interpretation of full workload and institutional base salary that creates a tension where faculty members feel the institution "owns" them 24 hours a day, including weekends. At this time, without federal guidance that would allow for more liberal interpretations, institutions are advised to follow current federal interpretations when considering like issues.)

Contribution of Effort

OMB Clarification Memo dated January 5, 2001 (see Appendix 2) states:

In addition, most Federally-funded research programs should have some level of committed faculty (or senior researchers) effort, paid or unpaid by the Federal Government. This effort can be provided at any time within the fiscal year (summer months, academic year, or both).

The Clarification Memo raises two important points. First, faculty members (or senior researchers) must commit/contribute some effort to the project. Salaries need not be charged to the sponsored project, though if this is the case, there must still be a mechanism to confirm that some effort has been contributed. The second point, that effort can be provided at any time during the fiscal year, is discussed in the section below.

Timing of Effort, Academic Year and Summer

An individual may provide committed effort during the academic year, during the summer, or during both time periods. Assuming the individual's salary is being charged to the federal project, the salary would normally be charged in the corresponding time periods. If effort is being provided, salary is not being charged, and effort was not committed in the project proposal, this would represent voluntary uncommitted cost sharing (see chapter 2e). This scenario is common with research funded by the National Science Foundation (NSF).

The NSF, through a number of its directorates, has historically funded research with the expectation that an individual conduct his/her research in the summer months, and up to 2/9ths of his/her salary be charged during the same summer period. Though in some situations charging salaries during the academic year to an NSF award may be permitted, this is usually not the case. When salaries are not charged during

the academic year, but voluntary uncommitted effort is contributed during the academic year, some believe this results in an unfair financial burden on the institution.

The financial burden is exacerbated in the summer months if the individual is to be engaged in non-NSF activities. In this situation, an institution may be technically in compliance with the Clarification Memo by demonstrating paid or unpaid effort on the award at different times during the entire fiscal year. However, if NSF recognizes the effort contributed during the academic year as voluntary uncommitted cost sharing only, salary to be charged during the summer will be affected. As a result, the institution may need to contribute institutional funding to cover other activities the individual is engaged in during the summer, even though the promised commitments were clearly contributed throughout the entire fiscal year.

Hot Buttons and Key Considerations

• The NSF, through a number of its directorates, has historically funded research with the expectation that an individual conduct research in the summer months, and that 2/9ths of his/her salary be charged during the same summer period. In reality, individuals funded in these situations provide significant effort during the academic year. However, in the summer months, NSF expectations seem to indicate that in order to have salary charged solely to the NSF award(s), the individual can be engaged only in NSF-related activity. If promised commitments are provided, and in many cases exceeded, over the course of the academic year and summer months, it would be beneficial to the research community to establish NSF-endorsed solutions. This could include "applying credit" to the summer months for effort contributed during the academic year, or even standardizing payment of academic year salaries.

Policy and Practice Suggestions

- Institutions that have created the "research faculty" position must consider grant proposal writing for competitive awards and well-defined, regular administrative duties. If these duties exist, a portion of salary should be charged to institutional funds. Institutions should also conduct a periodic assessment to determine if 100% salary charges to sponsored awards are appropriate for applicable individuals.
- The January 5, 2001 Clarification Memo by OMB requires faculty members (or senior researchers) to provide some level of effort to a federal award during either the academic year or the summer, and the institution must document such effort.
- The effort reporting cycle is an important variable. If an institution certifies using a separate summer period, then special care should be given to review the sponsored awards to which summer salaries are charged, versus the activities in which the individual is engaged. If an institution certifies using (for example) a six-month cycle, the summer months are combined with the academic year months, producing an effort report that consolidates the effort from these two periods. Regardless of the cycle used, the institution must be able to confirm that salary charges can be supported by actual effort.

CHAPTER 2C. LEVEL OF PRECISION

A-21 does not quantitatively define "precision" or "tolerance," though it states: "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" (J10b(1)(c)). When the after-the-fact certification occurs, each institution may make reasonable judgments regarding the level of precision to be permitted between the salary charges to sponsored agreements and the certified effort. Institutions may set a reasonable range (or variance) within which they expect documented faculty effort to fall. Some institutions have established an acceptable variance of less than 5 percent, which is based on a 1979 interpretation by the Department of Health,

Education, and Welfare (DHEW, has since split into the Department of Education and Department of Health and Human Services): "As a general rule of thumb, a change applicable to a given project or activity of 5% or more of an employee's total effort would warrant an adjustment by the employee or the official."

The intent of the 1979 interpretation was to define the variance as less than 5 percent of 100% total effort, or 5 percentage points. Using this interpretation, an individual's salary, initially allocated 50% to a project, would not require an adjustment if certified effort could reasonably be determined to fall between 45 and 55%. Other institutions use a more narrow interpretation: 5% of the initial distribution. In the case of a 50% allocation, the range would be between 47.5 and 52.5%. Regardless of the range used, both examples appear also to be supported by the A-21 language in J10b(1)(c), which allows activity distribution to be based on reasonable estimates.

Institutions that use a 5 percent standard should clearly document the context in which it is used. For example, if an institution's policy instructs faculty to review salary distribution, and then confirm that effort is reasonable using a 5 percent standard, this approach would be consistent with both the 1979 interpretations and A-21. However, if the institution's policy is such that faculty members are expected to know their exact effort to the nearest percentage point, to couple this approach with a 5 percent variance policy might raise questions (e.g., if an individual knows the exact effort percentage, why allow a 5 percent variance?)

One other application of the 5 percent standard would be important in an audit situation. If the institution has a policy, such as the one described above where faculty review salary distribution, and then confirm that effort is reasonable using a 5 percent standard, then it would be expected that auditors use the same standard. In other words, the audit standard would be to verify that faculty effort was within the range, as opposed to trying to determine the exact effort to the nearest percentage point.

De minimis Activity

"De minimis" activity is not an A-21 term, but one that is sometimes used in the research community. Faculty members who, on rare occasion, attend faculty meetings or advise undergraduate students, wonder how that affects their funded effort. Institutions may set a reasonable threshold for *de minimis* activity, and incorporate the concept of *de minimis* using examples and descriptions in their institutional policies.

Clinical Trials

A faculty member may have a limited role in a large number of clinical trials. To determine a reasonable amount of effort contributed to each clinical trial may be difficult. Individually, each clinical trial may amount to a minimal amount of effort. However, when all clinical trials are combined, a reasonable estimate can normally be made. When an individual is engaged in a large number of clinical trials, each with a minimal amount of effort, some institutions combine the clinical trials into a single category for effort reporting purposes. This practice may be more intuitive to faculty members, and result in a more accurate accounting of effort.

Defined "Sub-activities" in A-21

In section J10a, A-21 recognizes a variety of "sub-activities" related to sponsored research as appropriate when a faculty member is paid on a sponsored agreement. The examples are helpful in that they highlight how an individual spends his/her time. However, the intent of these examples is not to imply that a faculty member needs to account for his/her time at the "sub-activity" level. The value of the excerpt is that it can reinforce the typical activities in which one may engage.

Charges to sponsored agreements may include reasonable amounts for activities contributing and intimately related to work under the agreements, such as delivering special lectures about specific aspects of the ongoing activity, writing reports and articles, participating in appropriate seminars, consulting with colleagues and graduate students, and attending meetings and conferences. (J10a)

Hot Buttons and Key Considerations

- The "level of precision" discussion embodies much of the confusion that surrounds effort reporting. Where accounting requirements are clearly defined, research institutions are responsible for following the guidelines and demonstrating compliance. Where A-21 allows for reasonable estimates, federal guidance clearly allows institutions to implement corresponding policies and practices. Furthermore, practices such as the 5 percent reporting variance threshold should be formally recognized by appropriate federal officials so that institutions can confidently implement like practices.
- When researchers work on multiple awards with similar scientific goals, apportioning one's time can be challenging. Chapter 2f, Managing Cost Transfers and Changes in Effort, discusses this topic as it relates to allowability of cost transfers.
- The concept of *de minimis* activity is not found in federal guidance. However, from a practical perspective, it can be difficult and unproductive to capture and/or quantify some activities that take a small amount of time and/or occur infrequently.

Policy and Practice Suggestions

- Institutions should provide guidance regarding level of precision. Using a 5 percent variance threshold is based on a 1979 interpretation from the DHEW. Institutions that use this standard should clearly document the context in which it is used.
- Institutions should develop clear policies when addressing areas such as *de minimis* activity and clinical trials. While A-21 is silent on both topics, they are important areas where faculty will require institutional guidance.

CHAPTER 2D. PROPOSAL COMMITMENTS AND OVERCOMMITMENTS

Federal funding agencies require applicants to document the amount of effort committed to sponsored projects by principal investigators, project directors, and other key project personnel. This includes both effort committed to current awards as well as potential new effort associated with outstanding grant applications. Furthermore, the OMB Clarification Memo of A-21 dated January 5, 2001 (see Appendix 2), requires that most federally funded research projects have some level of committed effort by faculty or senior researchers, either paid or unpaid by the federal government. Both agency expectations and the OMB memo emphasize the importance of properly tracking and accounting for committed effort.

At the same time, institutions should have a system that defines and manages potential overcommitment. Exceeding certain thresholds on the number of active awards is one example. This is not to say that once an individual is committed to a certain number of awards he/she is overcommitted. Rather, if the threshold is reached, closer monitoring of the individual's effort might be appropriate. In a similar situation, a threshold might be established for the percentage of time committed to sponsored awards. Once again, it might appropriate to reach or exceed the threshold, however, closer monitoring in this situation could be an effective practice.

Another example of possible overcommitment is where current award commitments and outstanding grant applications, when combined, result in "potential commitments" that exceed 100% of full time effort. Grant application requests are often made with the expectation that not all applications will be funded. If new funding results in more than 100% full time effort, this will require downward adjustments in committed effort on awarded projects, with the approval of the sponsor where required.

Funding agencies, such as the National Institutes of Health (NIH), recognize that "potential commitments" could exceed 100%. Grant applicants are required to follow important application procedures, including documentation of "Other Support" and potential commitment overlap. These procedures are well established in the research community, and agencies, such as NIH, actively engage and communicate with applicant institutions when the potential for overcommitment exists:

...During this process adjustments are often made to the research proposal, including changes to level of effort for key personnel ... By handling the proposal review process in this way, NIH enables applicants to have multiple applications pending at one time, and doing so is acceptable as long as certain guidelines and restrictions are followed ('Reporting Financial Support from Other Sources – Overview and Risk Assessment.' Report on Research Compliance, National Council of University Research Administrators, Atlantic Information Services, Inc., Robert J. Kenney Jr., March 2006)

Hot Buttons and Key Considerations

• Because many proposal submissions are not funded, it is accepted practice for a faculty member to have "potential commitments" that exceed 100% of full time effort (based on the institutional definition of full workload). However, auditors may view this situation negatively, even though institutions and the awarding agencies have procedures in place to implement and approve downward adjustments to committed effort on awarded projects.

Policy and Practice Suggestions

- Institutional processes are necessary for assuring that all committed effort (paid and cost shared) on sponsored awards is being met. Cost shared effort poses unique challenges as this activity may not be captured in the payroll system. Institutions should have a system to track and document all committed effort.
- Because cost shared activity may not be captured in the payroll system, some form of regularly scheduled communication between administrators and faculty may help the institution better track these commitments.
- Some institutions have developed or acquired solutions that show all commitments directly on the effort report. A system that captures all commitments can be an effective institutional tool to help monitor the extent to which all commitments are being met.
- The institution should have a process for reviewing effort commitments as new awards are funded. Some institutions have processes to identify situations where an individual exceeds a certain threshold of awards he/she is working on, or where a certain percentage of time committed to sponsored awards is reached. While exceeding the established thresholds may be appropriate, a process to flag these situations represents a good internal control.

CHAPTER 2E. COST SHARING, K AWARDS, SALARY LIMITATIONS (CAPS), AND NO-COST EXTENSIONS

Cost sharing is most often represented as an institution's financial contribution toward a sponsored project. Related to the broad topic of cost sharing are the topics of Career Development awards (K awards) and the Salary Limitations (commonly known as "salary caps"). Federal agencies, such as the National Institutes of Health (NIH) and the National Science Foundation (NSF), have provided guidance on these topics since they primarily affect them, and the January 5, 2001 Clarification Memo by OMB (see Appendix 2) clarified the treatment of voluntary uncommitted cost sharing.

An institution's financial contribution may consist of the institution funding some or all of a faculty member's effort on a sponsored project. Other means of cost sharing might include third party in-kind contributions (e.g., donations from a private business) or goods and services benefiting the sponsored project purchased with institutional funds. Cost sharing from another federal source is rarely allowable and could only be utilized if explicitly approved in writing by the applicable federal agency.

Mandatory Cost Sharing

Mandatory cost sharing is cost sharing required as a condition of an award or agreed to between the institution and the sponsor when negotiating a sponsored agreement. Once this type of cost sharing is offered and the sponsored project is awarded, the cost sharing is required.

"Aggregate" cost sharing is a form of mandatory cost sharing. The NSF generally requires institutions to provide an aggregate one percent (1%) cost sharing on unsolicited awards. The cost sharing is not listed on the proposal, nor is it required on a grant-by-grant basis, but it must be met in aggregate on all unsolicited awards.

Committed Cost Sharing

Committed cost sharing (including voluntary committed cost sharing) is effort (or other costs) not required by the sponsor, but proposed in the sponsored project proposal budget or budget justification with no corresponding funding requested or awarded. Once this type of cost sharing is offered and the sponsored project is awarded, the cost sharing is required.

Cost sharing commitments can also be created by replacing funded effort with cost shared effort. For example, committed cost sharing would result where an individual's salary is funded at 20% for 20% effort, and subsequently, only 5% of his/her salary is charged to the project. In this case, the uncharged effort of 15% would represent "committed cost sharing," and must still be accounted for.

Voluntary Uncommitted Cost Sharing

Faculty and senior researcher effort, above that which is committed and/or budgeted for a sponsored agreement, is defined as voluntary uncommitted cost sharing (VUCS). As noted in the OMB Clarification Memo dated January 5, 2001 (see Appendix 2), this effort is excluded from effort reporting requirements of section J10 (also note: this effort, and corresponding costs, should not be included in the organized research base in the institutions facilities and administrative rate proposal). However, A-21 still requires that the apportionment of salaries and wages be supported by a payroll distribution system that will *"encompass both the sponsored and all other activities on an integrated basis..."* (J10b(2)(a)(iii)) Most institutions accomplish this by capturing voluntary uncommitted effort in a residual category (e.g., a general institutional fund account) in the payroll distribution system.

Some believe that a cost overrun is similar to VUCS, and in some cases (e.g., an overrun related to faculty and senior researcher salaries), should be excluded from the institution's organized research base in the facilities & administrative rate proposal. From the funding agency's standpoint, this issue requires little

attention because the award is not charged for the overrun. However, it affects the discussion of cost sharing in terms of its treatment in the facilities and administrative rate proposal, and might require more attention when discussed in this context.

K Awards

NIH Career Development Awards (K Awards) are designed primarily as support for new investigators, though some are designed for more senior faculty. K Awards typically have established effort requirements, often up to 75%. Salary recovery is often limited to \$75,000 or \$90,000 per year, requiring the institution to cost share the difference if the faculty member's salary is higher. An example of how cost sharing would be viewed under the terms of a K Award is shown below:

• Step 1: Calculated salary base and cost sharing for a K Award

Salary for individual	\$150,000
Effort on K Award	X 75%
Salary charged "should be"	\$112,500

• Step 2: Calculated cost share requirement

Salary base for K Award	\$112,500
If Salary limit is	<u>(\$90,000)</u>
Cost Share	<u>\$ 22,500</u>

Also note, in the above example, salary rebudgeting would be allowed up to the NIH salary limitation amount (see Salary Limitations later in this chapter). If funding per the K Award shown above was available (for example, \$10,000), this amount could be rebudgeted to the recipient's salary, and cost sharing would be reduced from \$22,500, to \$12,500.

A K Award recipients remaining effort (typically 25%) may be devoted to other institutional activities. NIH often requires that those activities be consistent with the objectives of the K award. In addition, some K Awards prohibit recipients from simultaneously recovering salary on another NIH award. However, an NIH notice (<u>NOT-OD-04-007</u>) dated November 14, 2003 liberalized the ability of a K award recipient to obtain additional NIH funding, if the recipient is in his/her final two years of career award support. An excerpt from that notice is included below:

Effective for competing applications submitted for February 1, 2004 and beyond, mentored career award recipients, in the last two years of career award support, are encouraged to obtain funding from NIH either as Principal Investigator on a competing research grant award or cooperative agreement, or as project leader on a competing multi-project award. Requested budgets for a competing research grant or a subproject on a multi-project grant should request appropriate amounts for the salary and associated costs for the career recipient's effort. At the time the research grant is awarded, the effort required on the career award may be reduced to no less than 50 percent and replaced by career award may be reduced to no less than 50 percent and replaced by commitment remains at 75 percent or more for the duration of the mentored career award. This change in policy applies to the following mentored career award mechanisms: K01, K07 (developmental) K08, K22, K23, and K25, as well as the individuals mentored through institutional K12 awards. On a separate topic related to K Awards, the NIH issued a notice (NOT-OD-04-056) on August 3, 2004 that clarified the required commitment of total professional effort for individuals supported by K Awards. The intent of the notice was to clarify that the 75% effort requirement could be limited to the recipient's effort at his/her home institution, and that effort associated with outside organizations (e.g. clinical practice plan, Veteran's Administration) could be excluded (hence, making it more manageable to support and track the 75% effort requirement.) The important points of that notice included:

A career award recipient meets the required commitment of total professional effort as long as: 1) the individual has a full-time appointment with the applicant organization; and 2) the minimum percentage of the candidate's commitment required for the proposed Career award experience is covered by that appointment. Please note that a candidate may propose a career award experience that involves sites beyond the applicant institution or organization, provided that the goals of the total experience are encompassed and supported under the appointment with the applicant organization.

This policy also applies to individuals who hold additional appointments with an independent clinical practice plan, the Veterans Administration or other organizations. Assuming a full-time appointment with the applicant organization, a candidate meets the professional effort requirement of the career award as long as the minimum percentage required for the proposed Career award experience is supported by the appointment at the applicant organization. Responsibilities outside of the applicant organization appointment are not restricted but also cannot be used to meet any minimum effort requirement.

The following example is illustrative:

An investigator has a full time appointment at a university and a half time appointment with another organization (VA or independent clinical practice plan). Under this new policy, the investigator can be supported because the university and candidate can commit at least 75% of the full time appointment to the award.

Salary Limitations (Caps)

Federal awards from the National Institutes of Health, the Agency for Healthcare Research and Quality, and the Substance Abuse and Mental Health Services Administration (each under the Department of Health and Human Services) are the most notable for restricting the amount of direct salary paid on their grants. The restriction is commonly known as the "salary cap," and is a legislative mandate imposed by Congress. Other sponsors also implement salary caps, and institutions must be cognizant of these requirements.

Salary that exceeds the cap must be funded by institutional funds and is considered by some as a form of cost sharing. For example, with a hypothetical \$150,000 salary cap, a faculty member who earns \$200,000 and has 10% effort on a project may recover \$15,000 from the federal sponsor (\$150,000 cap X 10% = \$15,000). The institution must contribute \$5,000 (\$200,000 - 150,000, X 10% = \$5,000).

No-Cost Extensions

A no-cost extension could be necessary when a project period has reached its end date, but effort toward the project is still required. In these situations, a principal investigator or other key personnel may continue contributing the original committed effort, or they may reduce effort upon agreement with the sponsoring agency. Regardless of the agreement with the agency, this effort may be unfunded and require institutional funds to support the individual. Unfunded effort during a no-cost extension may be interpreted as another form of cost sharing.

Hot Buttons and Key Considerations

• The K award process can be complex. Among the NIH Institutes and Centers, and sometimes across awards, the rules and/or interpretation of the rules vary. Of concern is the guidance, at times, provided by program officers that the required effort percentage (often 75%) is a percentage of a 40-hour work week, which is not the case.

Policy and Practice Suggestions

- Mandatory, Committed, and K Award cost sharing must be documented for effort reporting purposes. "Aggregate" cost sharing does not require grant-by-grant accounting, which may result in its exclusion from the formal effort reporting process. Cost sharing associated with salary exceeding an agency salary limitation (cap) must be tracked and should normally be identified for effort reporting purposes.
- Some institutions utilize "companion" cost sharing accounts as a tool to integrate cost sharing commitments into the formal accounting and payroll systems. Under this approach, a separate companion account, which links to the award account, is established. When this approach is not used, cost sharing commitments must be accounted for in a stand-alone system. In terms of producing effort reports, institutions that utilize companion accounts are able to extract the award and companion accounts from the same payroll system, and need not rely on a separate stand-alone system.
- K Awards, salary limitation (cap) management, and situations involving no-cost extensions all require close monitoring. The institution's systems should be able to accommodate the unique characteristics of each of these examples, and incorporate and account for them in the effort reporting system.
- Voluntary uncommitted cost sharing (VUCS) can be defaulted into a residual category (e.g., a general institutional fund account), and need not be specifically identified for effort reporting purposes (as applicable to faculty and senior researchers).
- The treatment of cost sharing in an institution's facilities and administrative rate proposal varies depending on the type of cost sharing. VUCS, as specifically stated in the January 5, 2001 OMB Clarification Memo, is excluded from the organized research base. Most other forms of cost sharing are normally included, though there is uncertainty in several situations. A detailed discussion is outside the scope of this paper.

CHAPTER 2F. COST TRANSFERS AND CONFIRMATIONS OF EFFORT DISTRIBUTION

The demand for oversight in the area of cost transfers is of critical concern (for the purposes of this paper, the specific focus is on salary transfers). Cost transfers have been under increased scrutiny by federal officials, and institutions must have processes to manage the frequency and timeliness of cost transfers, assure adequate documentation explaining the reasons for transfers, and educate faculty and staff on the rules for determining allowability.

Borrowing funds from one project to support charges on a second project is unallowable. However, certain situations constitute allowable cost transfers, such as a transfer made to correct an error, a transfer to move expenditures from an advanced funding account to a newly received award, or a transfer to move expenditures between projects due to the closely related nature of the projects (as approved by the sponsoring agency, and/or if not restricted in the project's terms and conditions). Per section B(3) of A-21:

If a cost benefits two or more projects or activities in proportions that can be determined without undue effort or cost, the cost should be allocated to the projects based on the proportional benefit. If a cost benefits two or more projects or activities in proportions that cannot be determined because of the interrelationship of the work involved, then, notwithstanding subsection b, the costs may be allocated or transferred to benefited projects on any reasonable basis, consistent with subsections d. (1) and (2).

Because effort reports are designed to confirm that salary charges are in alignment with effort, the effort report can be a good tool to identify allowable transfers. When a certified effort report indicates that a salary distribution from a period being certified was not correct, a confirmation of effort distribution (requiring a transfer from one account/fund to another) may be required to update the original distribution (see chapter 3g for examples). From a technical standpoint, this type of transaction does not fall within a strict definition of a cost transfer, but rather is a mechanism to finalize provisional charges (estimates) from the prior accounting period. *Though this may be seem to be merely a difference in terminology, there is value in the distinction. Excessive cost transfers are sometimes synonymous with poor internal controls, while confirmations of effort distribution should not be characterized in the same manner.*

While effort reports are an important tool for confirming effort distributions, it is of equal importance for effort reports to be produced in a timely manner at the end of the institution's defined reporting period. In its policies and practices, each institution should define the time parameter for the completion of effort reports so that corrections to the salary distribution can be identified and entered into the institution's payroll distribution system with sufficient lead-time for the production of correct and accurate sponsor reports.

Institutions also rely on monthly budget reports, or other reviews, to review and confirm effort distributions. Thus, the effort report may not be the only tool for confirming that effort distributions are correct.

Regardless of the tool, incorrect charges should be identified and corrected in the payroll and accounting systems in a timely manner. For projects that are closing, the payroll and accounting systems should allow for the correction within Circular A-110's 90-day reporting period, so that the timely production of annual and final reports to the sponsor can be completed. The standard for timeliness as it relates to cost transfers, whether a project is closing or is active, is 90 days from the end of the month in which the original charge was made. If a transfer is made after the 90-day period, the documentation of the reason for the transfer should also explain why it was late. According to the NIH Grants Policy Statement (see next section below), the 90 day criteria is based on when the "error was discovered."

Post Certification Changes and Other Guidance

Once charges for personal services have been certified on an effort report, subsequent changes to the certified distribution must be carefully scrutinized. Federal officials and institutional administrators, alike, will ask: "If the initial cost distribution was certified by a 'responsible person with/using suitable means of verification' (also see chapter 3d,) how can a change to that distribution be appropriate?" If it is determined that a cost transfer is acceptable, the circumstances must be clearly documented. In this case, in addition to the documentation explaining the transfer, institutions should require "recertification" by the principal investigator or project director, as well as a review and approval by an authorized administrator involved in the administration of sponsored programs.

Administrative reviews should be made for all cost transfers *onto sponsored awards*. A transfer off of a sponsored award to an institutional fund (e.g., due to a cost overrun) will rarely require the same level of scrutiny, though repeated costs transfers off of federal awards could be sign of poor internal controls.

Federal guidance, such as the NIH Grants Policy Statement (December 2003), is helpful for defining institutional policies and practices, and makes it clear that a full explanation is required (and *"to correct error"* is inadequate). Specifically, Part II, Subpart A, Cost Considerations, Cost Transfers, Overruns and Accelerated and Delayed Expenditures states:

...corrections of clerical or bookkeeping errors should be accomplished within 90 days of when the error was discovered. The transfers must be supported by documentation that fully explains how the error occurred and a certification ... by a responsible organizational official ...

Research institutions are well advised to define strict accounting and oversight standards on the allowability of cost transfers. Specific explanations for all cost transfers, and especially those that are over a certain number of days, should be part of the institution's policies and practices. When errors occur, they must be corrected. At the same time, a large volume of errors may be a sign of poor internal controls and suggest that policies and procedures are not in place at the department or institutional level to ensure that the majority of expenditures are charged to the correct award the first time.

► Hot Buttons and Key Considerations ◄

- Within a given principal investigator's laboratory, projects are often closely related, and differentiating effort between closely related projects can be difficult. Though borrowing funds from one project to support charges on a second project is unallowable, the research community could be well-served by expanding the definition on the "inter-relatedness of research," and applying a more realistic standard as it relates to effort reporting and cost transfer requirements.
- Corrections necessary because reported effort is different from the estimated payroll distribution represent legitimate transactions to finalize provisional charges. Because excessive cost transfers are sometimes synonymous with poor internal controls, it would be more appropriate to label these transactions as "confirmations of effort distribution," rather than "cost transfers."

Policy and Practice Suggestions

- When a certified effort report indicates the salary distribution from the period being certified was not correct, a cost transfer may need to be made to correct the original distribution (see chapter 3g for examples). This is an important institutional practice to ensure that effort and payroll are aligned.
- Well-defined institutional accounting and oversight policies and practices must apply to cost transfers. This includes parameters and examples that define allowability, requirements for written documentation, the number of days after an event in which a cost transfer can still be processed, and what procedures are applicable to exceptional circumstances.

CHAPTER 2G. CONSISTENCY IN ESTIMATING AND REPORTING COSTS

Educational institutions are subject to Cost Accounting Standards (CAS). Section C.10 "Consistency in estimating, accumulating and reporting costs" and Appendix A: CAS 9905.501, per A-21, describe the requirements for consistency in the manner in which an institution estimates costs in proposal preparation. The fundamental requirement of the standard dictates that the manner in which significant costs are presented in proposal preparation and submission must be supported by records that enable the accumulation and reporting of costs at a level that permits a meaningful comparison to the proposal.

Because the majority of research costs are for salaries, wages and fringe benefits, it is extremely important that the after-the-fact certification process for salary charges is consistent with the method chosen for estimating costs in the proposal. The institution must assure consistency in the methods used to prepare sponsor budgets, communicate commitments to projects, distribute payroll charges within the accounting system, and certify charges on an after-the-fact basis. The institution must also assure that supporting records and documentation are updated and reconciled when changes are made to salary charges on an after-the-fact basis. This includes reconciling the effort system with the payroll and accounting records.

Proposing in Person Months

Federal funding agencies will soon uniformly require "person months" for grant application and budgeting purposes. This requirement seems to create inconsistency between proposing in person months, versus certifying using percentages. In a response to the question "*Can investigators continue to certify time* & *effort with percent effort* ...?," NIH wrote in a May 15, 2006 publication titled <u>NIH eSubmission Items of Interest for AORs & SOs</u>: "It is an institutional level policy decision in how you capture time & *effort reporting data. If your institution chooses to keep their current policy in place for collecting this data, that is acceptable and in compliance to the NIH policy standards*." Research institutions, funding agencies, and other federal government entities recognize both the A-21 language encouraging use of percentages, as well as the wide-use of percentages across most institutions.

Hot Buttons and Key Considerations

• Institutions have worked diligently to educate faculty members to think of their full workload in terms of percentages of effort. Directives to submit grant proposals in terms of person months, though reasonable, might create confusion. In effect, thinking in terms of person months could inadvertently trigger thought processes related to the 40-hour week, and other artificial time periods.

Policy and Practice Suggestions

• As was emphasized in chapter 1a, institutions should consistently define and clarify full workload, institutional base salary (with examples of what is included and excluded), and that the activities that are associated with institutional base salary must also be included for effort reporting purposes. Consistent treatment of IBS as it relates to proposal preparation, charging, and effort reporting must be applied.

CHAPTER 2H. EDUCATION AND TRAINING PROGRAMS

Education and training programs are important for faculty members, senior researchers, laboratory personnel, administrative staff, and other appropriate individuals. The key elements that should be addressed in structuring the education program include institutional policies and procedures, how often the program is offered, the target populations and method of delivery for each (e.g., use of the web), the education and training program requirements, and the follow-up plan for individuals not completing the program. While the specific policy and procedures will differ for each institution, the following topics are a sampling of recommended topics for inclusion in the program:

- Key concepts and terms, for example:
 - Definitions of full workload and institutional base salary
 - The difficulty in defining a 40-hour week
 - Effort committed (including voluntary commitment), versus voluntary uncommitted effort
 - 0 When does a significant variation in effort require an adjustment?
 - o When does a change in effort require prior approval?

- o Mentoring students, and how is this activity treated
- o Special circumstances (e.g., K awards, salary limitations)
- o Who are "responsible persons" and what are "suitable means of verification" to certify effort?
- Roles and Responsibilities
- Certification Process and Requirements
- Areas of caution, for example:
 - Cost transfers to federal programs
 - o Cost transfers to federal programs near or past the end of the project
 - Other appropriate high risk areas

The education and training program may vary depending on the role or responsibility of the individual, so an institution may have multiple programs (e.g., one for faculty members, one for laboratory staff, one for administrators, etc.). Institutions may offer training in various ways, including classroom instruction or web-based self-instruction, to address the training needs of the diverse populations.

A critical decision is whether the training will carry follow-up action for those who do not complete the program. Institutions are taking steps to underline the importance of education regarding effort reporting principles. Examples of follow-up action include limiting a principal investigator's ability to charge to a federal award, prohibiting new proposal submissions, and removal of the faculty member's role as the principal investigator on a federal award.

Emphasis on mandatory attendance in programs, and enforcement via follow-up action, require the support from the President, Provost, and other applicable senior administrators. Ultimately, well-conceived education and training programs, in combination with written, thoughtful, and well-documented policies and procedures are powerful tools to maximize compliance in the area of effort reporting.

Hot Buttons and Key Considerations

- Faculty members struggle with effort reporting, especially when it is presented as an exact and precise science. Administrators responsible for developing programs can alleviate this notion, and should present the areas where A-21 relies on reasonable estimates, and where A-21 recognizes the intermingled nature of academic research and teaching. An appropriate institutional culture, starting with the President and Provost, must be established so that faculty and staff members understand the importance of effort reporting and related policies.
- If faculty or other staff members dismiss the importance of effort reporting, and if attendance at education and training programs is ignored, how will the institution implement follow-up actions?

Policy and Practice Suggestions

- Focus on the critical elements that each group needs to know, rather than a comprehensive primer on effort reporting.
- Use the most effective method of training for the applicable group (e.g., seminars, workshops, web-based self-instruction, etc.)
- Have frequently asked questions (FAQs) and examples readily available when individuals are completing their effort certifications.

3. TECHNICAL CONSIDERATIONS

This section addresses the fundamental requirements associated with payroll distribution and effort reporting systems. More specifically, this section addresses key processes and components of compliant systems, with the focus on the A-21 language and interpretation of the requirements (e.g., how frequently one must certify). Also see Section D, Effort Reporting Basics, for an introduction to effort reporting concepts and definitions.

CHAPTER 3A. PAYROLL DISTRIBUTION SYSTEM REQUIREMENTS

An institution's payroll distribution system is the starting point for apportioning an individual's salary by account, fund, or other attributes (accounting terminology varies from institution to institution). After an award is received, and an account is established in the financial system, the institution will have a process to load the new award information into the payroll distribution system. The exact "loading" processes are beyond the scope of this document; however, it is appropriate to mention that the degree of automation between information systems, the level of detail maintained in the account, and other factors all are important institutional considerations.

The information loaded into the payroll distribution system must comply with both the General Principles of the payroll distribution system (J10b(1)), and the Criteria for Acceptable Methods (J10b(2)):

J10b(1)(b). The apportionment of employees' salaries and wages which are chargeable to more than one sponsored agreement or other cost objective will be accomplished by methods which will-

(1) be in accordance with Sections A.2 and C;
(2) produce an equitable distribution of charges for employee's activities; and

(3) distinguish the employees' direct activities from their $F \mathcal{CA}$ activities.

Section A2 of A-21 is titled Policy Guides, and emphasizes the "development of mutual understanding between representatives of universities and of the Federal Government ...". Section A2e. goes on to state: "the accounting practices of individual colleges and universities must support the accumulation of costs as required by the principles, and must provide for adequate documentation to support costs charged to sponsored agreements."

Section C, titled *Basic Considerations*, includes fourteen subsections addressing topics, such as: Factors affecting allowability of costs (C2), Reasonable costs (C3), Allocable costs (C4), and Consistency in estimating, accumulating, and reporting costs (C10). Each of the subsections under Section C are important considerations when determining appropriate charges to sponsored awards.

"Equitable distribution of charges" is an important concept, and is the starting point for the discussion on effort reporting. Ultimately, the distribution of charges must be confirmed.

Finally, distinguishing between "direct activities" and "F&A activities" reinforces the concept that direct categories should capture all individual sponsored funding sources, though F&A activities need not be specifically identified and may be captured in a residual category (see chapter 3f).

The J10b(2)(a), under the Criteria for Acceptable Methods, addresses additional attributes specific to a compliant payroll distribution system:

J10b(2)(a). The payroll distribution system will

(i) be incorporated into the official records of the institution; (ii) reasonably reflect the activity for which the employee is compensated by the institution; and (iii) encompass both sponsored and all other activities on an integrated basis, but may include the use of subsidiary records. (Compensation for incidental work described in subsection J10a need not be included).

An institution should be able to demonstrate, both in written policies and through actual practice, that its payroll distribution system is in compliance with both the General Principles (J10b(1)) and the Criteria for Acceptable Methods (J10b(2)).

Hot Buttons and Key Considerations

• Some institutions utilize technology solutions to establish account/fund information, load the new award information into the payroll distribution system, and create interconnectivity from "cradle to grave" (i.e., pre-award to project close-out). Institutions considering new systems are well advised to diligently and critically review all potential solutions.

Policy and Practice Suggestions

- An institution's payroll distribution system must comply with J10b(1), General Principles, and J10b(2), Criteria for Acceptable Methods.
- Some institutions, before the official Notice of Grant Award (NGA) is received, establish advanced funding accounts covered by institutional or departmental funds. Upon receipt of the NGA, expenditures from the advanced funding account may then be transferred to the new award. If the award is not received, then the institution will have to determine how the advanced funding account should be reimbursed, or how costs should be transferred to another account.

CHAPTER 3B. FROM PAYROLL DISTRIBUTION TO EFFORT REPORTING

After defining the key elements and requirements related to payroll distribution, the discussion in A-21 shifts to the confirmation of payroll - in other words, the concept of effort reporting. Though the term "effort reporting" is not used in A-21, the consecutive sections of J10b(2)(b) and J10b(2)(c) state that:

J10b(2)(b). The method must recognize the principle of after the fact confirmation or determination so that costs distributed represent actual costs, unless a mutually satisfactory alternative agreement is reached ...

and

J10b(2)(c). The payroll distribution system will allow confirmation of activity allocable to each sponsored agreement ...

Information from the payroll distribution system will comprise the source data for the effort reporting system. While the level of detail, degree of automation, and other factors on how these systems interface will vary from institution to institution, there must be a clear "crosswalk" from the payroll distribution system, to the effort reporting system.

Exactly what is derived from the payroll distribution system to produce effort reports depends upon the methodology the institution uses to confirm effort. Examples of acceptable methods are shown in Section J10c of A-21, and are described in more detail in the next chapter (see chapter 3c, The Three Examples).

Finally, it may be useful to think of the payroll distribution and the effort reporting procedures as two distinct steps in a larger process. From an information technology standpoint, the two processes can be fully integrated. However, managing and updating payroll distributions are a separate process from afterthe-fact confirmation and effort reporting, and one should remember this when developing related policies and practices.

Hot Buttons and Key Considerations

• Effort reporting has historically existed as a stand-alone process. Data is often transferred and reconciled (via uploads/downloads in the payroll system) to and from the effort reporting system, and the process may not be fully automated. As more automated systems are made available to the research community, institutions considering such solutions should complete an internal needs assessment, and when possible, invest the time to critically review proposed effort reporting solutions in a "real time-case study" setting.

Policy and Practice Suggestions

• While the level of detail, degree of automation, and other factors on how these systems interface will vary from institution to institution, there must be a clear "crosswalk" from the payroll distribution system, to the effort reporting system.

CHAPTER 3C. THE THREE EXAMPLES

The three examples of acceptable methodologies for a payroll distribution system (and effort reporting system), as defined in A-21, are:

- Plan-Confirmation (J10c(1))
- After-the-fact Activity Records (J10c(2))
- Multiple Confirmation Records (J10c(3))

The three methods are examples, and A-21 allows for alternatives to the three methods. Alternatives are not discussed at length in this publication, though if an institution is utilizing an alternative methodology, it is advisable to obtain approval from the appropriate federal officials.

J10b(1)(d). "Examples of acceptable methods are contained in subsection J10c. Other methods that meet the criteria specified in subsection J10b(2) also shall be deemed acceptable, if a mutually satisfactory alternative agreement is reached." (J10b(1)(d).

Plan Confirmation (J10c(1))

A survey of 72 institutions, completed by MAXIMUS Inc., Higher Education Practice, and presented to COGR on October 27, 2005 showed that 20% of the institutions utilize the Plan Confirmation method. According to the surveyed institutions, Plan Confirmation is the second most popular method; After-the-fact Activity Records is the most popular (56%).

Those institutions that follow the Plan Confirmation method define a plan for each individual at the beginning of the fiscal year, which documents each individual's anticipated payroll distribution. Per A-21, "A system of budgeted, planned, or assigned work activity will be incorporated into the official records of the institution and encompass both sponsored and all other activities on an integrated basis." (J10c(1)(a))

If the plan holds for the entire year, Plan Confirmation might simply result in annual (after-the-fact) confirmation. Per A-21, "At least annually a statement will be signed by the employee, principal investigator, or responsible official(s)...." (J10c(1)(e)). However, if "... a significant change in work activity that is directly or indirectly charged to sponsored agreements will occur or has occurred, the change will be documented over the signature of a responsible official and entered into the system." (J10c(1)(d)) As a result, the Plan Confirmation requires constant monitoring and identifying of changes to payroll distribution.

For those institutions using Plan Confirmation, a common practice is to verify the original payroll distribution, as well as the new distribution, when there is a significant change in work activity. This publication uniquely defines this action as the "verification of plan change."

A-21 is not entirely clear as to whether an annual statement is still required if a "verification of plan change" was completed during the course of the year. In effect, if a "verification of plan change" was completed, it is likely that the individual certified effort for the prior period. Therefore, the institution's policy may allow the "verification of plan change" to suffice as the annual statement. If there was no need to complete a "verification of plan change" during the year, then the individual must complete an annual statement at the end of the fiscal year.

The difference between a "verification of plan change" and an annual statement can be confusing. If the institution is following the Plan Confirmation method, it should clearly describe the processes associated with the "verification of plan change" and the annual statement. On the other hand, if the institution is simply using attributes from the Plan Confirmation method in an allowable alternative agreement, this should be made clear in its internal policies.

After-the-fact Activity Records (J10c(2))

In the MAXIMUS Inc., Higher Education Practice survey, 56% of the 72 institutions utilized the After-the-fact Activity Records method. Those institutions that utilize After-the-fact Activity Records produce effort reports for various classes of employees, on regular cycles (see chapter 3e), requiring that the individuals *"confirm that the distribution of activity represents a reasonable estimate of the work performed by the employee during the period* ..." (J10c(2)(c))

If the effort report presented to the individual is not accurate, the After-the-fact method requires that "charges are promptly adjusted if significant differences are indicated by activity records." (J10c(2)(b))

Whereas Plan Confirmation could identify changes in payroll distribution almost instantaneously, institutions using After-the-fact Activity Records might not identify a change until the timing of the next effort reporting cycle. The benefit of using Plan Confirmation is that it allows for identifying changes in a more timely manner. However, the constant monitoring can make this method more onerous. While the After-the-fact Activity Records method is not specifically designed to immediately identify payroll distribution changes (note, however, that identification and confirmation are ultimately provided), this

method is a more routine and uniform process, and subsequently, potentially easier for the institution to manage.

Finally, in describing the After-the-fact Activity Records method, A-21 states that: "Where the institution uses time cards or other forms of after the fact payroll documents as original documentation for payroll and payroll charges, such documents shall qualify as records for this purpose, provided that they meet the requirements in subsections (a) through (e)" (J10c(2)(f)). Though time cards are neither realistic, nor effective among certain classes of employees, they can be a workable approach to supporting the After-the-fact Activity Records method where they can be implemented.

Multiple Confirmation Records (J10c(3))

The MAXIMUS Inc. survey provided the following additional results: After-the-fact Activity Records (56%), Plan Confirmation (20%), Timecards (18%), and Other (6%). While there is no indication in the survey that the institutions in the "Other" category utilized the Multiple Confirmation Records method, the unpopularity of this method is based on at least two requirements: *The system will reflect activity applicable to each sponsored agreement and to each category needed to identify* $F \not \subset A costs \dots$ (J10c(3)(d)), and \dots the signature of the employee or of a person having direct knowledge of the work \dots is appropriate \dots (J10c(3)(e)).

The requirement to document F&A costs makes this method difficult to administer, and therefore, is generally not used. The "direct knowledge" signature requirement, though not unreasonable, adds confusion when an institution must choose between this standard and "*suitable means of verification*" (also see chapter 3d).

Hot Buttons and Key Considerations

- The three methods in section J10c are examples only. An institution can implement alternative processes, *"if a mutually satisfactory alternative agreement is reached"* with the appropriate federal officials.
- The appropriate federal officials responsible for approving alternative methodologies are based on the institution's cognizant federal agency. For institutions that have the Division of Cost Allocation (DCA), Department of Health and Human Services (DHHS) as their cognizant agency, the DHHS Office of Grants Policy is officially responsible for approving alternative methodologies. For institutions that have the Office of Naval Research (ONR), Department of Defense (DoD) as their cognizant agency, ONR is responsible. In the case of DCA cognizant institutions, though the Office of Grants Policy has official responsibility, DCA would most likely be consulted in situations related to approval of alternative methodologies.
- The DCA and ONR also are responsible for reviewing the institution's DS-2 Statement of Cost Accounting Standards, where effort reporting systems are described. There have been varying degrees of explicit approval of effort reporting systems, which have left some institutions uncertain as to which alternative methodologies are acceptable.
- Salary Certification is an alternative method, though it has not yet been widely accepted in the research community. This approach includes some concepts of the Plan Confirmation methodology where changes in work activity are closely monitored during the year, and an annual statement is confirmed. However, important differences revolve around a "project-centric" statement where all individuals paid on the project are shown on a single statement using a project reporting period. Salary charges are then certified by the principal investigator as being reasonable for the individuals over the project period. Some argue that certification to the reasonableness of a salary is more intuitive than the current approach of certifying "percent of time and effort" over a more ambiguous denominator comprising full workload.

Policy and Practice Suggestions

• Whichever method is utilized, the J10b(2)(b) requirement states: "The method must recognize the principle of after the fact confirmation or determination so that costs distributed represent actual costs" Regardless of whether the institution's system strictly follows one of the three examples, or if an alternative system has been established, the system must comply with the principle of after the fact confirmation, as well as with the General Principles of J10b(1) and the Criteria for Acceptable Methods in J10b(2).

CHAPTER 3D. RESPONSIBLE PERSON WITH/USING SUITABLE MEANS OF VERIFICATION

The majority of institutions utilize a practice that relies on "responsible persons/officials with/using suitable means of verification that the work was performed," or certification by the individual (note, both "with suitable means" and "using suitable means" are used in A-21).

A-21 references "responsible persons/officials with/using suitable means of verification that the work was performed" in sections J10b(2)(b), Criteria for Acceptable Methods, J10c(1)(e), Plan Confirmation, and J10c(2)(c), After-the-fact Activity Records. The wording in each is consistent, with the first reference under J10b(2)(b) being the definitive requirement:

Criteria for Acceptable Methods, J10b(2)(b) ... Direct cost activities and F&A cost activities may be confirmed by responsible persons with suitable means of verification that the work was performed. Confirmation by the employee is not a requirement for either direct or F&A cost activities if other responsible persons make appropriate confirmations.

Section J10c(3)(e), Multiple Confirmations Records, requires certification by an individual with "*direct knowledge*" for work done on sponsored agreements, and certification by an individual with "*suitable means of verification*" for F&A work. It is advisable to work with the appropriate federal officials to confirm expectations if using the Multiple Confirmation Records method.

Institutions will be at risk when using liberal interpretations of either "responsible persons/officials" and/or "suitable means of verification that the work was performed." A department administrator should never be put in a position to sign an effort report, unless he/she has received definitive and verifiable confirmation from the individual that performed the work, or from an individual that has specific knowledge of the work. Also note, an oral verification from a faculty member to an administrator will most likely not pass the test of "suitable means of verification." Verification, at a minimum, should be accompanied by some form of written correspondence and documentation.

Though direct knowledge is not used in the description of either Plan Confirmation or After-the-fact Activity Records methods, it is useful standard for defining *"responsible persons/officials with/using suitable means of verification."* Direct knowledge could encompass the individual performing the work, or a direct supervisor or an administrator (with sufficient and verifiable knowledge of the work being performed). In short, any individual at the institution who has sufficient and verifiable knowledge, including an understanding of another individual's regular duties and responsibilities, would qualify as a *"responsible person/official with/using suitable means of verification."*

There is little value for an institution to stray from a strict interpretation of "responsible persons/officials" and "suitable means of verification." In times of heightened scrutiny and a willingness by institutions to develop strong compliance programs, an argument can be made for requiring the individual to sign for

him/herself. Regardless of approach, at a minimum, an institutional policy that assures federal officials that a *"responsible persons/officials with/using suitable means of verification"* criteria is being diligently implemented will minimize the risk of non-compliance.

Graduate Students

Certification of effort for graduate students working on federal programs present several discussion topics. First, a principal investigator (PI) can certify the salary charges for his/her graduate students, post doctoral assistants, or others, working on his/her sponsored programs, because the PI would clearly meet the *"responsible person/official with/using suitable means of verification"* standard.

Second, not directly related to the "suitable means" discussion, concerns the types of effort to be certified. If a graduate student is receiving compensation (salary) for services performed on a grant, this effort should be certified. If the student is receiving a stipend, the conventional wisdom is that this is educational assistance (i.e., student aid), and this activity need not be certified through an effort report. If the student is receiving tuition remission, in addition to salary, on a grant, both A-21 (section J45b.) and the January 5, 2001 OMB Clarification Memo (see Appendix 2) indicate that tuition remission is subject to the "reporting requirements" in J10. The tuition remission portion of a graduate student's compensation might not be part of the institution's payroll distribution system. However, since the tuition remission charged to a grant (e.g., 50% of the student's salary), confirmation of the graduate student's salary distribution effectively supports the tuition remission charged to the grant.

Hot Buttons and Key Considerations

- Since institutions have introduced electronic systems for certifying effort, the question of federal acceptance of electronic signatures has been raised. Assuming that system security and password access can be demonstrated, internal controls verified, and the electronic signature can be validated, then federal acceptance should be readily available.
- *"Suitable means of verification"* is not explicitly defined in A-21. Without specific guidance, the institution must define criteria based both on its interpretation of A-21, and generally understood practices used throughout the research community.
- If the institution has developed reasonable policies in those situations where specific criteria in A-21 are not provided, these policies should be acceptable. In situations as such, A-21 was written to allow the institution to develop internal standards, and apply those standards in a consistent manner. If the institution's internal standards are reasonable and are being followed, an audit finding may be inappropriate.

Policy and Practice Suggestions

- A-21 does not define a "responsible person/official" nor does it define "suitable means of verification." Each institution should define these parameters according to its policies and procedures, provide examples, and suggest best practices to be followed.
- Effort reports for employees no longer at the institution require special attention. Institutional policies that permit *"responsible persons/officials with/using suitable means of verification"* should be adequate to support certification in these situations.
- A-21 provides for the possibility that other departmental officials may complete the after-the-fact documentation requirements, even for PIs, provided those officials have "*suitable means of verification that the work was performed*" and that they have obtained and retained for audit purposes reasonable documentation of the effort or distribution of charges. Relying solely on an oral verification by a PI is not advisable. Though there is no definitive standard, the institution should provide to department officials examples or guidance as to what is acceptable documentation.

• A PI can certify the salary charges for his/her graduate students, post doctoral assistants, or others, working on his/her sponsored programs, because the PI would clearly meet the *"responsible person/official with/using suitable means of verification"* standard. Other issues related to graduate student certification (such as treatment of stipends and tuition remission) should be clearly documented in the institution's policies and procedures.

CHAPTER 3E. FREQUENCY OF REPORTING

The Criteria for Acceptable Methods (J10b(2)(b)), which would normally contain the definitive requirement, does not refer to how often effort reports should be completed, which is instead contained in the three Examples of Acceptable Methods (J10c). There are four references that address frequency:

Plan Confirmation, $J10c(1)(d) \ldots$ Whenever it is apparent that a significant change in work activity that is directly or indirectly charged to sponsored agreements will occur or has occurred, the change will be documented ...

Plan Confirmation, J10c(1)(e). At least annually a statement will be signed by the employee, principal investigator, or responsible official(s) ...

After-the-fact Activity Records, J10c(2)(e). For professorial and professional staff, the reports will be prepared each academic term, but no less frequently than every six months. For other employees, unless alternate arrangements are agreed to, the reports will be prepared no less frequently than monthly and will coincide with one or more pay periods.

Multiple Confirmation Records, J10c(3)(f). The reports will be prepared each academic term, but no less frequently than every six months.

The first two references are specific to the Plan Confirmation method. As was discussed in Chapter 3c, this COGR publication uniquely defines "verification of plan change" as specific to the Plan Confirmation method, and is required when there is a "significant change in work activity." Some institutions may allow a "verification of plan change" to suffice as the annual statement, though A-21 is not entirely clear as to whether an annual statement is still required if a "verification of plan change" was completed. If there was not a "significant change in work activity" during the year, and no "verification of plan change" necessary during the year, then at a minimum, an annual statement must be completed.

Under the After-the-fact Activity Records method, professorial and professional staff may adhere to an academic term, semi-annual, quarterly, or even monthly cycle. For other employees, a monthly cycle is sometimes used, though some institutions have established alternate arrangements (upon approval from the appropriate federal officials) and utilize, for example, quarterly cycles. Furthermore, not all types of employees are required to be on the same cycle. For example, professorial staff members might certify semi-annually, with other employees certifying monthly.

The Multiple Confirmation Records methodology is very specific in its direction, and applies to all employees: *The reports will be prepared each academic term, but no less frequently than every six months.* "Alternate arrangements" language is not included, so if an institution is strictly following this methodology, either an academic term cycle, or a semi-annual cycle must be used.

In summary, frequency of reporting is relatively straightforward, even though it is not referenced in A-21 section J10b(2), Criteria for Acceptable Methods. Since the three Examples of Acceptable Methods are examples only, there is not an overarching criteria to which adherence is required. Still, the examples

provide good guidance. If an institution is considering defining effort reporting cycles that are different from those from the examples (e.g., using a quarterly cycle rather than a monthly cycle for selected employees), it is advisable to obtain approval from the appropriate federal officials (also see Hot Buttons and Key Considerations, chapter 3b, for approval suggestions).

► Hot Buttons and Key Considerations ◄

- Some institutions believe a cycle that coincides with academic terms is ideal for faculty and other exempt staff members. The premise is that this approach is intuitive and more consistent with changes in faculty activities. In this situation, a separate summer period may be applicable, and special care should be given to review the sponsored awards to which summer salaries are charged, versus the activities in which the individual is engaged (see chapter 2b, Faculty Effort, Special Circumstances). If an institution certifies using a six-month cycle, the summer months are combined with the academic year months, producing an effort report that combines the effort from these two periods. Regardless of the cycle, the institution must be able to confirm that salary charges can be supported by actual effort.
- Requirements for "timeliness" (how long after the effort reporting period should the report be completed) are not discussed in A-21. Without specific guidance, the institution must define criteria based both on its interpretation of A-21, and generally understood practices used throughout the research community.
- If the institution has developed reasonable policies in those situations where specific criteria in A-21 are not provided, these policies should be acceptable. In situations as such, A-21 was written to allow the institution to develop internal standards, and apply those standards in a consistent manner. If the institution's internal standards are reasonable and are being followed, an audit finding may be inappropriate.

Policy and Practice Suggestions

- A-21 section J10b(2), Criteria for Acceptable Methods, does not provide guidance on frequency. However, the three Examples of Acceptable Methods, per J10c, provide specific guidance. In situations where the institution defines effort reporting cycles that divert from the guidelines (e.g., using a quarterly cycle rather than a monthly cycle for selected employees), it is advisable to obtain approval from the appropriate federal officials (also see Hot Buttons and Key Considerations, chapter 3b, for approval suggestions).
- In the absence of A-21 guidance on "timeliness," the institution should establish a policy that requires completion within a reasonable time period that preserves the integrity of the effort report and maintains credibility of the institution's effort reporting process.

CHAPTER 3F. STANDARD FORMAT, USE OF PERCENTAGES, AND THE RESIDUAL CATEGORY

A standard effort report normally shows a separate line for each sponsored agreement (or at a minimum, each federally sponsored agreement), and the payroll distribution for a defined past period (in the form of a percentage). Depending on the period for certification (e.g., monthly versus semester), multiple pay period amounts are normally combined into each line to show a composite percentage for each sponsored agreement. The effort report would include the sponsored agreements paid for by the federal funding agencies, and most likely, non-federal sponsors. Furthermore, if the sponsored agreement includes a cost sharing commitment, this should be displayed on the effort report (if cost sharing is not shown, some other reporting mechanism would be required to confirm cost sharing commitments). The past period captured in the effort report will be determined by the employee type and the approach taken by the institution (e.g., the most recent academic term, an "annual statement" applicable under the Plan Confirmation method, an acceptable alternative time period, or any other allowable time period).

Use of Percentages

A-21, though not explicitly requiring the use of percentages on an effort, encourages the use of percentages in three separate references:

Criteria for Acceptable Methods, J10b(2)(d) ... the payroll distribution system may reflect categories of activities expressed as a percentage distribution of total activities.

Plan Confirmation, J10c(1)(b) ... the system will reflect categories of activities expressed as a percentage distribution of total activities.

After-the-fact Activity Records, J10c(2)(b). These reports will reflect an after the fact reporting of the percentage distribution of activity of employees.

The first reference (Criteria for Acceptable Methods, J10b(2)(d)) should be considered the definitive guidance. "*Percentage distribution of total activities*" is an acceptable format for the payroll distribution system, and ultimately for the effort report. Because the latter two references ("*will reflect ... percentage distribution*") are applicable to the examples only, absolute use of percentages is not required. Though the use of other measures, such as hours or person months, may have merit, the use of percentages is the research community norm and is a more manageable and acceptable practice for both institutions and the federal agencies.

Residual Category

A-21 allows all other activity (i.e., non-sponsored) to be reported in a "residual category," which includes activity associated with instruction, facilities and administrative (F&A) activity, and any other institutional activity.

If there are multiple funding sources (e.g., general operating funds, gift funds, clinical practice funds, etc.) that comprise the residual category, these may be reported as a single grouping under the residual category, or as separate lines under a general heading called "non-sponsored" or "residual." The important point is that an individual is neither expected, nor required, to go through the laborious task of documenting effort associated with instruction, F&A activity, and any other institutional activity. If the institution wants to require this information for other purposes, it is free to do so, and can design the effort report accordingly.

The residual category is referenced four times in A-21, with section J10b(1)(a), General Principles, providing the more broad requirement:

General Principles, J10b(1)(a)... Institutions may include in a residual category all activities that are not directly charged to sponsored agreements, and that need not be distributed to more than one activity for purposes of identifying FCA costs and the functions to which they are allocable. The components of the residual category are not required to be separately documented.

As a final note, if an institution is using the Multiple Confirmation Records method, F&A activity is required to be documented: "... There will also be F \mathcal{CA} cost records to reflect the distribution of that activity to

F&A costs." (J10b(2)(c)) Including F&A activities in the effort report would be an onerous process. For this reason, among several, many institutions do not utilize the Multiple Confirmation Records method.

Hot Buttons and Key Considerations

• Use of percentages is the research community norm. Discussions on the "40-hour Week, and the Hours-worked Approach" from chapter 1a, and "Proposing in Person Months" from chapter 2g, are applicable to certain situations. However, these situations should be narrowly defined and not be applied to established effort reporting practices.

Policy and Practice Suggestions

- An after-the-fact effort report should normally show a separate line for each sponsored agreement, and the payroll distribution for a defined past period (in the form of a percent). If the sponsored agreement includes a cost sharing commitment, this should either be displayed on the effort report, or shown using some other reporting mechanism.
- Use of the residual category allows the institution to simplify the requirements of effort reporting. However, for other reporting purposes (e.g., state requirements), activities such as teaching, administration, patient care, and other institutional activities may be required to be separately documented on the effort report. If an institution includes these categories, extra care should be taken to ensure that confirmation of effort associated with sponsored agreements is not compromised.

CHAPTER 3G. CONFIRMATION AND RECONCILIATION

The confirmation process results in an individual certifying that the effort expended for each sponsored agreement is consistent with payroll distribution for the time period captured in the effort report. At the core of the confirmation is the assurance to federal entities that the commitment promised on the award, and the salaries charged via the payroll distribution system, are supported and accounted for.

If there are differences between devoted effort and the payroll distribution, the Criteria for Acceptable Methods (J10b(2)(e)) addresses an important compliance requirement: "... significant changes in the corresponding work activity must be identified and entered into the payroll distribution system."

If a confirmation indicates that devoted effort for each sponsored agreement was consistent with payroll distribution, no further action is required (except that the institution ensure that the effort report is stored via a hard copy or electronic filing).

If a confirmation indicates that devoted effort for a particular sponsored agreement was greater than payroll distribution, this also results in a situation where no further action is required on that sponsored agreement (though note, if effort on the that sponsored agreement was greater, this may imply effort on other sponsored agreements was less, resulting in further action for the other sponsored agreements; see the following paragraph for required action). Assuming that committed cost sharing requirements have also been met, the additional effort contributed (specific to a faculty member or senior researcher) on the sponsored agreement would be voluntary uncommitted cost sharing (VUCS). The January 5, 2001 OMB Clarification Memo (see Appendix 2) permits VUCS to be excluded from effort reporting and requires no further documentation (also see Appendix 2).

If a confirmation indicates devoted effort for one or more sponsored agreement *was less* than payroll distribution, and depending on the circumstances and the magnitude of the difference, one or more actions may be necessary:

- a. The sponsor was overcharged for the reporting period, and the sponsor should be reimbursed accordingly. This requires a retroactive adjustment to payroll distribution.
- b. In addition to a retroactive adjustment, the change may need to be entered as a prospective change to payroll distribution. Note, special care must be taken when prospective changes affect the individual's original commitment. Per Circular A-110 (section .25, Revision of budget and program plans), funding agencies require prior notification if there is going to be a reduction in effort of 25%, or more, of the original commitment.
- c. As described in J10b(2)(e), Criteria for Acceptable Methods, "Short term (such as one or two months) fluctuation between workload categories need not be considered as long as the distribution of salaries and wages is reasonable over the longer term, such as an academic period." If the devoted effort that was less than payroll distribution was attributable to a short term fluctuation, no action is required. However, the institution should have a clear definition of what constitutes a short term fluctuation, and have a defined process for monitoring the fluctuation to ensure it does not become a longer term fluctuation.

Points a. through c. focus mainly on devoted effort compared to payroll distribution. Equally important is confirmation of all proposal commitments. As described in chapter 2d, cost shared effort contributed to awards poses unique challenges as this effort may not be captured in the payroll system. The institution should have a process in place to track and document these situations, and to resolve issues when commitments are not met.

Finally, there are situations in which an institution voluntarily establishes a payroll distribution where the salary charged is less than what has been approved by the awarding agency. In this situation, the payroll distribution would show an artificially low salary charge, while the actual commitment may have been properly met. Once again, the institution should have a process in place to track and document these situations, and to resolve issues when commitments are not met.

Hot Buttons and Key Considerations

• Reconciling effort to payroll is a critical accounting standard. In addition, an institution should have a process in place to identity and confirm costs sharing commitments.

Policy and Practice Suggestions

- There should be a process to identify situations where devoted effort is less than payroll distribution, and if necessary (see points a) though c)), the proper adjustments to the payroll distribution system must be made so that payroll distribution aligns with effort.
- The institution should have a process to verify that required adjustments are posted to the payroll distribution system and to the official records of the institution. Identifying a change, without having a means to confirm the change was posted, represents a weak internal control.
- Chapters 2d and 2e discuss issues related to documenting commitments, including cost shared effort. The institution should have a process in place to track and document these situations, and to resolve issues when commitments are not met.

F. CONCLUDING THOUGHTS: EVALUATING QUALITY AND COMPLIANCE OF THE SYSTEMS

If an institution has: 1) addressed all of the questions and issues raised throughout this publication, 2) developed written, thoughtful, and well-documented policies and procedures, and 3) successfully implemented those policies and practices throughout the institution, *does the institution have a "system" that can stand-up to audit and review?* The concepts described below do not represent an exhaustive list of benchmarks. However, they can serve as starting points for evaluating the quality and compliance of an institution's payroll distribution and effort reporting systems.

In evaluating quality and compliance, the relationship between the payroll distribution and effort reporting procedures must be clear, concise, well-documented, and allow for reconciliation (see Chapter 3b). If the percent of effort expended (as documented on a certified effort report) is less than the percent charged through the payroll distribution system, adjustments to the payroll distribution should be made, or the institution is at risk of overcharging the federal government for work not performed.

A second benchmark is derived from the Criteria for Acceptable Methods, J10b(2)(f): "The system will provide for independent internal evaluations to ensure the system's effectiveness and compliance with the above standards." Though A-21 is not specific on how an evaluation should be conducted, A-21 is clear that this is an important standard of compliance. Institutions may utilize internal auditors and other internal entities to support the "internal evaluations". Institution may also use those same internal entities, plus a selection of external auditors, consulting firms, other independent parties, and other established institutional review mechanisms "to ensure the system's effectiveness and compliance." System evaluations will help ensure that the payroll distribution and effort reporting systems are effective, of the highest quality, and comply with federal regulations (see Chapter 2a).

Third, while well-defined policies and procedures alone do not ensure compliance, integration of those policies with institutional education and training programs and other "knowledge sharing" practices will contribute to successful systems. Programs that are supported by senior management (e.g., President, Provost, Deans, etc.) further promote successful systems. Quality and compliance can be greatly enhanced through well-defined policies and procedures, in combination with required educational programs for the faculty and staff that are involved with effort reporting (see Chapter 2h).

Colleges, universities, and research institutions across the country must actively and enthusiastically work with the federal government to foster and enhance the over fifty-year research partnership. One of the foundations of the partnership has been an appreciation of the delicate balance between accounting and oversight requirements, with an understanding that the grantor-grantee relationship is different from a commercial service contractor relationship.

Though broad policy discussions on our nation's research and science policy normally do not intersect with "nuts and bolts" issues related to payroll distribution and effort reporting systems, there is a common theme: A relationship between research institutions and the federal government, which is predicated on trust and goodwill, will promote open and fair discussions of effective practices. Ultimately, this will create a compliance environment that is rational and reasonable, and will result in an even stronger and more robust research partnership.

APPENDIX 1 - OMB CIRCULAR A-21, SECTION J10

Note: sections J10a. through J10e. have been included; J10f. through J10h. have been excluded.

CIRCULAR A-21 Revised 05/10/04 TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS SUBJECT: Cost Principles for Educational Institutions

J10. COMPENSATION FOR PERSONAL SERVICES.

a. General. Compensation for personal services covers all amounts paid currently or accrued by the institution for services of employees rendered during the period of performance under sponsored agreements. Such amounts include salaries, wages, and fringe benefits (see subsection f). These costs are allowable to the extent that the total compensation to individual employees conforms to the established policies of the institution, consistently applied, and provided that the charges for work performed directly on sponsored agreements and for other work allocable as F&A costs are determined and supported as provided below. Charges to sponsored agreements may include reasonable amounts for activities contributing and intimately related to work under the agreements, such as delivering special lectures about specific aspects of the ongoing activity, writing reports and articles, participating in appropriate seminars, consulting with colleagues and graduate students, and attending meetings and conferences. Incidental work (that in excess of normal for the individual), for which supplemental compensation is paid by an institution under institutional policy, need not be included in the payroll distribution systems described below, provided such work and compensation are separately identified and documented in the financial management system of the institution.

b. Payroll distribution.

(1) General Principles.

(a) The distribution of salaries and wages, whether treated as direct or F&A costs, will be based on payrolls documented in accordance with the generally accepted practices of colleges and universities. Institutions may include in a residual category all activities that are not directly charged to sponsored agreements, and that need not be distributed to more than one activity for purposes of identifying F&A costs and the functions to which they are allocable. The components of the residual category are not required to be separately documented.

(b) The apportionment of employees' salaries and wages which are chargeable to more than one sponsored agreement or other cost objective will be accomplished by methods which will-

- (1) be in accordance with Sections A.2 and C;
- (2) produce an equitable distribution of charges for employee's activities; and
- (3) distinguish the employees' direct activities from their F&A activities.

(c) In the use of any methods for apportioning salaries, it is recognized 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.

(d) There is no single best method for documenting the distribution of charges for personal services. Methods for apportioning salaries and wages, however, must meet the criteria specified in subsection b.(2). Examples of acceptable methods are contained in subsection c. Other methods that meet the criteria specified in subsection b.(2) also shall be deemed acceptable, if a mutually satisfactory alternative agreement is reached.

- (2) Criteria for Acceptable Methods.
 - (a) The payroll distribution system will

(i) be incorporated into the official records of the institution;

(ii) reasonably reflect the activity for which the employee is compensated by the institution; and

(iii) encompass both sponsored and all other activities on an integrated basis, but may include the use of subsidiary records. (Compensation for incidental work described in subsection a need not be included.)

(b) The method must recognize the principle of after the fact confirmation or determination so that costs distributed represent actual costs, unless a mutually satisfactory alternative agreement is reached. Direct cost activities and F&A cost activities may be confirmed by responsible persons with suitable means of verification that the work was performed. Confirmation by the employee is not a requirement for either direct or F&A cost activities if other responsible persons make appropriate confirmations.

(c) The payroll distribution system will allow confirmation of activity allocable to each sponsored agreement and each of the categories of activity needed to identify F&A costs and the functions to which they are allocable. The activities chargeable to F&A cost categories or the major functions of the institution for employees whose salaries must be apportioned (see subsection b.(1)b)), if not initially identified as separate categories, may be subsequently distributed by any reasonable method mutually agreed to, including, but not limited to, suitably conducted surveys, statistical sampling procedures, or the application of negotiated fixed rates.

(d) Practices vary among institutions and within institutions as to the activity constituting a full workload. Therefore, the payroll distribution system may reflect categories of activities expressed as a percentage distribution of total activities.

(e) Direct and F&A charges may be made initially to sponsored agreements on the basis of estimates made before services are performed. When such estimates are used, significant changes in the corresponding work activity must be identified and entered into the payroll distribution system. Short term (such as one or two months) fluctuation between workload categories need not be considered as long as the distribution of salaries and wages is reasonable over the longer term, such as an academic period.

(f) The system will provide for independent internal evaluations to ensure the system's effectiveness and compliance with the above standards.

(g) For systems which meet these standards, the institution will not be required to provide additional support or documentation for the effort actually performed.

c. Examples of Acceptable Methods for Payroll Distribution.

(1) Plan Confirmation: Under this method, the distribution of salaries and wages of professorial and professional staff applicable to sponsored agreements is based on budgeted, planned, or assigned work activity, updated to reflect any significant changes in work distribution. A plan confirmation system used for salaries and wages charged directly or indirectly to sponsored agreements will meet the following standards:

(a) A system of budgeted, planned, or assigned work activity will be incorporated into the official records of the institution and encompass both sponsored and all other activities on an integrated basis. The system may include the use of subsidiary records.

(b) The system will reasonably reflect only the activity for which the employee is compensated by the institution (compensation for incidental work described in subsection a need not be included). Practices vary among institutions and within institutions as to the activity constituting a full workload. Hence, the system will reflect categories of activities expressed as a percentage distribution of total activities. (See Section H for treatment of F&A costs under the simplified method for small institutions.)

(c) The system will reflect activity applicable to each sponsored agreement and to each category needed to identify F&A costs and the functions to which they are allocable. The system may treat F&A cost activities initially within a residual category and subsequently determine them by alternate methods as discussed in subsection b.(2)(c).

(d) The system will provide for modification of an individual's salary or salary distribution commensurate with a significant change in the employee's work activity. Short term (such as one or two months) fluctuation between workload categories need not be considered as long as the distribution of salaries and wages is reasonable over the longer term, such as an academic period. Whenever it is apparent that a significant change in work activity that is directly or indirectly charged to sponsored agreements will occur or has occurred, the change will be documented over the signature of a responsible official and entered into the system.

(e) At least annually a statement will be signed by the employee, principal investigator, or responsible official(s) using suitable means of verification that the work was performed, stating that salaries and wages charged to sponsored agreements as direct charges, and to residual, F&A cost or other categories are reasonable in relation to work performed.

(f) The system will provide for independent internal evaluation to ensure the system's integrity and compliance with the above standards.

(g) In the use of this method, an institution shall not be required to provide additional support or documentation for the effort actually performed.

(2) After the fact Activity Records: Under this system the distribution of salaries and wages by the institution will be supported by activity reports as prescribed below.

(a) Activity reports will reflect the distribution of activity expended by employees covered by the system (compensation for incidental work as described in subsection a

need not be included).

(b) These reports will reflect an after the fact reporting of the percentage distribution of activity of employees. Charges may be made initially on the basis of estimates made before the services are performed, provided that such charges are promptly adjusted if significant differences are indicated by activity records.

(c) Reports will reasonably reflect the activities for which employees are compensated by the institution. To confirm that the distribution of activity represents a reasonable estimate of the work performed by the employee during the period, the reports will be signed by the employee, principal investigator, or responsible official(s) using suitable means of verification that the work was performed.

(d) The system will reflect activity applicable to each sponsored agreement and to each category needed to identify F&A costs and the functions to which they are allocable. The system may treat F&A cost activities initially within a residual category and subsequently determine them by alternate methods as discussed in subsection b.(2)(c).

(e) For professorial and professional staff, the reports will be prepared each academic term, but no less frequently than every six months. For other employees, unless alternate arrangements are agreed to, the reports will be prepared no less frequently than monthly and will coincide with one or more pay periods.

(f) Where the institution uses time cards or other forms of after the fact payroll documents as original documentation for payroll and payroll charges, such documents shall qualify as records for this purpose, provided that they meet the requirements in subsections (a) through (e).

(3) Multiple Confirmation Records: Under this system, the distribution of salaries and wages of professorial and professional staff will be supported by records which certify separately for direct and F&A cost activities as prescribed below.

(a) For employees covered by the system, there will be direct cost records to reflect the distribution of that activity expended which is to be allocable as direct cost to each sponsored agreement. There will also be F&A cost records to reflect the distribution of that activity to F&A costs. These records may be kept jointly or separately (but are to be certified separately, see below).

(b) Salary and wage charges may be made initially on the basis of estimates made before the services are performed, provided that such charges are promptly adjusted if significant differences occur.

(c) Institutional records will reasonably reflect only the activity for which employees are compensated by the institution (compensation for incidental work as described in subsection a need not be included).

(d) The system will reflect activity applicable to each sponsored agreement and to each category needed to identify F&A costs and the functions to which they are allocable.

(e) To confirm that distribution of activity represents a reasonable estimate of the work performed by the employee during the period, the record for each employee will include:

(i) the signature of the employee or of a person having direct knowledge of the work, confirming that the record of activities allocable as direct costs of each sponsored agreement is appropriate; and,

(ii) the record of F&A costs will include the signature of responsible person(s) who use suitable means of verification that the work was performed and is consistent with the overall distribution of the employee's compensated activities. These signatures may all be on the same document.

(f) The reports will be prepared each academic term, but no less frequently than every six months.

(g) Where the institution uses time cards or other forms of after the fact payroll documents as original documentation for payroll and payroll charges, such documents shall qualify as records for this purposes, provided they meet the requirements in subsections (a) through (f).

d. Salary rates for faculty members.

(1) Salary rates for academic year. Charges for work performed on sponsored agreements by faculty members during the academic year will be based on the individual faculty member's regular compensation for the continuous period which, under the policy of the institution concerned, constitutes the basis of his salary. Charges for work performed on sponsored agreements during all or any portion of such period are allowable at the base salary rate. In no event will charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period. This principle applies to all members of the faculty at an institution. Since intra university consulting is assumed to be undertaken as a university obligation requiring no compensation in addition to full time base salary, the principle also applies to faculty members who function as consultants or otherwise contribute to a sponsored agreement conducted by another faculty member of the same institution. However, in unusual cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the consultant is in addition to his regular departmental load, any charges for such work representing extra compensation above the base salary are allowable provided that such consulting arrangements are specifically provided for in the agreement or approved in writing by the sponsoring agency.

(2) Periods outside the academic year.

(a) Except as otherwise specified for teaching activity in subsection (b), charges for work performed by faculty members on sponsored agreements during the summer months or other period not included in the base salary period will be determined for each faculty member at a rate not in excess of the base salary divided by the period to which the base salary relates, and will be limited to charges made in accordance with other parts of this section. The base salary period used in computing charges for work performed during the summer months will be the number of months covered by the faculty member's official academic year appointment.

(b) Charges for teaching activities performed by faculty members on sponsored agreements during the summer months or other periods not included in the base salary period will be based on the normal policy of the institution governing compensation to faculty members for teaching assignments during such periods.

(3) Part time faculty. Charges for work performed on sponsored agreements by faculty members having only part time appointments will be determined at a rate not in excess of that regularly

paid for the part time assignments. For example, an institution pays \$5000 to a faculty member for half time teaching during the academic year. He devoted one half of his remaining time to a sponsored agreement. Thus, his additional compensation, chargeable by the institution to the agreement, would be one half of \$5000, or \$2500.

e. Noninstitutional professional activities. Unless an arrangement is specifically authorized by a Federal sponsoring agency, an institution must follow its institution wide policies and practices concerning the permissible extent of professional services that can be provided outside the institution for noninstitutional compensation. Where such institution wide policies do not exist or do not adequately define the permissible extent of consulting or other noninstitutional activities undertaken for extra outside pay, the Federal Government may require that the effort of professional staff working on sponsored agreements be allocated between (1) institutional activities, and (2) noninstitutional professional activities. If the sponsoring agency considers the extent of noninstitutional professional effort excessive, appropriate arrangements governing compensation will be negotiated on a case by case basis.

APPENDIX 2 - JANUARY 5, 2001 OMB CLARIFICATION MEMO

January 5, 2001

M-01-06

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

- FROM: Joshua Gotbaum Executive Associate Director and Controller
- SUBJECT: Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission Costs

This memorandum clarifies the treatment of voluntary uncommitted cost sharing effort and tuition remission costs in accordance with OMB Circular A-21, "Cost Principles for Educational Institutions." This clarification is consistent with the recommendation by the National Science and Technology Council (NSTC) to improve the Government-university research partnership.

In two separate sections below, this memorandum discusses the purpose of the clarification, the background, the related issue, and the clarification for the treatment of voluntary uncommitted cost sharing and tuition remission costs in accordance with OMB Circular A-21.

Voluntary Uncommitted Cost Sharing

Purpose. This memorandum clarifies the treatment of voluntary uncommitted cost sharing effort in the computation of facilities and administrative (F&A) rates in accordance with OMB Circular A-21. Voluntary uncommitted cost sharing effort is defined, for the purpose of this memorandum, as university faculty (including senior researchers) effort that is over and above that which is committed and budgeted for in a sponsored agreement.

Background. Circular A-21, section C.4, "Allocable Costs," states that "a cost is allocable to a particular objective (i.e., a specific function, project, sponsored agreement, department, or the like) if the goods or services are chargeable or assignable to such cost objective in accordance with relative benefits received or other equitable relationship." Most faculty organized research effort is either charged directly to the sponsor, or is considered mandatory or voluntary committed cost sharing (i.e., cost sharing specifically pledged in the proposal's budget or award) on the part of the recipient. Both mandatory and voluntary committed cost sharing strement and captured in the accounting system. Voluntary uncommitted cost sharing effort, on the other hand, is faculty-donated additional time above that agreed to as part of the award.

Mandatory and voluntary committed cost sharing must be properly documented for cost accounting purposes. In addition, current Circular A-21 provisions require that, for research projects that are funded by both the Federal Government and a private third party (e.g., a corporation), the faculty should properly document through reporting its compensated effort, including mandatory and voluntary committed effort in order to allocate salaries and associated F&A costs.

Issue. Recently adopted Cost Accounting Standards in Circular A-21 have been interpreted by some Federal Government officials to require the assignment of a proportionate share of F&A costs to the

voluntary uncommitted cost sharing effort by either including an estimated amount in the organized research base or by adjusting the allocation of facility costs related to this effort.

The reporting burdens on universities and their faculty associated with detailed recording of voluntary uncommitted cost sharing may be providing a disincentive for the universities to contribute additional time to the research effort. In addition, the imprecise nature of the data concerning the amount of voluntary uncommitted cost sharing has made it difficult to compute and use as part of rate negotiations between the Federal Government and the universities.

Clarification. Voluntary uncommitted cost sharing should be treated differently from committed effort and should not be included in the organized research base for computing the F&A rate or reflected in any allocation of F&A costs. Furthermore, such faculty effort is excluded from the effort reporting requirement in section J.8. This treatment is consistent with the guidance in section J.8.b (1).c, "Payroll Distribution," that a precise documentation of faculty effort is not always feasible, nor is it expected, because of the inextricably intermingled functions performed by the faculty in an academic setting (i.e., teaching, research, service and administration).

Although voluntary uncommitted cost sharing will no longer be included in the organized research base, it should be noted that current A-21 provisions for payroll distribution (section J.8.b) require that the apportionment of salaries and wages must be supported by a payroll distribution system that "will encompass both the sponsored and all other activities on an integrated basis." The process must also identify significant changes in the corresponding work activity. As such, when an institution reduces a faculty member's level of activities dedicated to other institutional responsibilities in order to shift his/her activities to organized research activities, the institution must reflect this reduction in the payroll distribution system (as an increase to the research effort component) and in the F&A proposals.

In addition, most Federally-funded research programs should have some level of committed faculty (or senior researchers) effort, paid or unpaid by the Federal Government. This effort can be provided at any time within the fiscal year (summer months, academic year, or both). Such committed faculty effort shall not be excluded from the organized research base by declaring it to be voluntary uncommitted cost sharing. If a research sponsored agreement shows no faculty (or senior researchers) effort, paid or unpaid by the Federal Government, an estimated amount must be computed by the university and included in the organized research base. However, some types of research programs, such as programs for equipment and instrumentation, doctoral dissertations, and student augmentation, do not require committed faculty effort, paid or unpaid by the Federal Government, and consequently would not be subject to such an adjustment.

In the future, OMB and the research agencies will evaluate the impact on committed cost sharing of this clarification memorandum.

This interpretation of the treatment of voluntary uncommitted cost sharing is applicable prospectively to future sponsored agreements and future F&A proposal submissions. It does not require adjustments for current sponsored agreements or affect the negotiated rates that were agreed upon by the Federal Government and the universities based on previous F&A submissions. F&A rates negotiated prior to this clarification will not be renegotiated, nor will this clarification affect the calculation of prior years' carry-forward amounts.

Tuition Remission Costs

Purpose: This memorandum provides a clarification for the tuition remission costs of graduate students charged to Federal programs in accordance with OMB Circular A-21, Section J.41, "Scholarships and Student Aid Costs," and Section A.2.c. "Purpose and Scope." Specifically, it clarifies that the Circular's requirement for a "bona fide employer-employee" relationship does not mean that the tuition remission

costs are allowable only if the graduate student is treated as an employee for the purposes of the Internal Revenue Code and the Internal Revenue Service (IRS) regulations.

Background: OMB Circular A-21, Section A.2.c, "Purpose and Scope," states: "the dual role of students engaged in research and the resulting benefits to sponsored agreements are fundamental to the research effort and shall be recognized in the application of these principles." Section J.41, "Scholarships and Student Aid Costs," states that tuition remission costs for students are allowable on sponsored awards provided that "there is a bona fide employer-employee relationship between the student and the institution..." This statement has been interpreted incorrectly by some Federal Government officials to mean that, for tuition remission costs to be allowable, students must be treated as employees of the university, for tax purposes, which would mean that students' tuition remission benefits must be treated as taxable wages. This misunderstanding has recently generated a considerable amount of concern from universities and Federal research agencies. A clarification of the "employer-employee relationship between Circular A-21 guidelines and the IRS regulations.

Issue: The Federal policy on support of graduate students participating in research projects is to provide a reasonable amount of support (tuition remission and other support) on the basis of the individual's participation in the project. Sponsoring agencies are supporting graduate students who fulfill a vital role both as students and as researchers. This policy is not contingent on there being an employer-employee relationship, for tax purposes, between the institution and the graduate student. Rather, it recognizes the reality that research activities are an essential component of the individual's educational activities.

Clarification: OMB in the Circular did not intend to tie the allowability of tuition remission costs to how they are treated for tax purposes. However, given the misunderstanding that has arisen, a clarification is needed. In recognition of the dual role of students (as both students and researchers) engaged in research and the resulting benefits to sponsored agreements (as recognized in Section A.2.c of OMB Circular A-21) and research overall, tuition remission and other forms of reasonable support that are associated with student status and provided to individuals participating in the necessary work of a sponsored agreement are allowable provided that:

(1) The individual is conducting activities necessary to the sponsored agreement;

(2) Tuition remission and other support are provided in accordance with established educational institutional policy and consistently provided in a like manner to students in return for similar activities conducted in nonsponsored as well as sponsored activities; and

(3) During the academic period, the student is enrolled in an advanced degree program at a grantee or affiliated institution and the activities of the student in relation to the Federally-sponsored research project are related to the degree program.

Accordingly, tuition remission and other forms of support that satisfy these criteria are allowable, regardless of whether the tuition remission or other form of support qualifies as wages for tax purposes.

Tuition remission and other student support shall be subject to the reporting requirements stipulated in Section J.8, "Compensation for Personal Services," of OMB Circular A-21, or an equivalent method for documenting the individual's effort on a research project. Tuition remission may be charged on an average basis. In addition, as applicable with other types of costs charged against Federal research projects, total graduate student compensation must still meet Circular A-21 criteria for reasonableness and allowability.

AUTHORS AND CONTRIBUTORS

It is through the active and dedicated efforts of the COGR Costing Committee that this paper was completed. In addition, a number of other individuals made significant contributions. A special thank you goes out to everyone who worked so hard to produce this important document for the research community.

COGR Costing Committee

Albert Horvath, Committee Chairman Columbia University

Michael Amey The Johns Hopkins University

Susan Camber University of Washington

Joanne DeStefano Cornell University

Jerry Fife Vanderbilt University

Michelle Fortnam, ACUA Liaison Stanford University

Natalie "Nikki" Krawitz University of Missouri System

Ron Maples University of Tennessee System

Yoke San Reynolds University of Virginia

John Shipley Purdue University

Janet Ackerman (retired November 2006) Yale University

COGR Chairpersons and COGR Staff

Jane Youngers, COGR Chairperson	Marvin Parnes, past COGR Chairperson
University of Texas Health Science Center	University of Michigan
at San Antonio	

Tony DeCrappeo President, COGR David Kennedy Director of Costing Policy, COGR

Special Contributors

Joshua Adams, Editor Independent Contractor, Ithaca N.Y.

Joseph Gindhart Washington University

Robert J. Kenney, Jr. Hogan & Hartson LLP

Gunta J. Liders University of Rochester and COGR Board Member Andrew B. Rudczynski Yale University

Doyle Smith, Jr. Maximus, Inc.

Gary Talesnik BearingPoint, Inc.

Alice A. Tangredi-Hannon Yale University