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Sharing Facilities and Administrative (F&A) Cost Recovery to Facilitate Interdisciplinary Research

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Abstract

Purpose—Despite increasing interest in interdisciplinary research, researchers consistently cite institutional barriers as deterrents. Researchers, administrators, and others have suggested developing processes for sharing facilities and administrative (F&A) cost recovery as one way to support collaborative research. Therefore, the authors reviewed current policies for sharing F&A cost recovery and user satisfaction with them.

Method—In 2010, through reviewing institutional Websites and surveying researchers and grants administrators from a range of institutions, the authors identified a number of different policies currently employed and assessed user satisfaction with them.

Results—While most respondents (80.7%, 205/254) agreed that a standard policy for sharing F&A cost recovery would facilitate interdisciplinary collaboration, only 35.4% (90/254) reported that their institutions had such a policy. Among the 85 respondents whose institutions had a policy, most (66 [77.6%]) reported that the policy applied to grants with multiple principal investigators or co-investigators across departments or schools, and 68 (80.0%) reported satisfaction with the policy. Respondents from institutions *with* policies were significantly more likely to endorse the notion that policies are helpful compared to those who reported that their institutions did *not* have such policies or were unsure of their existence (89% versus 76%, $P =$

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0.014). The authors detected no significant differences in satisfaction scores based on type of policy, whether determined by investigator effort, space allocation, or other considerations ($P = 0.29$).

Conclusions—These data support the need for institutions to establish formal policies for sharing F&A cost recovery as a way to promote interdisciplinary research collaboration.

Despite increasing interest in interdisciplinary and translational research on the part of researchers and funding agencies,^{1–3} researchers have consistently cited institutional barriers as important deterrents.^{4–6} One major institutional barrier is the handling of the recovery of facilities and administrative (F&A) costs (i.e., “indirects” or “institutional overhead”),^{7–9} which have been traditionally allocated to the department or school of the principal investigator (PI).¹⁰ Researchers, administrators, and university ad hoc task forces and committees have suggested the development of processes for sharing F&A cost recovery as one way to minimize economic barriers to collaborative research across disciplines, departments, or academic institutions.^{5,7,9,11,12} In addition, in 2007, spurred by the Interdisciplinary Research Initiative of the National Institutes of Health (NIH) Roadmap, the NIH implemented a policy to allow multiple PIs on grants, as a mechanism to facilitate interdisciplinary and translational research and to maximize the potential of “team science” efforts.¹³

F&A costs are defined as “costs that are incurred for common or joint objectives and, therefore, cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or any other institutional activity.”¹⁴ F&A cost recovery is typically awarded to institutions as part of funded research grants in excess of the direct costs required to conduct the research. For federally funded projects, F&A cost recovery rates, which vary among institutions, are governed by the Office of Management and Budget Circular A-21,¹⁴ are negotiated by a cognizant federal agency (e.g., The Department of Health and Human Services), and are reevaluated and updated periodically. Elements considered in the negotiation of an institution’s F&A rate include the costs associated with multiple levels of administration as well as both the maintenance of the infrastructure (e.g., buildings, equipment, libraries, utilities) and the general operation of the physical facilities (e.g., heat, water). These F&A costs are then recovered by institutions at the negotiated rate, as funds awarded above the direct costs of conducting the project. For example, if a grant requesting \$100,000 direct costs is awarded to an institution that has a 61% F&A rate, the actual budget awarded would be \$161,000: the \$100,000 directly required to conduct the research and \$61,000 to recover the associated indirect costs incurred by the project. But each individual institution determines whether a school, department, division, faculty member, or other entity actually shares in this cost recovery once awarded.

In 2005, the NIH issued a “Request for Information on the Plan to Recognize Multiple Principal Investigators,”¹⁵ which called for input regarding the allocation of funds. Although responses clearly indicated that budgetary issues would be an institutional barrier to the multiple PI leadership model,¹⁶ final NIH guidelines do not require the sharing of F&A cost recovery between PIs, schools, or departments, but rather state that the decision to share (or not to share) F&A cost recovery should be determined “according to existing policy.”¹⁷ As a result, many institutions faced the administrative burden of developing such a policy for the first time¹⁸; however, despite the need for new policies, very little in the published literature focuses on the types of models in place or on institutions’ experiences with them.

Thus, the purpose of this study was both to describe models for sharing F&A cost recovery for research conducted in universities and academic health centers (AHCs) and to gauge users’ experiences with them. Using data obtained via policy statements available on the

Internet for some institutions and data gathered directly from surveys of researchers and grants administrators from a range of institutions, we have described and categorized a number of different systems currently employed throughout the United States, as well as user perceptions and satisfaction as reported via our survey.

Method

Internet searches

From November 2009 to January 2010, we conducted extensive searches using Google to locate policies on the distribution of F&A cost recovery posted publicly on institutional Websites. We used 48 unique phrases including the following:

- sharing/distribution of/allocation of indirect/facilities and administrative/F&A cost recovery,
- indirect cost/facilities and administrative/F&A distribution policy,
- sharing indirects/indirect cost recovery/facilities and administrative cost recovery/F&A/F&A cost recovery between departments/units/centers/schools,
- sharing of indirects/facilities and administrative cost recovery/F&A cost recovery to encourage interdisciplinary/multidisciplinary research,
- sharing indirect cost/facilities and administrative/F&A reimbursement,
- indirect cost/facilities and administrative/F&A distribution policy, and
- administrative barriers/barriers to interdisciplinary/multidisciplinary research.

In addition, using the same phrases, we performed searches directly on the Websites of the first 46 institutions that received NIH-funded Clinical and Translational Science Awards (CTSAs). We reviewed all the policies we identified (through both the Google search and the CTSA institution Website review) that provided guidelines for the distribution of F&A cost recovery, and we categorized them, post hoc, into one of four major types. We then reviewed each policy to determine whether or not it specifically addressed the issue of sharing F&A cost recovery when multiple PIs, departments, units, or centers contributed to the research. We further categorized the policies according to their specific details for cost-sharing (e.g., based on investigator time, space allocation, and/or unit resources). Finally, using the same search phrases used to locate institutional policies, we conducted searches of both Google and the PubMed database to identify available literature on sharing F&A cost recovery. Based on information gathered through our Internet survey of existing institutional policies, we developed an online survey to elicit information from faculty investigators and university research administrators regarding (1) their experiences with and attitudes toward sharing F&A cost recovery, (2) the types of policies, if any, their institutions had in place, and (3) their level of satisfaction with these institutional policies.

Survey sample and procedures

In early 2010, we sent invitations to participate in our survey to two groups: (1) PIs of the CTSAs and (2) members of the National Council of University Research Administrators (NCURA). The NIH CTSA program, funded by the National Center for Research Resources, was designed to create a definable academic home for clinical and translational research. We chose to survey the PIs of the 46 CTSAs (awarded from 2006 to 2009) to garner *faculty* input on the surveys because of the program's unique interdisciplinary emphasis, which seeks to accelerate collaboration across disciplinary boundaries, schools, and/or departments. NCURA is an international professional organization of over 7,000 members who engage in the administration of sponsored programs, including research,

education, and training at colleges, universities, and teaching hospitals, and we surveyed NCURA members to gain an *administrative* perspective on F&A cost recovery. We sent the e-mail invitation to participate in the survey to members who subscribe to any of the following four NCURA online neighborhood listservs: Departmental Administration, Academic/Medical Center Departmental Administration, Financial Research, and Pre-Award. The members of these four listservs total approximately 1,275. We followed all NCURA Neighborhood Listserv rules (e.g., no commercial use).¹⁹ We sent two follow-up e-mails to the CTSA PIs and one to the NCURA neighborhood listservs.

Invitations to both groups indicated that the purpose of the survey was to gain a better understanding of not only the range of policies for sharing F&A cost recovery currently in place at universities and AHCs, but also the success, as measured by user satisfaction, of these policies. In addition, the e-mail indicated that the survey was brief (requiring < 5 minutes to complete), participation was voluntary, and all individual responses would remain anonymous. We did not offer incentives to survey respondents for participating. The Columbia University Institutional Review Board approved this study as exempt.

Instruments

We used Survey Monkey (<http://www.surveymonkey.com>) to design the online survey and collect responses. The survey included six questions regarding F&A policies and respondents' level of satisfaction with the policies. We did not collect job title or institutional information from the CTSA group because, as each PI is a faculty member at an AHC, doing so would have compromised his/her anonymity; however, the NCURA survey included two additional questions regarding respondent's position (central or departmental administration) and institution type (predominantly undergraduate college [hereafter, "college"], multi-school university with graduate students [hereafter, "university"], or university with a medical school and associated clinics [hereafter, AHC]). We designed the survey so that multiple responses from a single individual were not possible. We pilot-tested the survey with several senior faculty members of Columbia University's CTSA for possible errors, clarity, and ease of use.

Data analysis

Variables for analysis—The overall goal of the statistical analyses was to correlate institutional and policy characteristics with 2 main response variables: (1) the respondents' views of the *helpfulness* of policies for sharing F&A cost recovery for supporting interdisciplinary research, and (2) the respondents' *satisfaction* with the policies in place (if any) at their home institutions. With respect to the first outcome, we asked respondents to indicate their level of agreement with the following statement: "Having a standard policy for F&A cost sharing helps investigators from multiple departments, units, or centers to engage in interdisciplinary research collaboration." For all analyses, we collapsed the responses to this question into 2 categories: strongly agree / agree versus neutral / disagree somewhat / disagree strongly. The second outcome focused on level of satisfaction with the policy at the institution, and we also collapsed these answers into 2 categories: very satisfied / somewhat satisfied versus neutral / somewhat dissatisfied / very dissatisfied.

Covariates assessed included the sampling group of the respondent (CTSA versus NCURA), the existence of a standard policy at the institution (yes versus no/unsure), the type of policy in place – if applicable (one of four, determined post hoc [see Results]), and the institution's policy on allowing units to negotiate special arrangements on a case-by-case basis (yes versus no/unsure). One question asked whether F&A sharing occurred only when multiple PIs were in place or if sharing extended to situations in which any co-investigators (PI or non-PI) were based in different departments or units. Next, a question with the descriptions

of types of policies honed in on whether F&A sharing took into account the percentage of effort of the investigators involved, the location of the physical space required to complete the work, or a mix of personnel time and other resources used (e.g., space). The survey also asked whether F&A sharing arrangements were negotiated on a case-by-case basis rather than by a standard formula.

Statistical methods—We describe responses by reporting percentages for all variables, both separately (by group—CTSA or NCURA) and combined. We used risk ratios and chi-squared tests to assess associations between 2 categorical variables, and we employed the Mantel-Haenszel approach to assess the association between 2 binary variables, while controlling for a multi-category predictor variable.²⁰ We performed all analyses using STATA software (Version 10.1, College Station, TX).²¹

Results

Internet searches

Table 1 presents the results from the Internet searches. Through the Google searches, we located 54 policies posted for AHCs, universities, and colleges as well as 5 institutional reports from ad hoc task forces or committees convened specifically to address the issues of sharing F&A cost recovery. In searching the Websites of institutions awarded CTSA, we located 19 posted policies and 5 institutional reports addressing the issue. Through consensus, we determined that all 19 policies fit in one of four categories or types: based on (1) the distribution of work by investigator effort, (2) the physical space used (e.g., office space, lab space, patient exam space), (3) a pre-set percentage formula taking into account a wide variety of factors, and (4) case-by-case basis negotiations (Table 1). For illustrative purposes, we highlight the publicly-available policies that are available on the Internet for the University of Colorado at Boulder,²² the University of Kansas – Lawrence,²³ the University of New Hampshire,²⁴ and the University of Nebraska – Lincoln,²⁵ which provide some of the most detailed models we found for sharing F&A recovery between departments/units/centers.

Looking at the *combined* results of both the Google searches and the CTSA institution Website review (Table 1), we found that a slight majority of institutional policies that address the sharing of F&A cost recovery between departments/units/centers are based, either wholly (type 1) or in part (type 3), on the distribution of work (percent effort) by individual investigators (51.1%, 23/45). But, when comparing groups, we found that most of the policies uncovered through Google searches were based only on the distribution of work by investigator effort (44.8%, 13/29), while the majority of policies at institutions with CTSA were based on case-by-case negotiation (75.0%, 12/16; $P = 0.051$). Although, according to their reports, all ad hoc task forces and committees identified the issue of sharing F&A cost recovery as a factor in facilitating interdisciplinary research and recommended that such a policy be established, only half (50%, 5/10) offered specific guidelines or models for establishing one (data not shown).^{26–30} Finally, 13.7% (10/73) of the policies we located through our Internet searches (Google, CTSA institution cites) describe the distribution and/or sharing of F&A cost recovery either as an “incentive” for investigators, centers, and units conducting the research or as “bridge funds” to stimulate additional research initiatives (data not shown).^{24,31–39}

We uncovered very little about F&A cost recovery through our Google and PubMed database searches, and the few articles and books we did find simply indicated that recovering F&A costs was a “recognized barrier” to interdisciplinary research,^{5,7–9,11,12} described the role of F&A cost recovery in allocating space,⁴⁰ or noted that universities are not adequately reimbursed for the indirect costs of conducting research.⁴¹ We located one

proceedings article that offered a detailed description of one university's methods for assigning credit and distributing the return of F&A in order to break down barriers to interdisciplinary research.¹¹ While this article provides an in-depth look at one university's policy and subsequent increase in volume of proposals and research expenditures, it neither provided information on users' satisfaction with the policy nor reviewed other policies in existence. Therefore, we believe this is the first peer-reviewed publication to describe and examine in a systematic way policies for sharing F&A cost recovery and satisfaction with them.

Survey

Of the 46 possible respondents from the CTSA group, 37 (80.4%) returned surveys, and 217 respondents from the NCURA group returned surveys. Because individuals subscribed to any or all of the four listservs, we were unable to determine a denominator or response rate for the NCURA group. Table 2 gives the number (and percent) for responses to survey questions administered to all respondents (Part I) and those administered only to respondents from institutions with written policies for F&A sharing (Part II).

With respect to their primary roles, of the 217 NCURA respondents, 135 (62.2%) indicated that they work in central administration, 74 (34.1%) reported that they work in departmental administration, and 8 (3.7%) did not indicate their primary role. Approximately one-fourth of the NCURA respondents (27.7%, 60/217) were from colleges, 33.6% each were from universities and AHCs (73/217, respectively), and 5.1% (11/217) did not answer.

While the majority of both CTSA and NCURA respondents (80.7%, 205/254) agreed, strongly or somewhat, that a standard policy for sharing F&A cost recovery would facilitate interdisciplinary collaboration, only 35.4% (90/254) reported that their institutions had such a policy (Table 2). Although nearly two-thirds (64.6%, 164/254) indicated that their institutions did not have a policy in place or that they were unsure if one existed, 59.8% of these (98/164) confirmed that individual units within the institution are permitted to negotiate unique F&A sharing arrangements on a case-by-case basis.

Of the 90 total CTSA and NCURA respondents who indicated that their institutions had an F&A cost recovery sharing policy, 85 answered 3 additional questions describing their policies and their satisfaction with them (Table 2). Most of these respondents (77.6%, 66/85) reported that their policy applied to grants with any co-investigators across different departments or schools (regardless of whether the grant involved multiple PIs), and the majority (80%, 68/85) reported being satisfied (very or somewhat) with the policy in place. While a few respondents were either neutral (14.1%, 12/85) or somewhat dissatisfied (5.9%, 5/85) with their policy, none expressed a high level of dissatisfaction (Table 2).

Respondents from both the CTSA and NCURA groups reported 4 types of formulae for F&A cost recovery sharing that correspond with the 4 types we identified through our Internet searches (Table 2): distribution based solely by investigator effort (43.5%, 37/85); distribution based on a more complex formula that takes into account multiple factors such as personnel time and space requirements (29.4%, 25/85); calculations made on a case-by-case basis (24.7%, 21/85); and distribution based upon physical space needed (2.4%, 2/85). Respondents at institutions with an F&A cost recovery sharing policy in place (yes versus no/unsure) were significantly more likely to endorse the idea that implementing a standard policy supports interdisciplinary collaboration (89% versus 76%, relative risk=1.17; 95% confidence interval=1.04 to 1.31; $P = 0.014$; data not shown). This difference remained significant ($P = 0.012$) when we adjusted for survey group (CTSA versus NCURA), as captured in Figure 1. When we compared satisfaction levels across types of policies and formulas in place, we observed no strictly statistically significant differences ($P < 0.05$).

However, we did note a marginally significant relationship between satisfaction (strongly/somewhat satisfied versus neutral/somewhat dissatisfied/very dissatisfied) and whether the institution imposed a formula for F&A sharing or allowed investigators to negotiate unique arrangements: those with formulaic policies were somewhat more satisfied (84.4%) than those pursuing case-by-case negotiations (66.7%; $P = 0.078$; data not shown).

As shown in Table 2, similar percentages of CTSA and NCURA respondents endorsed the usefulness of F&A sharing (86.5% versus 79.7%; $P = 0.34$), and the proportion in each group reporting the existence of an institutional policy did not differ significantly (27.0% versus 36.9%; $P = 0.25$). Neither the distribution of policy types nor the description of the formula differed by respondent group ($P = 0.39$ and $P = 0.35$, respectively). Finally, we explored whether the type of institution (college, university, AHC through NCURA, or AHC through CTSA) impacted agreement with the principle of sharing, policy types, and satisfaction with policies (if in place), but we found no significant differences among these variables. We did see a significant difference, however, with respect to satisfaction level among those institutions having implemented a formal policy. Among these 85 respondents from both the CTSA and the NCURA groups combined, satisfaction with the existing policy was almost universal for those at universities (96.7%) and somewhat lower among AHCs contacted through CTSA (80.0%), colleges (72.7%), and AHCs contacted through NCURA (61.9%; $P = 0.018$).

Discussion

Internet searches

Through our searches, we found that at least 45 institutions have implemented policies for sharing F&A cost recovery between departments/units/centers, and 10 have convened ad hoc task forces or committees to discuss the issue, attesting to the perceived importance of sharing F&A cost recovery in the success of conducting interdisciplinary research. Even though results of the Google searches illustrated the wide variance of policies, implementation, and attitudes among institutions regarding shared F&A cost recovery, we were able to synthesize the results into one of 4 unique types (Table 1), which could be used as models by other institutions looking to adopt a formal policy.

Notable differences exist in the type of policies in place at institutions with CTSA compared to institutions without CTSA. While only approximately half (53.7%) of the policies we discovered through our general Google searches specifically address the sharing of F&A between departments/units/centers, well over four-fifths (84.2%) of the Websites of CTSA-funded institutions addressed this issue. This finding supports the idea that at institutions with CTSA, the administrators make concerted efforts to establish a policy that allows for sharing F&A cost recovery for interdisciplinary research initiatives. Notably, the results from the searches of CTSA-funded institutional Websites do not align perfectly with the results from the survey of CTSA PIs. For example, none of the Websites from the CTSA-funded institutions reported that F&A sharing policies were based upon investigator effort, whereas 4 CTSA PI survey respondents indicated this was the type of policy at their institution. This discrepancy is likely explained by an institution's choice not to post such documents publicly, but rather to circulate them internally.

Survey

While survey respondents widely agreed that a policy for sharing F&A cost recovery was important for facilitating interdisciplinary research, the majority of them reported that their institution did not have a formal policy. Notably, the support for sharing F&A to facilitate interdisciplinary research was stronger among institutions that had already implemented a

formal policy with a uniform strategy for sharing cost recovery (Figure 1). Generally, those who had a policy seemed to be satisfied, regardless of the details of the policy in place.

Prior to administering the survey, we had anticipated that the 2 survey groups, CTSA and NCURA, might respond differently to the survey questions given their different roles (senior investigators versus research administrators) and the types of institutions at which they worked (college, university, or AHC). Overall, however, the responses from both groups were strikingly similar; most endorsed the idea of sharing F&A to facilitate interdisciplinary research, and most were satisfied with the policies in place. The 80% response rate among the CTSA group, consisting of busy, high-profile researchers, indicates a high level of interest in this topic for research faculty. This issue is clearly relevant for administrators at non-medically focused institutions as well, attesting to the importance of the topic in general, regardless of the type of research conducted. Despite the high degree of interest, 8% of both CTSA and NCURA respondents were unsure if their institutions had implemented a formal policy; we found this result to be surprising, as we had expected that both groups would be more knowledgeable about this topic. Finally, we note that the vast majority of survey respondents who reported having a policy in place indicated that their policy was applicable whether it was for a grant with multiple PIs (as recognized by the NIH) or a grant with a single PI and co-investigators across multiple departments. We would have postulated that sharing F&A cost recovery would be much more commonly adopted in instances of grants awarded to multiple NIH-recognized PIs than in cases of co-investigators from different departments collaborating.

Many respondents indicated that their institutions allowed for individual F&A sharing agreements negotiated on a case-by-case basis. The slightly lower level of satisfaction among this group compared to those with standard policies in place argues against the case-by-case approach as a primary strategy. Perhaps investigators are less satisfied with case-by-case negotiation because it may entail more time (and perhaps confrontation) in the negotiation process, slowing the progress of research.

Limitations

Institutions other than those counted in Table 1 may have similar policies that were not publicly posted from November 2009 to January 2010 or were accessible only through a secure institutional login. As with any survey, the results are vulnerable to non-response bias. For example, the response rate among NCURA members was dramatically lower than that of CTSA PIs. The PIs are more likely to have experience with interdisciplinary research initiatives as well as related institutional barriers. Furthermore, CTSA PIs received the survey from a colleague known to most of them whereas the NCURA members received the survey cold through their listservs. Hence, the lower response rate among the NCURA members is not surprising. We cannot determine whether NCURA respondents were more or less likely than research administrators who are not NCURA members to be knowledgeable about the administrative barriers to interdisciplinary research and F&A policies at their institutions. Additionally, NCURA members who are active in the organization and subscribe to the online listservs are likely to be more informed and concerned about such administrative issues. Therefore, NCURA survey respondents may be unrepresentative of the entire NCURA membership as well as unrepresentative of the make-up of the overall population of employed research administrators. Lastly, a small degree of overlap between survey groups is possible as some of the NCURA respondents may be employed at CTSA-affiliated institutions.

Conclusions

Our survey results show that the vast majority of investigators and administrators are in favor of F&A cost recovery sharing policies to facilitate interdisciplinary research; this philosophy aligns with current NIH recommendations that institutions develop ways of sharing F&A cost recovery as part of the initiative to increase and facilitate interdisciplinary research. The majority of faculty and administrators reported satisfaction with the policies in place at their institutions, regardless of the type of policy. In addition, those respondents at institutions with formal policies in place were even more likely to endorse the principle of sharing, adding further evidence of user satisfaction with formalized F&A cost recovery sharing strategies. Given these findings, more institutions should explore establishing formal F&A cost recovery sharing policies for their investigators as a way to reduce barriers to interdisciplinary research. Investigators perceive them as helpful in pursuing interdisciplinary lines of inquiry and seem satisfied with policies that impose standard formulas based on salary distribution, space allocation, and/or other resources needed to conduct the research. We recommend that prior to implementing a policy, institutions that are considering developing an F&A cost recovery sharing policy carefully review the four models described in this report and engage in a detailed analysis of the implications on departmental and center budgets. A multi-year retrospective analysis would both allow for an evaluation of the budgetary impact of sharing F&A cost recovery over time, and permit departments and centers to prepare for impending financial changes.

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Figure 1.
Percentage of respondents who agree that sharing policies are useful in conducting interdisciplinary research, cross-classified by existence of a written policy and survey group.

Table 1

Summary of Institutional Policies on Distribution and Sharing of Facilities and Administration (F&A) Cost Recovery Discovered in Internet Searches, 2010

Institution type	Policy type	Google search No.(%)	Clinical and Translational Science Award institutions No. (%)	Total No.(%)
All institutions	General policy posted for distribution of F&A cost recovery (Subset I)	54/59 (91.5)	19/46 (41.3)	73/105 (69.5)
	If policy posted, it specifically addresses sharing of F&A cost recovery between departments/units/centers (Subset II)	29/54 (53.7)	16/19 (84.2)	45/73 (61.6)
Subset I: Institutions with policy posted for distribution of F&A cost recovery	1. Based on the distribution of work by investigator effort	14/54 (25.9)	0	14/73 (19.2)
	2. Based on the physical space used (e.g., office space, lab space, patient exam space)	5/54 (9.3)	2/19 (10.5)	7/73 (9.6)
	3. Based on a pre-set percentage formula taking into account a wide variety of factors	29/54 (53.7)	5/19 (26.3)	34/73 (46.6)
	4. Negotiated on a case-by-case basis	6/54 (11.1)	12/19 (63.2)	18/73 (24.7)
Subset II: Institutions with policy posted that specifically address sharing of F&A cost recovery between departments/units/centers	1. Based on the distribution of work by investigator effort	13/29 (44.8)	0	13/45 (28.9)
	2. Based on the physical space used (e.g., office space, lab space, patient exam space)	3/29 (10.4)	2/16 (12.5)	5/45 (11.1)
	3. Based on a pre-set percentage formula taking into account a wide variety of factors	8/29 (27.6)	2/16 (12.5)	10/45 (22.2)
	4. Negotiated on a case-by-case basis	5/29 (17.2)	12/16 (75.0)	17/45 (37.8)
Subset III: Institutions without policy posted for distribution of F&A cost recovery	Task Force or Ad Hoc Committee has been convened and presented recommendations for the sharing of F&A cost recovery	5/5 (100)	5/27 (18.5)	10/32 (31.3)

Table 2

Summary of Responses to Survey on Attitudes Toward and Types of Policies in Place for Sharing Facilities and Administrative (F&A) Cost Recovery

Survey part: Respondent	Survey question	Clinical and Translational Science Award (CTSA) institutions No. (%)	National Council of University Research Administrators No. (%)	Total No. (%)
Part I of Survey: All institutions	<i>Many academic leaders argue for implementing Facilities and Administrative (F&A) cost sharing strategies in order to make it easier for investigators to collaborate across disciplinary and departmental boundaries. Whether or not your institution has such a policy, please indicate your level of agreement with the following statement: "Having a standard policy for F&A cost recovery sharing helps investigators from multiple departments, units, or centers to engage in interdisciplinary research collaboration."</i>			
	Strongly agree	17/37 (46.0)	99/217 (45.6)	116/254 (45.7)
	Agree somewhat	15/37 (40.5)	74/217 (34.1)	89/254 (35.0)
	Neutral	4/37 (10.8)	32/217 (14.8)	36/254 (14.2)
	Disagree	1/37 (2.7)	11/217 (5.1)	12/254 (4.7)
	Disagree strongly	0	1/217 (0.5)	1/254 (0.4)
	<i>Is there a standard, written policy at your institution for the sharing of F&A cost recovery among departments/units/centers when a research grant includes investigators from multiple departments?</i>			
	Yes	10/37 (27.0)	80/217 (36.9)	90/254 (35.4)
	No	24/37 (64.9)	119/217 (54.8)	143/254 (56.3)
	Unsure	3/37 (8.1)	18/217 (8.3)	21/254 (8.3)
Part II of Survey: Institutions with written policies	<i>Please choose the policy description below which, IN GENERAL, most closely resembles the policy at your institution:</i>			
	Sharing of F&A cost recovery is based on the distribution of work by investigator effort proposed in the project	4/10 (40.0)	33/75 (44.0)	33/75 (44.0)
	Sharing of F&A cost recovery is based on a formula taking into account a wide variety of factors and variables, including percentage of effort of personnel, allocation of space, use of resources, etc.	2/10 (20.0)	23/75 (30.7)	25/85 (29.4)
	Sharing of F&A cost recovery is negotiated on a case-by-case basis	3/10 (30.0)	18/75 (24)	21/85 (24.7)
	Sharing of F&A cost recovery is based on the physical space needed to conduct the research (e.g., office space, lab space, patient exam space)	1/10 (10.0)	1/75 (1.3)q	2/85 (2.4)
	<i>Does your institution's policy refer to sharing of F&A cost recovery only for grants with multiple principal investigators (PIs), or to any grant in which the co-investigators are based in multiple departments?</i>			
	Multiple PIs	0	12/75 (16.0)	12/85 (14.1)

Survey part: Respondent	Survey question	Clinical and Translational Science Award (CTSA) institutions No. (%)	National Council of University Research Administrators No. (%)	Total No. (%)
	Either Multiple PIs or Co-Is in multiple departments	9/10 (90.0)	57/75 (76.0)	66/85 (77.6)
	Unsure	1/10 (10.0)	6/75 (8.0)	7/85 (8.2)
	<i>How satisfied are you with the policy at your institution?</i>			
	Very satisfied	1/10 (10.0)	25/75 (33.3)	26/85 (30.6)
	Somewhat satisfied	7/10 (70.0)	35/75 (46.7)	42/85 (49.4)
	Neutral	2/10 (20.0)	10/75 (13.3)	12/85 (14.1)
	Somewhat dissatisfied	0	5/75 (6.7)	5/85 (5.9)
	Very dissatisfied	0	0	0
	No experience with it	0	0	0