10 Fiscal Management

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A good program of financial management in a laboratory animal care and use program is no different than in any other business or program. It should tell the financial story in clear terms. It should meet the needs and format of the institution being served, and it should be meaningful. Financial management therefore includes acceptable accounting practices, sound budget planning, and frequent monitoring and adjustments. It is very important to remember that unlike most supplies and services used by the investigators, animal maintenance is usually very close to a monopoly and therefore suspect. The better the accounting practices, the easier it will be for the manager to tell his/her story.

Financial management comprises four processes: **planning, budgeting, cost accounting, and monitoring**. Each of the four steps should be performed on a regular basis for both short-term and long-term management. To ignore any of the steps truly jeopardizes fiscal management in any organization.

I. ACCOUNTING TERMS

A. **Accounting** is the systematic recording, presenting, and interpreting of the financial data to provide information to organizations.

Information provided by accounting includes the following.

1. **Operating information** is information that is required to conduct the day-to-day operation. This type of accounting would record payroll, supply and service expenditures, revenue received, equipment purchases and inventory balances. The organization needs to know how much it owes, what it needs, and when the debts are due. The organization also needs to know how much money it has to spend and in which categories.

2. **Management information** is a summary of the accounting information used by managers, as they do not have the time to examine all of the details involved in the operating information. The summaries and other indicators allow the manager to carry out his/her function. Managers use the accounting information to **control** (communicate, motivate, attention getting, and appraisal), **coordinate** (look at all areas of the organization simultaneously), and **plan** (budgeting, looking at areas that are over, as well as under, budget).

3. **Financial information** is the information provided to external parties such as other departments within the organization, funding agencies, and the parent organization. It is important that the information is kept in a format that is meaningful to the parent organization, sponsor, or users of the services. The information should be retrievable, reproducible, and meaningful.

B. **Goals** are needed in order have a plan for budgeting. Goals can be set to meet laws and standards or to meet the needs of the researchers being served. Typical goals are accreditation, meeting standards set by USDA, or meeting the animal health requirements of the research being conducted.

C. **Support** for animal facilities comes from grants, contracts, recharges, and institutional sources. The manager needs to be able to understand and account for each of these entities in the format needed. Typically, the terms "**indirect**" or "**direct**" are used for categories of support and costs. **Indirect costs** are not easily attributable to a particular cost center. An example of an indirect cost would be the cost of administering the department or facility. **Direct costs** are those easily attributed to an individual cost center. An example of a direct cost is mouse chow for the cost center "mice."

NIH grants typically have direct and indirect support components. **Direct support** for a grant or contract would be the support for supplies, equipment, and personnel associated with the funded project. **Indirect support** would be the support that goes to the institution and not directly to the department for program support. Indirect support would typically be used to support the institution's infrastructure (i.e., library, security, etc).

D. **Budget** is the monetary plan for the goals being set. Setting the budget should involve everyone responsible for achieving the goals.

E. **Rate setting** is the use of cost analysis to set fee structures for individual cost centers.

F. **Cost centers** are accounting devices for accumulating expenses that have common characteristics. Some examples of cost centers are cage washing, technical services, transportation, mouse husbandry, dog husbandry, and other centers that can stand alone. Cost centers should be as specific as possible and separated into categories that supply information that is truly needed.

Cost centers provide an equitable justification for charging users of services for the service or product provided. Cost centers also provide the director/manager a means of control and planning. They measure the cost of an activity against its value. Cost centers allow comparison between two or more like units for the cost of a service. They also allow a better justification of service fees to user groups and sponsors.

G. Cost Analysis is the use of all cost information to determine the correct fee for service. It helps identify services that are not needed or are not self-supporting. Cost analysis also assists in planning, decision-making, and the controlling process on a daily, quarterly, or annual basis.

II. PLANNING

The planning process is used to ensure that the animal facility management professionals have a vision and plan for the future. To plan for growth, adding additional services, or eliminating present services requires communication with the administration and investigators. The planning stage can be considered strategic planning in that the management team is looking to meet the needs and wants of the institution and personnel being served. Planning requires attendance at conferences and meetings in order to keep current and knowledgeable of trends in laboratory animal care and use. The needs of investigators have to be met not only today, but also in the future. Most research institutions require years of planning to erect new buildings, increase staff, purchase equipment, or rid the facility of disease. All of these require additional funds that must be generated either through the per diem system or by fund raising, neither of which happens quickly.

Sometimes good practices have to be marketed to the users of the services. Educating and communicating with the investigators and laboratory personnel accomplish marketing best. Marketing is closely linked with planning.

III. BUDGETING

The budgeting process should always be related to the overall planning process of an organization. No one is in a position to plan for the future without a clear sense of what the available resources are. Conversely, sensible budgets and financial plans cannot be put together without knowing the direction the organization will take in the future. Simply allocating money is not enough. Instead, the proper and strategic use of resources is key to the budgeting process. As Thomas Wolf writes in the book, *Managing a Nonprofit Organization* (1), "There are eight steps that an organization should take to complete a successful budgeting cycle."

STEP 1. Make a Wish List

The first step has nothing to do with numbers or dollars. Rather, it consists of an annual review of the needs of the institution by speaking with senior management and investigators to determine what they want the organization to accomplish in the year or years to come. This is the planning stage

previously discussed. The planning stage involves consideration of a number of questions about the upcoming year, such as:

1. What should the organization be doing in the next year or future years?
2. What core activities are essential?
3. What additional activities might be undertaken if cost were not an object?
4. What are the staffs needs associated with these activities?
5. Are there special one-time expenditures that might be considered for things such as upgrading equipment, improving physical facilities, contracting special consultancies in evaluation, or marketing?

STEP 2. Cost Out the List

This involves determining how much it will cost to carry out the activities listed in Step 1. Obviously, there are some basic costs that have to be covered just to keep the organization going. There are the facility expenses, core staff salaries, and expenses related to the basic programs that were established in the past and which are still needed. Each of these programs and activities must be carefully evaluated for cost and impact so that rational decisions can be made about the continuation of such programs. In addition, the expenses and impact associated with new activities must also be evaluated.

There are two approaches commonly used to develop costs:

1. The first approach is called the **incremental budgeting method** and leans heavily on information contained in the previous year's actual expenses and income records. If an organization is carrying out an activity that has been ongoing for several years, then the easiest way to prepare a budget for the coming year is to simply consider a percentage increment for inflation and other cost factors. The percentage increase or decrease added to the figures contained in the previous years financial statement (referred to as *actuals*) then becomes the budget figure for the new budget.
2. The second approach, called **zero-based budgeting**, requires that each line item of a budget be calculated anew. Staff members are told that any item in the budget will be zero unless they can provide a full justification for a new budget figure.

Obviously, some combination of these two approaches is desirable in the budgeting process. It is a waste of time and effort to rely on zero-based budgeting for programs already in place. On the other hand, implementing new programs without a full cost estimate would be irresponsible on the part of management. Costs should always be estimated on the high side. As the costs

of new programs and activities are considered, it should be remembered that they will add to the central administrative costs. The simple addition of a program will put added burden on the core staff, supervision, space, and equipment.

STEP 3. Allocate Estimated Income

In this process it is imperative to ensure that all "**restricted income**" is placed into the proper program activity. Examples of restricted income would be a grant for a specific activity, a donation for a specific project, or an internal decision to restrict all income for veterinary services to be used for some specified purpose. The restricted income should be allocated into the programs for which it was intended. Other income would be considered "**unrestricted**." The manager should try to cover the most basic administrative costs with the unrestricted income, and then allocate the remaining unrestricted income across all the programs and activities. This process makes it easier to make hard decisions later if the estimated expenses and income do not match.

STEP 4. Compare

Comparing the estimated expenses with the estimated income is usually very revealing. It may be clear in the process that some activities will have to be given up if the projected budget does not balance. In fact, if management discovers that income is adequate to cover all expenditures at this point in the budgeting process, there should be concern that the organization is not reaching far enough or being ambitious enough in its planning.
In evaluating one program activity against another, management needs to be careful about using the criterion of cost-effectiveness in the pure sense. Typically we think of cost-effectiveness as the return on investment with a large value gained for a small cost. While cost-effectiveness or breakeven are concerns, the mission may dictate that the organization should carry on certain activities that are not cost effective, at least in the short term. Some activities will have to be conducted in order for the organization to fulfill its mission, even at an apparent loss. An example would be having a small number of one species of animal. As most managers know, the care for a few animals is usually not cost effective and might necessitate cost subsidization until the numbers grow.

It also might be beneficial to spread some costs where specific service charges are hard to allocate, such as animal health, to all animals and not charge on a case-by-case basis. Similarly, one would not want to forego education, certification, and awards simply because income realized from these activities is not readily apparent. Thus, cost-effectiveness is only one

criterion but certainly not the only one. The primary criterion should relate to the mission of the organization, its purposes, goals, and objectives.

STEP 5. Set Priorities

Anyone who has participated in a budget-balancing session knows how traumatic it can be. Each suggested activity resulting in expenditures seems to have a defender. In the end, a priority-setting session must relate not solely to dollars and cents, but also to a fundamental assessment of the organization's mission. It is important to seek answers to questions such as:

1. Is this activity really central to what the organization is about?
2. Does it help the organization get where it should be in 1 year, 2 years, or 5 years?
3. Might it be more important to build a reserve to protect the organization over the long term rather than engage in a new activity area?

These are difficult questions, but by asking them the management team is fulfilling a fundamental role in deciding what course is best for the organization and most clearly in the interest of science.

STEP 6. Adjust and Balance

Once activities have been put in some order of priority, negotiation is still possible as the budget is adjusted and put into balance. For example, an activity that is related to veterinary health could be switched to husbandry if it proves to make husbandry more efficient. Weighing animals and trimming nails are examples that could fall into either category and should be placed where they are most cost efficient. This type of negotiation would be beneficial to both activities and to the mission of the unit as a whole. One must be careful not to move monies into or out of activities that are restricted or to overstate income in order to ease the pain of balancing the budget.

STEP 7. Approve

Management should ask hard questions about the budget preparation. They should challenge any documents proposing new activities because they are ultimately responsible for the fiscal health of the organization. Once everyone has agreed upon the budget and the activities to be supported, the budget should be approved. Budget agreement is very important because success depends upon everyone working together to ensure its success. If part of the management team attempts to continue with a program that has been cut, it makes it difficult for the other activities to continue. Nonetheless, the last step gives the budget process some flexibility.

STEP 8. Monitor and Amend

One common mistake in the budget process is to assume it has come to an end once management approves the final document. Two extremes should be avoided:

1. Management should not insist that the approved document is inflexible and force the staff to stick to it without modification throughout the fiscal year.
2. On the other hand, management should not be willing to say the budget document is only a rough approximation and give the staff instructions to "come as close as possible." Management should have final say on any significant changes in the budget figures.

If management or a staff person presents an idea midway through the budget year that is worthy of funding, the idea should be explored. However, the manager must remember this puts him/her back to the first step and he/she will then need to go through the process again. Granted, the process may be abbreviated, but good budgetary techniques require that the eight steps be completed in order to approve funding the new idea.

Each budget activity must be monitored throughout the year. Questions should be asked when budgets are being over/under-spent. Over-spending can suggest ineffective fiscal oversight and under-spending can suggest that the activity is not being performed sufficiently. It is the responsibility of management to ensure that things are going as planned. Cost accounting allows management the opportunity to monitor the activities of the organization.

IV. COST ACCOUNTING

A. Background

In order to have good fiscal management there must be a sound accounting system in place. The budget is the financial plan of the organization. Budgeting specifies how much money an organization thinks it will take in and how much it will spend (1). Accounting is the system that is used to record, classify, and summarize the income and expenses of the organization. The information provided is an integral part of the information used in financial management (2). Accounting and budgeting must be recognized as separate systems that interact in complementary manner if managers are to exercise control over the financial resources of their organizations. The budget is the plan; accounting is the record of the plan.

B. Cost Centers

The accounting system as stated above records, classifies, and summarizes the business activity of the organization. To break this down further, it records the activity of each cost center. Cost centers should be identified in such a way as to be able to stand alone in respect to the service the cost center provides. The manager should always ensure that the effort and cost of obtaining the cost information is truly needed. Data collection is costly in time and effort. It is recommended that the manager periodically look at the data being collected to see if it is really being used. If it is not being used, the resources used to gather the information have been wasted.

Several benefits can be derived from organizing into cost centers. These are described below.

1. **First and foremost, cost centers facilitate an equitable means of charging users for services provided.** Cost accounting by cost centers also allows the manager a means of analysis, which is useful for organizations evaluating particular programs for cost-effectiveness or for revenue-generating potential.

2. **Cost centers provide the director/manager a means of control and planning**. The activity being accounted for should be as small as possible. The smaller the cost center, within reason, the more accurate will be the expense and income records attributed to the activity. Accurate accounting allows the manager to measure the cost of an activity against its value. It also allows comparison between two or more units for the cost of a service. In addition, it will allow meaningful adjustments of fee schedules. If a manager has two or more cage-washing operations in separate buildings, cost accounting them as different cost centers is one management tool to evaluate the efficiency of each. The information provided could suggest equipment deficiencies, personnel issues, or physical plant designs that need to be remedied. If all cage-washing operations were accounted for under one umbrella, those differences would not show up. Separate cost centers also allow for activities to be dropped or charged differently in times of budget reductions or animal population shifts. For instance, physical examinations and immunizations of animals might be part of the husbandry per diem in a facility housing only dogs and cats. However, if rodent populations start to increase proportionately, physicals and immunizations might be switched to the dog and cat purchase or in-processing charges. Using this same example, labor for cleaning pens may be more of a factor for the dogs, but cage-washing costs would be more of a factor with the rodents and cats. By using dogs, cats, and

rodents as cost centers in this example, it is easier to differentiate the costs to ensure equitable charges.

3. **Cost centers allow better justification of fees to user groups and sponsors**. It is much easier to explain fees to users when actual costs are used. Management should be able to show what cost factors go into each cost center and how that cost was calculated. Cost centers allow the manager the ability to provide and charge for differential services based on need. If an investigator does not need quarantine or cage-washing services, cost center accounting will permit the manager to forgive those portions of the recharges. While the use of all services may be negotiable, some services will be mandatory for legal, humane, or institutional reasons.

The first step in cost accounting is to identify all direct costs. Identifying direct costs is different than using budget figures. Identifying direct costs allow you to assign the budget figures to a particular cost center. Examples of direct costs are labor, supplies, equipment, or facilities used in a specific aspect of the operation such as cage washing, dog husbandry, rodent husbandry, veterinary care, or laboratory support. Second, fair shares of indirect costs need to be assigned to each direct cost center. Examples of indirect costs are supervision, administration, utilities, and general-use cleaning supplies.

C. Determination of Per Diem Charges

After the direct and indirect costs have been identified and assigned, the manager is ready to calculate per diem charges.

The following eight steps are useful for determination of per diem charges.

STEP 1. Determine the goals of the organization and the services to be provided.

STEP 2. Budget the direct cost of each service or goal proposed by the organization. Utilities and maintenance could be direct costs depending upon the policies of the institution. It is important to be aware of any pertinent rules and regulations, with respect to appropriate charges for laboratory- and animal-based research, such as policies put in place by the Office of Management and Budget (OMB) (3). In general, the rates will be more accurate if more items can be identified as direct costs.

STEP 3. Determine the total indirect costs that must be allocated to the cost centers identified in the budgeting process. Indirect costs

include administration, supervision, benefits, and supplies to accommodate these activities.

STEP 4. Determine how the money will be obtained to cover the various costs. University animal facilities usually receive money from direct recharges to grants and contracts, general support from the university, and their own grants and contracts. Management needs to know how much money will come from each source and how the money can be used, i.e., whether it is restricted or unrestricted. Grants and contracts are usually specific for a particular project. University support may be allocated for faculty, administration, or other specific uses.

STEP 5. Allocate the income money from university sources, grants, and contracts to the total budget in accordance with any specific restrictions. This income is used to cover respective costs according to the restrictions if any are placed on the income. The costs not covered by the income will have to be recovered by recharges to the users of the services supplied.

STEP 6. Allocate the costs that must be recharged to revenue-producing cost centers. For each cost center a "factor" must be included to equitably distribute the indirect costs to each cost center. Examples of costs that would need to be included are animal health activities, administration, and maintenance of non-cost center space such as hallways and supply rooms. This distribution factor could be based on the labor distribution for each cost center, cage/pen space requirements for each species, or some other factor determined by management. It is important that this "factor" is truly representative of the indirect costs included for each cost center, as it has the potential to distribute some very large dollar amounts.

STEP 7. Calculate the number of animal days by multiplying the average daily population by the number of days in the year (365).

STEP 8. Calculate the cost per day (per diem) for each species. This is accomplished by dividing the number of animal days into the total allocated cost for each species.

One of the best sources for cost analysis and rate setting for animal research facilities is a document by that name, *Cost Analysis and Rate Setting Manual for Animal Research Facilities* (4), available from the National Center for Research Resources, Office of Science and Public Liaison. The latest revision was prompted by new technology, use of computers, increased regulation, and an increased need for consistency in cost accounting and rate setting. As research dollars become more scarce, and the cost of maintaining research

animals increases, management needs to have good cost containment and accounting practices to attract scientists to their institutions.

Some institutions feel that per diem surveys of other facilities' recharge schedules are equivalent to cost analysis and rate setting. Typically they use these surveys to prove that their costs are reasonable. If used for comparison, and only comparison, the surveys could be meaningful. If used to set per diem charges at your institution, the information is meaningless. Only cost analysis will truly prove what is a reasonable rate for a particular institution.

V. MONITORING AND REFLECTION

Monitoring the animal resource facility by using cost analysis is very important. The reports, if properly used, can be very effective management tools. An example would be if the animal census reports that the canine population has been decreasing for the past 2 months, but the cost of dog food and labor involved in caring for the dogs has not been reduced proportionately. In this case, the manager might suspect that the labor has become inefficient and either the food is going bad or is being used inappropriately. In both cases, the cost analysis reports should give a warning, and appropriate steps should be taken.

Several key questions with respect to monitoring financial management include the following.

A. What Does a Good Program of Financial Management Look Like?

The organization's finances should show prudent management, appropriate oversight and controls, and proper systems for predicting and tracking revenue and expenses (1).

The management team should keep accurate records that allow prediction of the organization's needs in the future. The management team should review the records and reports on a regular basis. It is wise for the management team to invite others to review the reports and records in order to help ensure a fair audit of the finances.

The budget should be monitored on an ongoing basis to ensure that expense and income are balanced. The cost of each service should be reasonable for the service provided. All costs need to be monitored and recharges justified for all species to ensure that charges applied to one species are not used to subsidize another.

The program should meet the needs of the community being served. All services should be well administered. The management team should continually question the users of the services to ensure that the programs are needed and adequate. The management should periodically determine what would happen if a particular service or program were stopped. It should be determined if anyone or anything suffers and how services and programs might be improved.

As stated in the budget development and review section, a good financial program allows management to position the organization for the future. Management should consider space and equipment needs for present and future users. Management should be involved in recruitment programs and be part of the research planning effort so that they are aware of future institutional needs. Except in extreme circumstances, an animal program should not be reactive in building space and purchasing equipment, but instead be proactive. Being proactive allows management the opportunity to put in place additional programs as the organization grows.

B. How Does One Incorporate Sound Financial Management If It Has Not Existed?

Building a sound financial program where one has not existed depends on strong support from the institutional administration. In all cases it will take time to collect costs, predict income and expenses, and develop budgets. The administration and the users of the services must be patient and supportive. The management team must use the eight-step approach that was discussed under budgeting. This approach will work even if good financial reports and records are not available. The less accurate the data is that is being used in the beginning of the process, the more the budget will need to be changed as the information and data become more precise. It is important for those starting out to remember to have a defensible plan for implementation and to stick to that plan. Change is inevitable as budgets and programs are developed, but if no plan is being followed, the change could be the result of pressure, rather than good decisions. It is the responsibility of the administration and the management team to ensure that the changes are made for the right reasons.

C. What Are Some Milestones or Indicators of Sound Financial Management?

Sound financial management is first measured by the ability of the organization to generate income that equals expenses. A more critical evaluation of sound financial management is to ask the question, "How are we serving our clients?" Breaking even in the income and expense categories is not relevant if management has to overcharge or cut programs that are truly needed. If investigators are not able to conduct research because of lack of facilities or disease in the animal population, then the program is not being managed soundly. The problems that appear in the financial management are better understood as symptoms rather than as disease. The lack of funds or space is usually caused by lack of support of the program from the administration and/or the faculty, or by a lack of vision and understanding of client needs on the part of the facility management. Therefore, a good milestone or indicator of sound financial management is the existence of

the resources needed to provide the investigators with the animals and technical capability required to conduct their research in an uninterrupted fashion.

It is important to remember that sound financial management is the same in both academic and industrial animal facilities. The costs must be contained whether the institution is non-profit or for-profit. The big difference is in how the cost is recovered. Typically the cost in academia is recovered through the per diem system of recharges. In industry, depending on the company, cost could be recovered through recharges to the research department or project, or could be assigned to other departments such as engineering, research support, services or some other department. However the costs are covered, they are very important to the success of the institution. The per diem charged in academia is usually the equivalent of the project costs in industry. The labor, equipment, supplies, animals, and facility costs still have to be accounted for and the income to cover the costs has to come from some identifiable source.

Finally, it is important for the manager to take time to reflect. Managers are paid to get things done. Periodically, the manager should take a reflective moment to jot down answers to a few questions, such as: "What are we doing?" "What should we be doing?" "What should we not be doing?" "What should we be doing next?" This informal exercise, when linked with the budget planning and monitoring process, can serve to highlight areas of strength and areas needing improvement.

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