Allocating Allowable Costs

Presented by:
Office of Sponsored Projects
Topics Covered

- Understanding the Basics
- What makes a cost allowable?
- Allocation Cost Methodologies
  - Proportional Benefit
  - Interrelationship
- Case Study and Discussion
- Question and Answers
Principles testing the allowability of costs:

- Necessary, reasonable and allocable: Goods or services acquired and amount involved reflect an action that a prudent person would have taken (prudent person rule).
- Conform: Items not restricted by federal regulations (2 CFR Part 200) or the specific award terms and conditions and agency requirements.
- Consistent with policies/procedures of the University and Treated Consistently: Consistent with policies and procedures that apply uniformly to both federally financed and other activities of the University. “Like” costs in similar circumstances treated consistently throughout the University.
- Be determined to be in accordance with GAAP: Financial information should be useful to individuals when making financial decisions, assessing resources, and maintaining records. (GAAP: Generally Accepted Accounting Principles)
- Not be included as a cost or used to meet cost sharing on any other federal award: A cost cannot be used to satisfy cost sharing requirements and also be charged to the award.
- Be adequately documented: Departments should keep complete records of all costs, including justifications of charges and any prior approvals.

Costs that do not meet these principles should not be charged to the sponsored award.
# A Review of Allowable and Unallowable Costs

<table>
<thead>
<tr>
<th>Typical Allowable Costs</th>
<th>Typical Unallowable Costs and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Salaries and benefits for employees who work directly on the sponsored award</td>
<td>• Alcoholic beverages</td>
</tr>
<tr>
<td>• Supplies and materials used in the performance of the sponsored project including</td>
<td>• Alumni/ae activities</td>
</tr>
<tr>
<td>computing devices &lt; $5,000 that are essential and allocable to the performance of the</td>
<td>• Bad debt, losses, collection and related legal costs</td>
</tr>
<tr>
<td>award</td>
<td>• Commencement and convocation</td>
</tr>
<tr>
<td>• Travel associated with the project or presenting results of the project</td>
<td>• Contingency provisions</td>
</tr>
<tr>
<td>• Equipment</td>
<td>• Donations and contributions</td>
</tr>
<tr>
<td>• Consultants</td>
<td>• Entertainment costs</td>
</tr>
<tr>
<td>• Subawards</td>
<td>• Fines and penalties</td>
</tr>
<tr>
<td>• Laboratory fees and patient care costs</td>
<td>• Fund raising and investment costs</td>
</tr>
<tr>
<td>• F&amp;A (Overhead or Indirect Costs)</td>
<td>• Housing and personal living costs</td>
</tr>
<tr>
<td></td>
<td>• Lobbying</td>
</tr>
<tr>
<td></td>
<td>• Losses on sponsored awards</td>
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</tbody>
</table>
A Review of Allowable and Unallowable Costs

Typical expenses not allowable as a direct charge on a federal award and excluded from the F&A rate calculation:

<table>
<thead>
<tr>
<th>Ledger Acct</th>
<th>Ledger Account Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>71006</td>
<td>Faculty Services-Other (Special Compensation)</td>
</tr>
<tr>
<td>72005</td>
<td>Salary &amp; Compensation- Other (Staff-Unallowable)</td>
</tr>
<tr>
<td>81025</td>
<td>Services-ITS/Telecom Expense (YSM Supplemental Telecom Charge)</td>
</tr>
<tr>
<td>81034</td>
<td>Services Expense (Services-Student)</td>
</tr>
<tr>
<td>81029</td>
<td>Services-Advertising and Promotion Expenses (Advertising, Public Relations, excluding recruitment of personnel)</td>
</tr>
<tr>
<td>81014</td>
<td>Collection Materials-Rare (Rare Books)</td>
</tr>
<tr>
<td>81014</td>
<td>Collection Materials-Rare (Manuscripts)</td>
</tr>
<tr>
<td>81011</td>
<td>Art and Museum Acquisition</td>
</tr>
<tr>
<td>81036</td>
<td>Travel Expenses (Domestic Travel-Unallowable)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ledger Acct</th>
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</tr>
</thead>
<tbody>
<tr>
<td>81036</td>
<td>Travel Expenses (International Travel-Unallowable)</td>
</tr>
<tr>
<td>81034</td>
<td>Services Expense (Professional Service Fees-Unallowable)</td>
</tr>
<tr>
<td>81048</td>
<td>Losses and Write-offs</td>
</tr>
<tr>
<td>81018</td>
<td>Supplies and Materials Expense (Materials for Resale)</td>
</tr>
<tr>
<td>81049</td>
<td>Prizes &amp; Awards</td>
</tr>
<tr>
<td>81041</td>
<td>Fee Expenses (Commissions)</td>
</tr>
<tr>
<td>81051</td>
<td>Other Expenses (Unallowable Credit Card Losses)</td>
</tr>
<tr>
<td>81050</td>
<td>Subsidies and Community Support</td>
</tr>
<tr>
<td>81051</td>
<td>Other Expenses (Parking Tickets)</td>
</tr>
<tr>
<td>81043</td>
<td>Dues &amp; Membership- Expenses</td>
</tr>
<tr>
<td>Examples</td>
<td>Allowable</td>
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<tr>
<td>--------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Flowers:</td>
<td>Used for table decoration at conference hosted by the grant.</td>
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<tr>
<td>Pantyhose:</td>
<td>Used to collect ticks for Lyme disease research.</td>
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<tr>
<td>Freezer:</td>
<td>Required to hold research samples resulting from work performed on the project.</td>
</tr>
<tr>
<td>Speeding Ticket:</td>
<td>Investigator was driving to New York to attend a steering commit meeting as part of the project.</td>
</tr>
<tr>
<td>Consultant:</td>
<td>Charged to the grant for services rendered to lobby Congress against reductions to research funding.</td>
</tr>
</tbody>
</table>
### Direct Costs vs. F&A Type Costs: Like or Unlike?

<table>
<thead>
<tr>
<th>Sponsored</th>
<th>Allowable</th>
<th>Unallowable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reason:</strong> Allowable to award if permitted by the sponsor and charges are for the direct benefit of the award</td>
<td></td>
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<tr>
<td><strong>Reason:</strong> Snacks and drinks are allowable when providing for human subjects care and well-being.</td>
<td></td>
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<tr>
<td><strong>Reason:</strong> Necessary for the conduct of the research and justified in the proposal.</td>
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<tr>
<td><strong>Consultant:</strong> Payments made to a non-Yale employee to interview human subjects in their homes for a research study.</td>
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<tr>
<td><strong>Snacks &amp; drinks:</strong> Provided to human participants in a blood draw study. Outlined in budget and budget description.</td>
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<tr>
<td><strong>Nooks:</strong> Provided for the research for an ED award on literacy. The participants are allowed to keep the Nooks after the study. Outlined in budget and budget justification.</td>
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<tr>
<td><strong>Speeding Ticket:</strong> PI and Co-Investigator purchase first class airline tickets to attend the annual Bimolecular conference held in Beijing, China.</td>
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<tr>
<td><strong>Air Fare and Travel:</strong> Investigator purchases airline tickets on Aeroflot airways rather than an US flag air carrier to attend the International conference on Genomic Advances held in Moscow.</td>
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</tr>
<tr>
<td><strong>$100 Airline Fee:</strong> PI changed his return flight to an earlier departure time so he could get back for a dinner with department faculty.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GA/Special Use</th>
<th>Allowable</th>
<th>Unallowable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reason:</strong> First Class tickets are not allowed to be charged on a federal award.</td>
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</tr>
<tr>
<td><strong>Reason:</strong> Neither Fly America nor Open Skies permit the purchase of airline tickets on a Soviet Union air carrier when US flag carriers are available.</td>
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<td></td>
</tr>
<tr>
<td><strong>Reason:</strong> Unallowable to the grant as there is no benefit to the award.</td>
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</tbody>
</table>
Allocation of Costs
Allocation of Costs

Has this ever happened to you?

- A PI in your department has just been awarded their second research award. The PI or Lab Manager is not certain how to equitably charge the two awards for commonly used lab supplies and chemicals and needs assistance.

- Do you know how to help? Let’s go through the steps!
Allocation of Costs

Allocable – Directly benefits the project(s) charged:

A cost is allocable to a sponsored award if:

- It is incurred solely to advance the research supported by the sponsored agreement
- It benefits both the sponsored award and other work of the institution, in proportions that can be approximated through use of reasonable methods
- Or, it is necessary to the overall operation of the institution and, in light of the principles provided in 2 CFR Part 200, is deemed to be assignable in part to sponsored projects.

2 CFR Part 200 provides two methods for allocating an allowable direct cost to two or more sponsored awards:

- Proportional Benefit
- Interrelationship Method
Proportional Benefit

- 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.
  - Initiator (PI or PI designee)
    - First-hand knowledge that purchase is reasonable and necessary
    - Determines the direct benefit and the proportional allocation. Detailed documentation supporting calculation of proportions is not required to execute the transaction.
  - Preparer
    - Must have appropriate proportional allocation instructions (i.e., email, fax, departmental request form, etc.) from the initiator prior to executing the purchase.

Example:

A PI has two awards which require the purchase of mice to conduct experiments.
  - the Specific Aims for one award requires 150 mice are needed to conduct the research
  - the Specific Aims of the second award requires 50 mice to conduct the research

The PI orders 200 mice and allocates the cost of the mice 75% - 25% between the awards.
Interrelationship Method

- If a cost benefits two or more projects or activities in proportions that cannot be easily determined due to the interrelationship of the work involved, then the cost may be allocated to the benefiting projects on any reasonable basis.

Example:

Acetone purchased for use in a laboratory is needed for the technicians working concurrently on three research projects.

A reasonable method of allocating the cost of the Acetone could be based on the number of research personnel FTEs in the lab that are supporting the award.
The methodology chosen should produce an allocation of costs to each sponsored award that reasonably reflects the proportion of benefit received by each award. Therefore, if reasonable, no after-the-fact reconciliation is necessary.

Examples of methodologies that could be used as a basis for allocating costs (depending on the type of expense) include:

- Effort of research personnel (headcount or FTEs)
- Laboratory space (square footage)
- Number of experiments or procedures performed
- Actual usage records for a representative sample (e.g., one week, one experiment cycle, etc.)
- Modified Total Direct Costs (MTDC) (Salaries, fringe benefits, materials and supplies, services, travel but excluding subawards entirely) budget of the benefiting sponsored award
Back to our original example:

A PI in your department has just been awarded their second research award. The PI or Lab Manager is not certain how to equitably charge the two awards for commonly used lab supplies and chemicals and needs assistance.

You met with the Lab Manager and determined the following:

- The PI needs to charge his two awards for needed lab supplies (pipettes, kimwipes, culture dishes, test kits, etc.) and chemicals to support his research. The total cost is $3,000.
- The Lab Manager is not certain as to the quantity of each supply item that will be used by each award and seeks your guidance in charging the two awards.
- The Lab Manager states there are 7 people working in the labs with 3.5 FTEs working on Award 1 and 1.5 FTEs working on Award 2. The FTEs do not include the PI who is not actively performing these tests in the lab but does include Research Assistants and Lab Techs.
Test Your Knowledge
Test Your Knowledge

Which allocation method would you use?

What methodology would you use to allocate the costs of the award?
# Allocation of Costs

## Cost Allocation Form

### 1304 FR.09: Cost Allocation Methodology

![Cost Allocation Form](image_url)
Different allocation methodologies may be required for different types of costs

- Example: It may be more appropriate to allocate lab supplies based on the proportion of effort devoted to each award (measured as FTEs).
- Whereas, allocating rent could be based on the square footage of lab space needed for each award.

Regardless of the allocation method used, it is important that the basis for the allocation method be:

- Documented contemporaneously with the cost being incurred and allocated; and
- Approved in advance by the Principal Investigator(s) of the awards to which the costs are allocated.

Guide: 1304 FR.02: Cost Allocation Methodologies
IMPORTANT

- Any cost allocable to a particular sponsored award under the standards provided in 2 CFR Part 200 may not be shifted to other sponsored awards in order to meet deficiencies caused by overruns or other fund considerations, to avoid restrictions imposed by law or by the terms of the sponsored award, or for other reasons of convenience.

- Any costs allocable to activities sponsored by industry, foreign governments, or other sponsors may not be shifted to federal awards.

- For additional information on determining allowability, reasonableness, and allocability of costs for sponsored projects refer to Guide 1305 GD.07
Test Your Knowledge
Question 1:
Dr. Smith receives monthly deliveries from Air Gas that is used for his four research awards.

Dr. Smith instructed the Department Business Office (DBO) to alternately charge the awards with the monthly costs (i.e., month 1 to award 1, month 2 to award 2, etc.).

Is this a proper allocation method?
Question 2:
Allocating the cost of rental space using actual square footage of each lab.

Question 3:
Dr. Smith has been allocating lab supplies for 2 years to his 5 research awards using the original FTEs budgeted on his awards. Staffing levels have changed during the 2 years.
Question 4:
PI instructs DBO to charge lab supply purchases to his special use account until he can decide how he wants the supplies allocated.

Question 5:
PI instructed DBO to develop an allocation method and prepare an online journal entry to allocate 3 months of lab supply purchases from his special use account to his 3 federal awards.
Case Reviews
Two of Dr. Murray’s NIH awards require the use of animals. Both awards (Award A and Award B) received approval for the use of animals with Award A needing 300 mice in order to conduct the research while Award B required 100 mice.

Unfortunately, the protocol number was only successfully linked to Award A and not to Award B. The PI orders 400 mice and allocates the cost of the mice 75% - 25% between the awards.

- Question: Is this allocation methodology appropriate?

- Question: Is this appropriate? Why or why not?
Case Review # 1: Analysis

- **Question:** Is this allocation methodology appropriate?

- **Question:** Because the protocol was not linked, YARC will not permit the charge to the second award. Knowing the first NIH award was properly linked, Dr. Murray requests that all 400 mice be charged to the first NIH award. Is this appropriate? Why or why not?
All of Dr. Murray’s research awards require the purchase of common lab supplies and chemicals in order to conduct the research. Dr. Murray has two NIH awards and three industry sponsored awards. It is very difficult to know the benefit to each of the awards so he allocates an equal portion of 20% to each.

- **Question:** Is this allocation methodology appropriate?
Question: Which of the following would be an appropriate method for allocating Dr. Murray’s lab supply and chemical charges among his five awards?

A. Charge all of the costs to the grant with the most money available.
B. Charge the costs to grant A in month #1, B in month #2, C in month #3, D in month #4, and E in month #5; then start over again.
C. Charge the 5 awards upfront based on the proportion of FTEs working on each award.
D. Charge all of the costs to the NIH awards and allocate the charges via cost transfer among the non-federal awards once they end.
E. Charge each award a proportionate amount of cost based on the modified total direct cost of each award as a percentage of the total.
Dr. Jones is attending a conference in San Francisco to present the findings from his research funded by two federal awards. Dr. Jones purchased his business class round-trip fare on Air Canada. When submitting the charge for reimbursement he instructs his business office to charge half the airfare to each award.

- Question: **Is this allowable and allocable to the two federal awards?**

*Policy: [3301 Travel on University Business](#)*
Class Take Aways

✓ Meet with your PI to create a reasonable allocation methodology prior to charging a sponsored award.

✓ Expenses and activities must be allowable in order to be allocated to sponsored awards.

✓ Allocation methodologies must be documented and approved by the PI.

✓ Allocation methodologies should logically relate to the costs being allocated.

✓ Retain supporting documentation in your department’s award file.

✓ Review allocation methodologies at least annually.

✓ Make sure no one person has control over all aspects of the transaction.
To successfully complete and receive credit for this course, you’ll need to pass the Allocating Allowable Costs online quiz.

Click here to take the online quiz
Websites Referenced in this Presentation

Policy, Procedures, Forms & Guides
Websites Referenced in this Presentation

2 CFR Part 200
http://www.ecfr.gov/cgi-bin/text-idx?SID=15d5184c2810c3eef54cd7109663b443&node=pt2.1.200&rgn=div5

Form 1304 FR.09 Cost Allocation Methodology
http://your.yale.edu/policies-procedures/forms/1304-fr09-cost-allocation-methodology

Guide 1304 GD.02 Cost Allocation Methodologies
http://your.yale.edu/policies-procedures/guides/1304-gd02-cost-allocation-methodologies

Guide 1305 GD.07 Determining Allowability, Reasonableness, and Allocability of Costs for Sponsored Projects
http://your.yale.edu/policies-procedures/guides/1305-gd07-determining-allowability-reasonableness-and-allocability-costs

3301 Travel on University Business
https://your.yale.edu/policies-procedures/policies/3301-travel-university-business

Allocating Allowable Costs online quiz
http://assessment-module.yale.edu/research-administration/allocating-allowable-costs-quiz
Answers to Test Your Knowledge
Which allocation method would you use?

*Answer: Interrelationship*

What methodology would you use to allocate the costs of the award?

*Answer: FTEs*
If the costs can not be easily determined based on the interrelationship of the work involved the costs may be allocated or transferred to benefitted projects on any reasonable basis.

In this example, the PI could use research personnel FTEs or laboratory space (square footage) method.

Question 1:
Dr. Smith receives monthly deliveries from Air Gas that is used for his four research awards.

Dr. Smith instructed the Department Business Office (DBO) to alternately charge the awards with the monthly costs (i.e., month 1 to award 1, month 2 to award 2, etc.).

Is this a proper allocation method?

Answer: NO. Why is the answer No?

If the costs can not be easily determined based on the interrelationship of the work involved the costs may be allocated or transferred to benefitted projects on any reasonable basis.

In this example, the PI could use research personnel FTEs or laboratory space (square footage) method.
Allocating rental space by square footage logically relates to the costs being allocated.

According to Guide 1304 GD.02, allocation methodologies should be reviewed regularly to ensure they are reasonable. Allocations must be updated when changes in headcount and/or effort occur. Allocation methods should be reviewed at least annually.
Question 4:
PI instructs DBO to charge lab supply purchases to his special use account until he can decide how he wants the supplies allocated.

Answer: NO. Why is the answer No?
Allocation methods should be documented when the cost is being incurred and approved in advance by the PI/initiator of the awards to which the costs are allocated.

Question 5:
PI instructed DBO to develop an allocation method and prepare an online journal entry to allocate 3 months of lab supply purchases from his special use account to his 3 federal awards.

Answer: NO. Why is the answer No?
Allocation methods should be developed and approved by the PI or initiator in advance of purchasing (or at the time of) ordering goods. Costs should not be allocated after-the-fact by use of an online journal entry resulting in cost transfers.
Answers to Case Reviews
Two of Dr. Murray’s NIH awards require the use of animals. Both awards (Award A and Award B) received approval for the use of animals with Award A needing 300 mice in order to conduct the research while Award B required 100 mice.

Unfortunately, the protocol number was only successfully linked to Award A and not to Award B. The PI orders 400 mice and allocates the cost of the mice 75% - 25% between the awards.

- **Question:** Is this allocation methodology appropriate?

  Because the protocol was not linked, YARC will not permit the charge to the second award. Knowing the first NIH award was properly linked, Dr. Murray requests that all 400 mice be charged to the first NIH award.

- **Question:** Is this appropriate? Why or why not?
Question: Is this allocation methodology appropriate?

Yes. 2 CFR Part 200 provides two methods for allocating an allowable direct cost to two or more grants. Proportional Benefit is one of the two methods defined when proportions can be determined and allocated without undue effort or cost.

Question: Because the protocol was not linked, YARC will not permit the charge to the second award. Knowing the first NIH award was properly linked, Dr. Murray requests that all 400 mice be charged to the first NIH award. Is this appropriate? Why or why not?

No. The 100 mice on Award B does not benefit Award A and would not be an appropriate charge to the award. You would contact the IACUC office and request the appropriate award linkage and ask YARC to charge the Award B.
All of Dr. Murray’s research awards require the purchase of common lab supplies and chemicals in order to conduct the research. Dr. Murray has two NIH awards and three industry sponsored awards. It is very difficult to know the benefit to each of the awards so he allocates an equal portion of 20% to each.

**Question:** Is this allocation methodology appropriate?

**No,** it is very difficult to identify the benefit to each award, the proportional benefit method would not be appropriate. The interrelationship method would be the more appropriate allocation, as interrelationship is used.

If a cost benefits two or more projects or activities in proportions that cannot be easily determined due to the interrelationship of the work involved.
Question: Which of the following would be an appropriate method for allocating Dr. Murray’s lab supply and chemical charges among his five awards?

A. Charge all of the costs to the grant with the most money available.
B. Charge the costs to grant A in month #1, B in month #2, C in month #3, D in month #4, and E in month #5; then start over again.
C. Charge the 5 awards upfront based on the proportion of FTEs working on each award.
D. Charge all of the costs to the NIH awards and allocate the charges via cost transfer among the non-federal awards once they end.
E. Charge each award a proportionate amount of cost based on the modified total direct cost of each award as a percentage of the total.

Answer: C and E
Dr. Jones is attending a conference in San Francisco to present the findings from his research funded by two federal awards. Dr. Jones purchased his business class round-trip fare on Air Canada. When submitting the charge for reimbursement he instructs his business office to charge half the airfare to each award.

**Question:** Is this allowable and allocable to the two federal awards?

**No.** The department business office should not process this reimbursement request to any Federal award as it violates the Fly America Act. Dr. Jones must use a U.S. flag carrier on domestic flights within the U.S.

Also, the purchase of business class fare is not typically allowed on federal awards (exceptions prescribed in 2 CFR Part 200 section 200.474 and University Policy).

Policy: 3301 Travel on University Business
Email questions to: osp.trainings@yale.edu

You will receive a response within 2 business days.
Thank you!