

The National Center for  
Nutrition Leadership

## Effective Cost Management for Today's Economy – Part III

September 21, 2010

*We will start at 2:30 PM. Please mute your phones #6*

Presenter



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Moderator



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## EFFECTIVE COST MANAGEMENT FOR TODAY'S ECONOMY

**Webinar Series Part III:  
The Delivery Process &  
Budgeting**

**Audrey C. McCool, EdD, RD, LD**

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## AGENDA

- ▣ All programs are responsible for meal delivery and for the budgeting process whether they produce their own food or contract for their food production
  - Preventing Cost Leakage During Product Delivery
  - Budgeting
  - The Operating Budget
  - Calculation of Actual Food Costs
    - Calculating Inventory Value
    - Consideration of Donated Foods and Materials
  - Estimating Costs for Your Budget
    - Translating Actual Food Costs to Your Budget Planning
    - Labor Costs
    - Non-Food Variable Costs & Operating Costs
    - Fixed Expenses
  - The Budget as a Control Tool
  - Budget Variance Analysis
  - Summary
  - Question and Answer Discussion

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## FOODSERVICE SYSTEM

INPUTS (PROGRAM FACILITIES, MENU,  
FOOD PRODUCTS, LABOR)



PROCESSING (FOOD PRODUCTION, STORAGE,  
PACKAGING, DELIVERY)



OUTPUTS (QUALITY MEALS THAT ARE SAFE  
FOR CLIENTS TO EAT)

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## Effective Cost Management

- ▣ Managing costs effectively means OPTIMIZING costs relative to the revenue anticipated for your program.
- ▣ It does NOT mean your costs are reduced to the minimum possible



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## Product Delivery

Product delivery can lead to cost leakage if not properly managed

- Meal packaging must maintain product quality and proper temperatures until delivered to clients to avoid spoilage or food safety problems
- Hot food temperatures are difficult to maintain over long delivery times
- Foodborne illness caused by program food can be extremely costly to a program



Avoid an ambulance at your clients' door because of YOUR food!!

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## Product Delivery

Product delivery can lead to cost leakage if not Properly managed

- Correct number of meals must be sent with each delivery to avoid meal waste
- Delivery personnel must be trained to report any problems with meal delivery and/or meal loss so that corrective actions can be taken to prevent further loss
  - Check all food temperatures at delivery points
  - Check client refrigerators and counters for food storage and uneaten foods
  - Check for changes in client's condition that might impact food needs and/or client's ability to eat provided foods

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## Budgeting

Why Budget??

- ❖ Provides a goal for the program
- ❖ Provides a control "device"
- ❖ Establishes a "yardstick" to evaluate operations
- ❖ Helps in planning
- ❖ Helps in solving problems

Challenges in Budgeting

- ❖ Takes time - and "time is money"
- ❖ Are based on forecasts & the future is unpredictable
- ❖ Must have total organizational support



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## Budgeting

- ❖ Budgeting is essential for effective cost control
- ❖ The budgeting process can be applied to the control of any program resource
- ❖ The operating budget is the most common type of budget - essential for program operations
- ❖ Could also have budgets such as
  - ❖ Capital improvements
  - ❖ Equipment
  - ❖ Labor



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## Operating Budget

The operating budget is a fundamental planning document for the program's operations in the coming year

Operating budgets are generally developed for a year and broken down into monthly operating budgets which serve as cost control tools

Operating budget development:

- Step 1: Examine revenue receipts from previous and current year
  - ✓ What were the revenue sources
  - ✓ How much revenue was realized from each source
  - ✓ Will these revenue sources be available in the coming year



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## Operating Budget

Operating Budget Development

- Step 2: Examine external environment – assess conditions or factors that could impact future revenue sources
  - ✓ Changes within the economy
  - ✓ Changes in population base – aging baby boomers
  - ✓ Changes in disease incidence and/or type of disease
  - ✓ Changes in care options, family structure
- Step 3: Examine any planned changes within the program that might affect revenue resources
- Step 4: Based on results of steps 1-3, Estimate Revenue flow for the next year

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## Operating Budget

Operating budget development:

- Step 5: Estimate Food Costs
- Step 6: Estimate Operating Costs
  - ✓ Labor Costs
  - ✓ Materials/supplies costs
  - ✓ Utility costs
- Step 7: Estimate Fixed Costs
  - ✓ Rent
  - ✓ Overhead
- Step 8: Treat your operating reserve as a cost that is included in your budget plans



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## Sample Budget Format

### Operating Budget

	Current Year	Budget Year
Revenue	XXX	XXX
- Food Cost	XXX	XXX
= Amount Available for Operating & Fixed Expenses		
- Operating Expenses		
- Labor Costs	XXX	XXX
- Materials and Supplies	XXX	XXX
- Utility Costs	XXX	XXX
- Repairs and Maintenance	XXX	XXX
- Fixed Expenses		
- Rent or depreciation	XXX	XXX
- Interest Expense	XXX	XXX
- Insurance and Taxes (where applicable)	XXX	XXX
- Allowance for Operating Reserve	XXX	XXX
Gain or loss for the period	XXX	XXX

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## Operating Budget



- Fixed costs and utilities are available from documents such as billings and contracts.
- Control of variable costs such as food costs and the variable portion of labor costs is critical to cost management as these costs represent a large % of the budget
- Labor costs can be calculated from payroll records
  - Include all costs – salaries, wages, benefits
  - Benefits provided to volunteers (meals, mileage reimbursement, etc.) should be included in labor costs



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## Calculation of Actual Food Costs

Calculation of actual food costs can be complex

- Requires calculation of inventory value based on the monthly physical inventory
- The physical inventory must be valued using a standard valuation method. Common methods are:
  - FIFO – First in, First Out
  - LIFO – Last in, First Out
  - Latest Purchase Price – Last price paid for products



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## Calculating Inventory Value

### FIRST IN - FIRST OUT (FIFO)



Assigns the most recent prices paid for units in a category to the units of that category remaining in inventory. Assumes all units in inventory are those which remain after all previous purchases have been used.

- ▣ A. Items on hand in inventory are priced according to the recorded invoice prices.
- ▣ B. Inventory value calculations are made by multiplying the prices paid by the number of units purchased at any one price until all units are accounted for. The results of this multiplication are then summed for the total value.

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## Calculating Inventory Value

### LAST IN - FIRST OUT (LIFO)



Assigns the earliest prices paid for units in a category to the units of that category remaining in inventory. It is the OPPOSITE approach to FIFO for pricing inventory items.

- ▣ A. Items on hand in inventory are priced according to the recorded invoice prices. The actual prices paid need not be recorded on each item unit.
- ▣ B. The inventory value calculations are made the same as for FIFO, except that here, only the EARLIEST prices paid are used.

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## Calculating Inventory Value

### LATEST PURCHASE PRICE



Method assigns the price most recently paid for units in a given category to all units counted in that category.

- ▣ A. Items on hand in inventory are priced according to the latest invoice price. Actual prices paid are NOT recorded on individual units. This method MINIMIZES labor usage.
- ▣ B. To determine the inventory value, simply multiply the number of units on hand by the last price paid for the particular items.

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## Calculation of Actual Food Costs

### ❖ Formula for calculating actual food costs for a month

- Beginning Inventory (ending inventory from previous month)
- + Purchases during the month
- Ending Inventory
- = Cost of food consumed during the month
- Adjustments (food provided for volunteers, used for other program, etc.)
- = Actual Foods Costs for the month



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## Calculation of Actual Food Costs

### Example - Actual Food Cost Calculation

- o Beginning Inventory: \$5,000
- o Ending Inventory: \$4,500
- o Purchases for the month: \$25,000
- o Food provided to volunteers for meals: \$2,000
- o Food used for advisory board meeting: \$300



### ❖ Cost Calculation:

$\$5,000 + \$25,000 = \$30,000$  (cost of food available for use)  
 $\$30,000 - \$4,500 = \$25,500$  (cost of food consumed)  
 $\$25,500 - \$2,000 - \$300 = \$23,200$  (actual cost of food to clients)

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## Consideration of Donated Foods and Materials

- Donated foods and materials can be valuable resources for programs
- In budgeting, donated foods & materials are considered as revenue - valued at current market value
- Donated foods and materials on hand must be included in monthly inventory counts
- Donated foods must be included in inventory valuations used to calculate actual food costs

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## Calculation of Food Costs for the Budget

- Actual food cost records are the basis for estimating food costs in the budgeting process
- Actual food costs are calculated as a % of revenue in the current year
- The calculated % is adjusted, as appropriate, based on the analyses completed in budgeting steps 1-3
- The estimated revenue is multiplied by the calculated food cost % to estimate the budgeted food cost



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## Calculation of Food Costs for the Budget

Example of food cost calculation:

Last year's revenue = \$100,000

Last year's actual food cost = \$55,000

Last year's food cost % = 55%

Estimated revenue for new budget year = \$150,000

Analyses of the environment and internal program changes (steps 1-3 of the budgeting process) indicate a 5% increase in food purchase prices offset by an anticipated 2% savings in food cost through the availability of more produce from program & community gardens → a 3% overall increase in food costs for the new budget year.

Thus:

Budgeted food costs = \$150,000 X (55% + 3%) = \$150,000 X 58%  
= \$87,000



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## Calculation of Labor Costs

- Estimate number of labor hours needed for each hourly pay personnel category
- Estimate the average hourly pay for each personnel category
- Multiply the estimated labor hours by the estimated average hourly pay for each category
- Sum the calculated costs for all categories to get the total budgeted wage costs for the year
- For salaried labor costs, sum the annual salaries for all salaried personnel



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## Calculation of Labor Costs

- ▣ Fringe benefit costs are calculated as a % of the estimated wage costs and the estimated salary costs.
  - Often the fringe benefit % is different for hourly and salaried personnel
- ▣ Volunteer labor is a resource for programs.
  - Availability of volunteer labor hours will impact budgeted labor costs – if volunteers should not be available, paid labor hours will likely increase during the operating year
  - The number of volunteer hours needed can be estimated in the budgeting process
  - Budgeting is easier if volunteer hours are not considered in the operating budget as the estimated value and the estimated expense would need to be a “wash”.



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## Calculation of Non-Food Variable Costs & Operating Costs

- ▣ Calculate the costs of each item as a % of revenue in the current year's budget – and in the previous year's budget, if desired
- ▣ Adjust the %, as appropriate, based on budgeting process steps 1-3 assessments
- ▣ Apply that % to the anticipated revenue for the new budget year

### Example:

*Next year's revenue estimate = \$100,000*

*Based on current year's budget figures to date,  
utilities are 5% of revenue*

*Next year's utilities cost budgeted as \$5,000*



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## Calculation of Fixed Expenses

- ▣ Fixed expenses are just that – fixed amounts over which the program has no control
- ▣ Fixed expenses are budgeted as the actual amounts documented in documents such as rental contracts
- ▣ An amount to be budgeted for the program's operating reserve should be considered as a fixed expense
- ▣ The budgeted amount for the operating reserve should be determined by program needs, NOT by what is “left-over” after all other expenses are estimated



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## The Budget as a Control Tool

- Standards are essential for control
- Budgeted costs are the cost standards for the revenue level estimated in the operating budget
- In accord with the control process, actual costs (and revenue) are compared with the standard, i.e. the budgeted costs (and revenue) to determine variances



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## The Budget as a Control Tool

- ▣ Budget Variance Analysis :
  - By \$\$ and/or by % or both
  - Determining Significance
    - Significance levels are determined by each program based on their operating expectations
    - Usually significance is determined by a combination of both \$\$ and % levels
- ▣ Include Year-To-Date Comparisons



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## The Budget as a Control Tool



- If significant, then variances must be investigated
- If the variances are controllable by the program, then actions must be taken to correct the identified problem(s)
- Once corrective actions are taken, the control process, with the budget as the cost control tool, begins again.



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## Potential Savings

### Potential Savings:

- The difference between actual costs and planned costs
- Represents \$\$\$ that would still be in the bank as \$\$\$ still available to the program had the actual revenue and costs been the budgeted amounts
- Goal is to minimize potential savings (i.e. variance from budgeted \$\$\$ through careful planning and careful control of operations)



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## Budget Development



The time invested to prepared a detailed, well-constructed operating budget will pay dividends when the budget is used as a primary tool in the development and implementation of an effective cost control process.

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## summary

### TO OPTIMIZE COST MANAGEMENT -

- Standards are essential for all aspects of a program's foodservice operations
- Cost analyses and efforts to control costs should focus on variable costs which are controllable in the short run at the program level.
- Analyses should be conducted on a regular basis. When significant variances are noted, appropriate action should be taken.



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## summary



- All the positive cost management accomplishments could be wasted if the meal delivery is not managed cost effectively
- Budgeting, particularly the operating budget, is a critical key to cost effective program management
- The budgeting process is based on analyses of both the external and internal environments and incorporates previous operating records
- Ongoing budget variance analysis is essential for effective cost management
- Potential savings represent real \$\$ that extend the resources for your program



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