



Washington State Department of Health

Accounting And Reporting Manual for Hospitals
Chapter 5000

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 Accounting And Reporting Manual for Hospitals
 The Operating Budget
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Preface

5001

The operating budget is the basic foundation on which day-to-day planning and control are built. The planning of daily operations involves five basic budgetary documents: the units of service forecast, the expense budget, reclassification and cost allocation, prospective rate setting, and the revenue budget.

Frequently, the operating budget is used synonymously with the expense budget. However, in planning the operations of an institution, expenses are not the sole concern; the administration must also be concerned with both the volume of services to be provided and the revenue generated from these services.

The Statistical Budget

5100

Reliable statistical data concerning the expected volume and scope of activities is essential for determination of staffing requirements and cost estimates. This requires formal written procedures for each activity describing the data to be gathered and the method of accumulation. Written procedures should be reviewed and revised periodically, perhaps annually, so they will be current and contribute to efficient measurement of operations.

For the budget to serve planning, controlling, and reporting functions, the units of service have been organized around the departmental or cost center structure. This concept must be followed as it is the basis of performance reporting and determining prospective rates (Section 5400). Hospital management may also use these units of service to compare planned and actual operating results during the budget year.

In some cases, it might not be practical for an individual hospital to develop continuing reliable statistics, such as weighing or counting laundry and linen items. In such instances, there may be two or more test periods in which detailed actual statistics are accumulated. The test periods selected must reasonably represent the average workload in the department. The projection of the test period results to annual estimates would then be considered representative of the workload for the current and budget years. Changes in services to be rendered for the budget year would have to be taken into account in using the current or prior year's test data for projections in the budget.

Responsibility For the Statistical Budget 5101

The units of service forecast is primarily the responsibility of the controller or budget director. It is important that it be reviewed with the appropriate department heads. The department heads must feel that the forecast is realistic if they are to budget expenses for their department using the statistical forecast. In addition, department heads generally have valuable suggestions for preparing the forecast. They are close to the activities of the department and knowledgeable in the factors affecting their workload.

After the units of service forecast is prepared, it should be reviewed and approved by the hospital management.

Budget Timetable 5102

The units of service forecast must begin early in the budget cycle. The units of service forecast must be completed prior to the development of other parts of the operating budget. Thus, it is very important that updated historical data be obtained early so that delays will not be encountered in the preparation of the expense, cost finding, and revenue budgets.

Standard Unit of Measure Requirements 5110

The purpose of the Standard Unit of Measure is to provide a uniform statistic for measuring costs. The Standard Unit of Measure for revenue-producing cost centers attempts to measure the volume of services rendered to patients and the Standard Unit of Measure for non-revenue-producing cost centers attempts to measure the volume of support services rendered to patient care departments. Standard Units of Measure should not be confused with allocation statistics used to allocate the costs of non-revenue cost centers to each other and to the revenue-producing centers.

The table in Figure 1 is a listing of the Standard Units of Measure for each cost center required to be reported, where applicable. In addition, these statistics should be divided into inpatient, and outpatient components. The outpatient statistics may be subdivided further into the following groupings: (1) private referred, (2) clinic, (3) emergency, (4) day care, and (5) home care.

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These terms are defined as follows:

A Private Referred Outpatient: is one who is admitted exclusively to a special diagnostic or therapeutic facility or service of the hospital for diagnosis or treatment on an ambulatory basis upon referral of a physician.

A Clinical Outpatient: is one who is admitted to the clinical service of the hospital for diagnosis or treatment, on an ambulatory basis, in a formally organized unit of a medical or surgical specialty or subspecialty.

An Emergency Outpatient: is one who is admitted to the emergency, accident or equivalent service of the hospital, for diagnosis and treatment of a condition which may require immediate physician, dentist or allied services.

A Day Care Outpatient: is one who is participating in a surgical, psychiatric, or medical day or night care program and is not included in the daily inpatient census.

A Home Care Outpatient: is one who receives services at his residence from representatives of an organized home care program of the hospital (see cost center description 7400).

Figure 1

Table Of Standard Units of Measure

Cost Center	Standard Unit of Measure	Acct. No.
Daily Hospital Services		
Intensive/Coronary Care Patient Days	Patient Days	6010
Semi-Intensive Care		
Acute Care	Patient Days	6030
Alternative Birthing Cen	Patient Days	6070
Physical Rehabilitation	Patient Days	6100
Psychiatric	Patient Days	6120
Chemical Dependency Serv	Patient Days	6140
Nursery	Patient Days	6150
Skilled Nursing	Newborn Patient days	6170
Swing Beds	Patient Days	6200
Hospice Inpatient Serv	Patient Days	6210
Other Daily Hosp Serv	Patient Days	6330
Ancillary Services		6400
Labor and Delivery	Procedures	7010
Surgical Services	Operating Minutes	7020

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Cost Center	Standard Unit of Measure	Acct. No.
Recovery Room	Recovery Minutes	7030
Anesthesiology	Operating Minutes	7040
Central Services	NONE	7050
Intravenous Therapy Serv	NONE	7060
Laboratory	Billable Tests	7070
Electrodiagnosis	Billable Tests	7110
Magnetic Resonance Image	MRI Relative Value Unit	7120
CT Scanning Services	CT Relative Value Unit	7130
Radiology - Diagnostic	Relative Value Units	7140
Radiology - Therapeutic	Relative Value Units	150
Nuclear Medicine	Relative Value Units	7160
Pharmacy	NONE	7170
Respiratory Services	Number of Treatments	7180
Dialysis	Number of Hours of Treatment	7190
Physical Therapy	Number of Treatments	7200
Psychiatric Day Care	Visits	7220
Emergency Room	Visits	7230
Ambulance	Occasions of Service	7240
Short Stay Unit	Short Stay Patients	7250
Clinics	Visits	7260
Occupational Therapy	Number of Treatments	7310
Speech Pathology	Number of Treatments	7320
Recreational Therapy	Number of Treatments	7330
Electromyography	Number of Procedures	7340
Observation Unit	Hours of Stay	7350
Free Standing Clinic	Visits	7380
Air Transportation	Occasions of Service	7390
Home Care Services	Visits	7400
Lithotripsy	Number of Treatments	7410
Organ Acquisitions	Number of Acquisitions	7420
Outpatient Chemical Dep	Visits	7430
Other Ancillary Services	(Not Applicable)	7490
Research And Education	NONE	8200
General Services	NONE	
Printing and Duplicating	NONE	8310
Dietary	Patient Meals Served	8320
Cafeteria	Equivalent No. of Meals Served	8330
Laundry and Linen	No. of Dry & Clean Lbs Processed	8350
Social Services	NONE	8360

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Cost Center	Standard Unit of Measure	Acct. No.
Central Transportation	NONE	8370
Purchasing	NONE	8420
Plant	Number of Gross Square Feet	8430
Housekeeping	NONE	8460
Communications	NONE	8470
Data Processing	NONE	8480
Other General Services	NONE	8490
Fiscal Services	NONE	
Accounting	NONE	8510
Patient Accounts	NONE	8530
Admitting	NONE	8560
Other Fiscal Services	NONE	8590
Administrative Services		
Hospital Administration	NONE	8610
Employee Health Services	NONE	8620
Public Relations	NONE	8630
Management Engineering	NONE	8640
Personnel	NONE	8650
Auxiliary Groups	NONE	8660
Chaplaincy Services	NONE	8670
Medical Library	NONE	8680
Medical Records	NONE	8690
Medical Staff	NONE	8700
Utilization Management	NONE	8710
Nursing Administration	NONE	8720
Nursing Float Personnel	NONE	8730
Inserv Education-Nursing	NONE	8740
Inserv Education-Other	NONE	8750
Comm Health Education	NONE	8770
Other Administrative	NONE	8790
Unassigned Costs		
Depreciation	NONE	8810
Leases and Rentals	NONE	8820
Insurance - Hospital & Professional Malpractice	NONE	8830
Insurance - Other	NONE	8840
Licenses and Taxes	NONE	8850
Interest-Working Capital	NONE	8860
Interest - Other	NONE	8870

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Cost Center	Standard Unit of Measure	Acct. No.
Employee Benefits	NONE	8880
Amortization	NONE	8890
Other Unassigned Expense	NONE	8900

Statistical Forecasting 5120

The forecasting of units of service must be based on hospital management information; this information would include historical data, internal factors, and external factors.

Historical Forecasting Techniques 5121

Historical statistics are essential as they provide a base from which to forecast. If adequate data collection procedures are in effect over a three- to five-year period, historical data will provide important trend information to determine the projections.

The first step in projecting the forecasts based on historical activity is the accumulation of data. This may be a very simple matter if proper statistics have been maintained. Otherwise, the information will have to be reconstructed from data that is available. The number of years' data to be entered is dependent upon the change experienced by the department. If there has been considerable change in the departmental output due to the introduction of new procedures and other factors, it will be better to use a shorter span of historical data, such as the prior year and the current year data, to base the forecasting. If output change has been more uniform over the years, three to five years of historical data can be used.

Forecasts based on historical data may utilize one or more forecasting techniques. A very simple method is to plot the measure of activity on a graph, following past trends as closely as possible.

Historical statistics, when used as a means for forecasting units of service, cannot, however, adequately reflect future major external changes that are likely to occur in the hospital's service area nor changes in internal programs and policies.

Internal Factors

5121.1

Internal factors affecting the forecasting and historical trends could include plans to close a unit, restrict admission of patients with certain types of illnesses, reorganization of units, dedicating beds to certain purchasers of services, opening of new services, construction disruption and others.

External Factors

5121.2

Significant external factors which might influence the forecast must also be assessed in developing the units of service. These factors could include unusual growth or decline in the hospital's service area population and occupancy, alterations in the medical staff's composition, expansion of competing hospital facilities, economic fluctuations (such as a major employer of the area opening or closing a plant), breakthroughs in medical procedures, extraordinary events such as a declared public health emergency and changes in the health care delivery system (value based services). The hospital must be concerned with any unusual external factors which might affect admission, length of stay, outpatient services, or ancillary services within its service area.

Reconciliation And Finalization of Historical Forecast

5122

Once the preliminary historical forecast is completed, it must be adjusted to reflect any internal and external factors to which the hospital has knowledge, but which have not been incorporated in the forecast. If changes from past trends are indicated, the forecast will have to be adjusted accordingly. The controller should not deviate from historical trends unless satisfied that the deviation is supportable by other factors.

During this phase, the resulting preliminary forecasts should be discussed with the department head to secure cooperation and to gain any additional insight with regard to the forecast. The department heads must believe that the forecast is reasonable if they are to budget departmental expenses using the forecast.

Based on all the information available, a final forecast of units of service must be made. Preliminary forecasts of units of service for non-revenue departments from historical data must be reviewed for possible changes due to revenue-producing activity forecasts.

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Dietary forecast of meals is calculated by multiplying the patient days forecast by the average number of inpatient meals per patient day. Other meals (cafeteria, meetings, etc.) can be forecast by trend analysis or as a ratio to inpatient meals.

The Expense Budget 5200

Upon completion of the units of service budget component of the operating budget, the next task is to convert this statistical information into anticipated dollars of expense. Expenses must be kept below anticipated revenue to ensure sufficient funds for deductions from revenue and the required financial needs for debt service, replacement of physical plant, expansion of services, renovations, working capital, etc. If this is to be accomplished, accurate estimates of expenses become an essential part of the budget.

Expense Classifications 5210

The Department, in its prescribed system of accounts, has segregated expenses into the major classifications of (1) daily hospital services, (2) ancillary services, (3) research and education (4) general services, (5) fiscal services, (6) administrative services and (7) unassigned costs. The natural classification of expenses for all departments will include (1) salaries and wages, (2) employee benefits, (3) professional fees, (4) supplies, (5) purchased services - utilities, (6) purchased services - other, (7) depreciation, (8) leases and rentals, and (9) other direct expenses.

The natural classification of salaries and wages prescribed in the system of accounts will include (1) management and supervision, (2) technician and specialist, (3) registered nurses, (4) certified nursing assistants, (5) physicians, (6) non-physician medical practitioners, (7) other salaries and wages and (8) non-work time. The job classifications and natural classifications for these jobs are also presented in the system of accounts. Before discussing the components and methods of determining the expense budget hospital management must recognize the benefits of flexible budgeting within their institution.

Flexible Budgeting 5220

The flexible budget is management's most effective tool in controlling costs. It would assist the hospital personnel in preparing and monitoring the operating

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budget. A flexible budget is highly recommended for monitoring and controlling costs.

The total costs of departments will tend to vary according to the volume of service rendered. If the volume of service increases in a department, their total costs will tend to increase; if the volume of service decreases, total costs will tend to decrease. On the other hand, there are a few departments whose total costs are not influenced measurably (if at all) by the volume of patient service. An example is the administrative service department.

Departmental costs, however, are unlikely to vary in direct proportion to the percentage change in the volume of patient services. The percentage change in costs generally will be somewhat lower than the percentage change in service volume. This is due to the presence of fixed and semi-variable costs in most departments of a hospital.

Individual costs incurred by departments may be categorized into three classes; fixed, variable, and semi-variable. Fixed costs are those that tend to remain constant in total amount, regardless of fluctuations in the volume of service rendered (within some relevant range, of course). The variable costs are those that increase as the volume of service rises and decrease as the volume of service diminishes. This variation may range from a disproportionate percentage increase (or decrease) with an increase (or decrease) in volume of services, which is a semi-variable cost, to a proportionate percentage change, which is a purely variable cost.

In the dietary department, a department head (dietitian) is needed whether the hospital serves 5,000 or 6,000 meals per month. Therefore, the salary of the department head would be considered a fixed cost, as it would not change over this range of service volume.

The raw food costs for 6,000 meals, however, probably would be about 20 percent more than the raw food cost for 5,000 meals. This cost would be considered as purely variable. In this case, the most changes by approximately the same percentage as the change in volume of service.

In other situations, the percentage of volume may change more than the percentage of cost. For example, if each food service employee could handle a daily maximum of 125 trays, the cost of food service would not increase 100 percent if 600 meals were served instead of 300. The 300 trays would require the employment of three food servers, but an additional food server would not be needed until the volume of service exceeded 375 trays (125 trays x 3 employees). If 600 meals were served, only five food service employees would be needed. Thus, although the volume of service increased by 100 percent, the number of meal servers increased by

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only 66 2/3 percent. Actually, this particular cost has both fixed and variable characteristics, and is referred to as a semi-variable (sometimes, semi-fixed) cost.

This cost is also variable in that it does reflect an overall increase in response to an increase in volume. However, it also has fixed tendencies. The cost is fixed, for example, in the 251-375 range of service volume. Any number of trays served within this relevant range requires the use of three food servers. Theoretically, when the volume of service reaches 376 trays and is less than 501 trays, an additional food server is needed. The cost increases abruptly by the amount of compensation paid to the additional employee.

The effects of changes in service volume on fixed, variable, and semi-variable costs (unrelated to the previous illustration and semi-variable costs) are indicated in the presentation below:

Dietary Department Costs	Total Costs	Per Meal Cost	Total Cost	Per Meal Cost
Fixed	\$2,500	\$.50	\$2,500	\$.42
Variable	\$2,000	\$.40	\$2,400	\$.40
Semi-variable	\$1,000	\$.20	\$1,100	\$.18
Total	\$5,000	\$1.00	\$6,000	\$1.00

It should be noted that the fixed costs are the same in total amount at both levels; an increase in service volume within this range caused no change. However, the change in service volume reduced the cost per unit (meal) as a result of spreading fixed costs over a greater number of units of production. Fixed costs remain the same in total, but the fixed cost per unit of volume will decrease as volume increases and will increase as volume decreases.

The variable costs (raw food costs, for example) are assumed to be purely variable; that is, they vary in proportion to the change in volume. Here, for example, they increase by 20 percent as volume increases by 20 percent. The result is a unit cost that does not change with a change with volume. The total cost changes in the same direction as volume and by the same percentage.

Semi-variable costs, in total, change in the same direction and relatively the same percentage as volume, rather than exactly the same percentage. The semi-variable costs are approximately the same per unit, usually tending to be slightly lower per unit if volume increases significantly.

When the total costs of the department are examined, the amount is seen to increase (from \$5,500 to \$6,000) as would be expected, but not in the same percentage as the change in volume. As a result, the total unit cost per meal declines. This is due primarily to the more economical (greater) use of fixed resources.

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Each day the hospital must be ready to provide the quantity of services in each department that the patient load demands. Traditionally management has determined the number of personnel hours that would be employed to provide these services, and has attempted to retain a fixed number of personnel, regardless of the daily varying service volume, rather than hiring and laying off employees as the volume changes. This peculiarity of hospitals, coupled with the fact that the monthly occupancy is fairly constant, has meant that hospitals have maintained a large proportion of fixed costs, or readiness to serve costs, in most departments, and a smaller proportion of variable costs.

However, current management philosophy advocates a more flexible staffing arrangement, utilizing staff pools, float personnel, and variable work schedules to more effectively utilize personnel consistent with work load demands. This moves a portion of the fixed costs to a semi-variable or variable base to more appropriately reflect changes in cost resulting from changes in volume.

The application of flexible budgeting for the hospital will greatly assist in the forecasting or budgeting of operating expenses to provide more useful data to determine prospective rates and, for hospital management, measure the actual results of operations.

The development of the operating expense budget should include:

- Development of staffing plans for all departments;
- Computing the salary budget based on the staffing plans;
- Forecasting the non-salary expenses.

Staffing

5230

The initial steps in budgeting salaries and wages would be to develop a staffing plan for each revenue and non-revenue department of the hospital. The staffing plan must relate to the work expected to be done, or the output of the department. A nursing staffing plan, for example, should be based on the expected average daily census rather than on the number of beds of the unit or floor. Other department staffing levels should be based on comparable expected workloads. The standard units of measure discussed in Section 5110 will be the measure in departments where their workload varies proportionately to those units of service.

An effective staffing plan is an essential element to cost control. It is the department heads' management tool in making the decision to effectively control the salary and wage expenses of their departments.

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With personnel costs representing 60-70 percent of the hospital's total expenses, a written staffing plan is essential. It must provide the documentation for future decisions since the staffing plans must change to reflect current and future conditions.

There are several methods of setting staffing levels; they may include (1) management engineering standards, (2) historical experience and (3) experience of other hospitals. The management engineering standards would be developed using industrial engineering work measurement techniques. These standards must be developed for the individual hospital departments. With the identification of these standards, realistic man hours or full-time equivalents per unit of service can be set that would be attainable for the budget year.

The historical standards would be developed using past trends in man hours per unit of service to develop the staffing levels. This method, however, could encourage the continuation of past inefficiencies and not develop the planning tools to incur cost effectiveness.

The use of staffing plans within a hospital for budgeting requires management to achieve performance reporting (actual versus budgeted data) in their departments. This reporting must measure the variable versus the fixed staff relationship along with productive and nonproductive hours for the payroll reporting periods.

Salary And Wage Expenses

5240

With the completion of staffing plans, the next budgeting process would be to develop the Departmental Salary and Wage Budget. This budget accomplishes important segments of the department's budget preparation. It has the following purposes:

- Provides wage and salary expenses for the department on a monthly and annual basis.
- Provides a check on the vacation days used.
- Allows inclusion of overtime, shift differential, on-call and other impacts on salary and wage costs.
- It identifies projected merit, longevity and other selective salary increments in the month they are expected to occur.

Used in combination with the staffing plan for departments which staff and budget based on units of measure, the salary and wage budget also summarizes the average rate and total monthly budget of each personnel classification. It is also used to accumulate non-work time such as vacation, holidays and sick pay.

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After all regularly scheduled personnel have been listed, the monthly salary data is totaled. At this point, cost-of-living and other across-the-board pay increases should be added to the monthly salary totals. Then the hours of all these regularly scheduled personnel are totaled.

The hours and dollar amount of vacation, holiday and sick leave benefits pertaining to all the listed and totaled personnel is then calculated and entered by month. Provision for planned replacement coverage is entered and added to the salary totals. In this manner, absences that are not to be covered will be excluded from the budget dollars and hours figures.

The amount of overtime should be inserted on the "Overtime Line" and should be the anticipated hours worked at an appropriate straight time rate. This overtime is added as part of the replacement coverage.

Vacation, holiday, and sick leave coverage will vary for each department in the hospital; for example, dietary will normally have more coverage than housekeeping. Furthermore, this type of coverage can normally be expected to vary throughout the year. During June, July and August, when occupancy is normally down, no coverage may have to be made for vacation, holiday, or sick leave. Normally, the reverse is true for January and February, when sick leave and holidays may have to be covered, or holiday time off is moved to another month.

Replacement coverage should bear some relation to the vacation, holiday and sick leave budget. If coverage was anticipated to be 100 percent, then the replacement coverage of salaries and wages would approximate the budgeted vacation, holiday and sick leave expenses.

Any shift differential, on call, etc., should be shown on separate lines of the salary worksheet and properly labeled.

The total monthly salary budget will consist of the normal personnel salaries and wages less the vacation, holiday, and sick leave expenses plus replacement coverage and shift differential, etc. This amount should be entered on the departmental summary.

Nonsalary Expenses

5250

The keys to budgeting or forecasting non-salary expense include:

- Knowledge of the expense distribution practice;
- Determination of the relationship of these expenses to departmental units of service output;

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- Accuracy in forecasting units of service;
- Realistic estimation of vendor price escalation;
- Identification of changes in practice which may alter historic utilization of nonsalary expense items;
- Identification of changes in external economic conditions which may have an impact upon historical supply usage and other expenses.

The department head must thoroughly understand how the budget amounts are derived, the magnitude of each individual expense component and the underlying assumptions used in their computation. Only through direct involvement in making decisions that influence the preparation of budget amounts will the department head fully accept the responsibility for operating within the budget and be able to understand and explain variances.

The uniform definitions set forth in the Department's System of Accounts prescribes that non-salary expenses shall be grouped by the following natural classifications:

- Employee Benefits
- Professional Fees
- Supplies
- Purchased Services - Utilities
- Purchased Services - Other
- Depreciation
- Leases and Rentals
- Other Direct Expenses

Departmental Expense Budgets

5251

With the forecasted units of service and the salary and wage and non-salary expenses computed for the budget year, all elements are available for completion of the departmental expense budgets.

The prospective rate setting process by the hospital has not yet taken place; these expense summaries must be considered preliminary. Before they can be finalized, hospital management, the budget committee and the governing board must be assured that there will be adequate revenues generated to take care of these and other financial needs of the hospital.

Without adequate revenues, the expense budget will have to be reviewed to determine what reductions can be made. In many cases, this may involve putting off new programs or discontinuing existing programs that are not self-supporting. In

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other cases, it will involve reassessing staffing objectives and revising contemplated wage rate increases.

The hospital's final expense budget becomes the basis for establishing prospective rates and for measuring departmental performance during the budget year.

Budgeting Natural Expense Classifications 5251.1

Employee benefits charged direct to the departments must be adjusted for changes in legal requirements and administrative policy. Additional coverage should be considered as a change in practice, higher rates as changes in price. They should be categorized as variable expenses in departments which are budgeted on a variable staff basis, as fixed expenses in other departments.

Professional fees for medical care services (Accounts .21 and .22) will usually be variable, whereas, other professional fees will usually be fixed.

Supplies of a medical nature (Accounts .31-.39) and food costs (accounts .41 and .42) are usually variable costs and fluctuate directly in proportion to the patient load. Other supply items are more independent of patient load variations.

Purchased medical care related services, food services, and laundry services are usually variable costs.

Repairs and maintenance, collection agency services, and management services although often varying with units of service output may lag the department's current month units of service output and complicate cost analysis during the reporting year. The other direct expenses (Accounts .901-.999) are commonly budgeted as fixed costs.

Reclassification And Cost Finding 5300

The fourth phase of budgeting and prospective rate setting will be the reclassification of unassigned expenses and the allocation of costs of the non-revenue departmental expenses to the revenue departments. This process is commonly referred to as "cost finding" for hospitals.

Cost finding is defined as the "apportionment or allocation of the cost of the non-revenue producing cost centers to each other and to the other revenue producing cost centers on the basis of the statistical data that measures the amount of service rendered by each cost center to other cost centers."

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The purpose of the cost finding process is to determine the total or full costs of operating the revenue departments of the hospital in order to establish the prospective rates for services rendered.

The cost finding phase, then, is the process of recasting the non-revenue departmental expenses accumulated in the budgeting process to the revenue departments of the hospital. This procedure is done apart from the regular accounting system.

OBJECTIVES OF COST FINDING

5310

The objectives of the reclassification and cost finding procedures prescribed for the hospital may be stated as follows:

- Provide full cost information by revenue department for review, evaluation, and establishment of rates for services;
- Provide uniform information by revenue center for the determination of the reimbursable costs from contractual agencies;
- Provide uniform information to the Department, hospital associations, contractual agencies, etc.;
- Provide information to be used by hospital management in making the managerial decisions for prospective rate setting.

In summary, the cost finding process will provide information for a variety of needs of the Department and hospital management.

Setting And Assessing Rates

5311

The reclassification and cost finding process will aid hospital management in assessing the adequacy of rates; it does not, however, provide the precise and absolute rates for the services to be billed to the patients. It must be the objective of hospital management to ensure that the rates for services will be reasonably related to the full cost of providing the services. In addition to the recovery of the full cost of services for each department, the rates must reflect hospital management's policies and philosophies with respect to the recovery of deductions from revenue (bad debts, contractual adjustments, charity, etc.) and the required planned capital and service component factors for the hospital.

The process will establish an average cost per unit of service to be billed to the patients. The determination of the average cost of service, however, does not provide the information as to the unit cost of a particular type of examination or procedure.

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A great number of revenue departments within the hospital provide more than one service and a different charge is made for each service; e.g., laboratory, radiology and central services. The hospital must conduct special studies or analyses to determine the unit cost of providing each individual service within that revenue department or utilize the prescribed relative value unit where applicable.

Information For Outside Reporting 5312

The reclassification and cost finding process will provide uniform data for the Department, various agencies and the public. The Department shall develop and report uniform financial data to the institutions of the state; this information shall present comparable data for hospitals of similar sizes and services which should be beneficial to the management of the hospitals in fulfilling their managerial responsibilities.

The uniform information will be the basis of public disclosure of costs related to the rates for services rendered by the hospital.

Information For Internal Reporting 5313

Hospital management will use the cost finding data in measuring their overall operating effectiveness and to control costs. These data will also be used to evaluate departmental performances, efficiencies and plans for future operations and new services.

The cost finding procedures and the results of operation on a departmental basis should be understood by the department heads. The disclosure of the indirect cost allocated to each department will tend to develop a desirable cost-consciousness of the departmental management staff.

Prerequisites Of Reclassification and Cost Finding 5320

The essential prerequisites of this process are (1) sound organizational structure, (2) uniform accounting system and (3) uniform statistical data. These prerequisites have been previously discussed in this Manual. The statistical data, discussed in Section 5100, provides the basis for departmental evaluations. Additional uniform statistical data is required and prescribed by the Department for the allocation of expenses in the reclassification and cost finding process. These allocation statistics are discussed in Section 5350.

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As discussed in Section 5100, it is essential for the hospital in the collection of the units of service and allocation statistical data to develop and monitor this process with specific written procedures. These procedures must be developed in cooperation with each department head to ensure a practical application for the accumulation of this required data. The majority of this allocation data has been accumulated and used in the Medicare cost finding process. However, these procedures probably require a review and expansion to ensure that current and valid statistical information is available for the cost finding process.

These allocation statistics may be actual data of services for the reporting period or data developed from reasonable estimates for parts of the reporting periods to be developed from sampling techniques. These sampling techniques must develop valid data for allocation purposes for the total period. The sampling techniques must utilize two or more monthly periods of normal volumes of activity during the current year or the data sampling technique discussed in Section 5130 may be utilized.

Because variations exist in the comparability of services rendered by certain departments to others, the use of weighted statistics should be considered for the basis of allocations. Unless relatively greater weight is given to the more complex services, the departments receiving such services would not bear the equitable share of the allocated costs.

For example, if the cost of the laundry department was allocated to cost centers on the basis of the number of dry laundry pounds processed, the allocation likely would be inequitable. Some items cost more per pound than others to process in the laundry. For example, one of the more costly (per pound) items are the coats and jackets worn by personnel in the laboratory department. These items are often starched and pressed, whereas other items laundered are not.

To illustrate the impact of unweighted statistics, these data are assumed:

Laundry Department Cost	\$40,000
Number of Dry Pounds Processed Laboratory	6,000
Other Centers	<u>394,000</u>
Total	400,000

The average cost per pound processed is \$.10 (\$40,000 divided by 400,000 pounds). If this unweighted statistic is used in allocating the cost of the laundry department, the laboratory cost center should be charged with a \$600 laundry cost.

Assume that a special study is made, however, indicating that 2,000 of the 6,000 pounds of laboratory laundry were jackets and coats, which are five times as expensive to process as regular laundry items. (A number of reasons could be cited for this difference.) In this case, the weighting factors would be 5 for laboratory coats

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and 1 for other laundry items. Therefore, the weighted average cost per pound of laundry becomes about \$.098, as shown in the following illustration.

Laundry Department Cost	\$40,000
Weighted Number of Dry Pounds Processed:	
Laboratory (2,000 lbs. x 5 and 4,000lbs. x 1)	14,000 lbs.
Other Centers (394,000 x 1)	<u>394,000</u>
Total	408,000

Weighted average cost per pound \$.098

Using the weighted average cost per dry laundry pound processed, the laboratory cost center is charged with \$1,373 (14,000 lbs. x \$.098, rounded) as compared to the \$600 that would have been charged to it had unweighted statistics been used. Another illustration would be the required additional handling cost of soiled surgical laundry requires three pre-washes and, therefore, becomes eight times more expensive to process than regular items. In this case, the weighting factor for surgical laundry should be 8 and 1 for the other laundry items.

Many service departments require special analysis to achieve the proper weighting of services rendered to other departments. It is essential for the hospital to achieve the proper allocation statistic to determine the proper full costs for the revenue departments.

Cost Allocation Statistics

5350

Cost allocation utilizes statistics in making the distribution of indirect costs to revenue producing departments. It is required that adequate statistical data be maintained to measure the performance of each center.

The definition and sources of the required statistics for allocation are as follows:

Square feet: The number of square feet in each department of the hospital should be determined either by a physical measurement or by a measurement from blueprints. Floor area measurements should be taken from the center of walls to the center of adjoining corridors if a hallway services more than one department. Exclude stairwells, elevators, and other shafts. General and unused areas are also to be excluded. Hallways, waiting rooms, storage areas, etc., serving only one department should be included in that department. When changes in assigned area have been made during the year as a result of new construction, department relocation, expansion, or curtailment of service, statistical data should be maintained to allow for the development of "weighted" areas for the fractional part of the year.

Meals served: Number of meals served shall include only regularly scheduled meals and exclude snacks and fruit juices served between regularly scheduled meals.

Housekeeping hours of service: Number of hours of service shall include all time spent by the housekeeping unit in maintaining the general cleanliness and sanitation of the hospital.

Nursing full-time equivalents: The sum of all hours for which nursing employees were paid during the year, divided by 2,080. As determined from payroll accounting records.

Number of dry and clean pounds processed: This statistic shall include the weight of linen processed for the hospital's use.

Reclassification Of Cost Centers

5360

Reclassifications are necessary to adjust the hospital's records to the reporting requirements of the Department if they do not already reflect these requirements. These reclassifications may be made separate and apart from the books of the hospital but must be done prior to the direct cost adjustments and form preparation.

Reclassifications, as discussed in this Manual, are of three types: (1) reclassification to obtain the required level of reporting, (2) reclassification to correct "dislocations" of a given clinical type of patient which affect revenues and costs, and (3) reclassification to correct accumulation of costs.

The first type of reclassification may be necessary to reach the required level of reporting because the hospital has combined several departments. For instance, smaller hospitals may be combining the costs of acute and intensive care in one nursing unit cost center. In such cases, it is necessary to reclassify the total direct costs incurred in the two different types of care into two specific cost centers relating to these two types of services.

The second type is necessary when "overflow" patients are treated in cost centers other than the functional center relating to the services provided (e.g., a medical/surgical acute patient treated in an intensive care unit because all medical/surgical beds were occupied).

The third type of reclassification, to correct the accumulation of costs, would be necessary when the expense associated with a particular function is recorded in a cost center different from the functional description specified in this Manual. For instance, a reclassification would be required if the dietary department recorded the

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costs associated with hand-feeding of patients, because these costs should have been recorded in the daily services cost center relating to that patient.

As prescribed by the System of Accounts, the Department permits the distribution of depreciation and employee benefits direct to the accounts within the general ledger and prescribes that these expenses must be reclassified before the cost finding procedure. These expenses, therefore, that have not been directly charged or transferred to the individual departments within the accounting process must be reclassified through the use of the appropriate statistical base in the reclassification procedure.

The revenue and expenses associated with central supplies, charged to the patients for example, may be routinely recorded in the surgery, emergency room, intensive care and other departments. Such practices are satisfactory from a standpoint of month-to-month revenue and expense control. However, as prescribed in the System of Accounts, it is necessary to reclassify these revenues and expenses to the central supply department. It is also necessary to reclassify the pharmacy revenues and expenses to achieve the conformity defined by the System of Accounts. Other cost centers, such as nursing float and central transportation, must be reclassified before beginning the cost finding process as prescribed in the System of Accounts.

The System of Accounts also provides for the appropriate distribution of other operating revenues (commonly referred to as recoveries) within the reclassification process. All expense recoveries must be offset against the appropriate expense department. Other expenses recorded within the general ledger system of the institution must be reviewed and evaluated and, possibly, reclassified. Some of these expenses may include reallocation of dietary costs incurred in the serving of meals to patients, the nursing service personnel accumulating specimens for the laboratory and many others indicated within the System of Accounts.

Allocation

5370

The first allocation in the cost finding (step-down) shall include interest-other, insurance-other, licenses and taxes, plant operation, maintenance, grounds, security, parking and other general services and these costs shall be distributed on the basis of square footage of the floor area occupied by the department and cost centers serviced by these non-revenue cost centers. As previously discussed, some weighted basis of allocation could be developed for some of the cost elements.

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The second series of costs to be allocated shall include printing and duplicating, general accounting, communications, administration, public relations, management engineering and other administrative expenses. These costs will be distributed using the accumulated cost basis. The accumulated cost basis of allocation is to be based upon the total accumulated cost for the other departments receiving services from these departments.

The purchasing and stores department would be the third non-revenue cost center to be distributed in the step-down process. The basis of allocation would be the supply cost incurred by the unclosed revenue cost centers and the revenue departments. If pharmacy and dietary supplies are not secured and/or handled by the purchasing department, these supply costs shall be excluded from the allocation basis for this cost center.

The dietary expenses shall be allocated fourth and distributed on the basis of the number of meals served.

The fifth allocation step shall include the cafeteria and personnel costs. They shall be allocated on the basis of hospital full-time equivalents.

Housekeeping service accumulated costs are to be allocated sixth. This cost center is to be distributed on the basis of hours of service rendered by this department to other open cost centers.

The seventh cost center of accumulated costs to be distributed is the laundry and linen service. The costs are to be distributed on the basis of dry pounds of laundry processed and issued to each open cost center. As previously indicated, the dry pounds of laundry processed generally should be on a weighted basis.

The eighth allocation in the cost finding process shall include patient accounts, data processing, admitting, auxiliary groups, chaplaincy, medical library, medical records, health care review, medical staff, social services, and others. These costs are to be distributed on the basis of gross patient revenue derived from daily hospital services and ancillary services. In the budget year, these expenses must be distributed on the basis of the current year's gross revenue.

The final cost centers to be allocated include various educational programs; these costs are to be assigned to applicable revenue departments based upon the number of students or the assignment of students for training.

The total cost of each of the revenue-producing departments has now been determined through the totaling of the directly assigned expenses and the expenses added through the allocation process.

Individual Service Rates 5400

As discussed in the reclassification and cost finding section (Section 5300), many revenue departments of the hospital provide more than one service. Therefore, the total cost of services must be allocated to the multiple services within the department by special cost or rate studies to determine the prospective rates.

These special studies, to be conducted by the hospital, should determine individual service rates and total departmental rate setting revenue by using one or more of the following methods:

- Time basis,
- Weighted value time basis,
- Relative unit value basis,
- Gross margin -- cost of materials and handling,
- Composite rates for changes in mix.

Time Basis 5401

With over 50 percent of hospital costs being salaries, many different types of services involve widely differing amounts of time and salaries. Thus any pricing method must consider the effect on salary costs as a prime determinant of the rate structure. Thus, a time basis for rate distribution would be very logical. The surgery rate would be a prime example of a hospital department which could employ a rate system related to time.

Weighted Value Time Basis 5402

In the time basis of determining rates, it was assumed that all surgery time used the same amount of personnel cost. Thus, a time basis method was used for computing a rate for minutes of use of the surgery. If it is found that widely varying amount of personnel are used for different types of surgeries, then the rates charged should be adjusted to a weighted basis considering varying personnel costs per unit of surgery time or varying costs of equipment usage.

Laboratory Workload Unit Basis 5403

The third system of reflecting time-cost factors is the use of laboratory workload units. The laboratory workload unit basis for computing rates is the most

sophisticated method of developing individual rates for a departmental area. The laboratory workload unit is a common denominator for use in a complex, multi-service department. For each test or procedure that a department provides, a unit value is assigned based on a standardized time study. The number of tasks budgeted is multiplied by the number of workload units assigned to that task, thereby developing an aggregate, weighted value for that type of test. The sum of the aggregate weighted values divided into the total costs to be recovered by the department would determine the computed rate per laboratory workload unit.

Finally, the laboratory workload units assigned to each test should be multiplied by the computed rate per laboratory workload unit in order to determine the computed rate to be charged for the test. In addition, total revenue estimates can be made by multiplying the computed rate per test by the estimated number of tests to be performed.

This method is applicable to departments such as laboratory, radiology, EKG, EEG or similar areas using workload units of measure.

Relative Value of Similar Services Basis 5404

Another method to weigh services would be the relative value of that type of service in relationship to similar services. An illustration of this type of weighting of services in the hospital assumes that a private room would be more valuable to the patient's care and recovery than a two-patient room or a four-patient room. A relative value unit must be developed that recognizes the proportion that the value of each type of service is to other similar types of service. For example, a private room may be worth 1.2 times the value of a two-person or semi-private room. Costs are then allocated on the basis of the relative weight assigned to each type of accommodation.

Specific Billing Or "A La Carte" Pricing 5405

One opportunity for rate making that the hospital could take advantage of is a split of room rates or daily service charges into a hotel service charge, a nursing service charge, and a dietary charge, where applicable. This breakdown would allow the hospital to separate and charge for all hotel type services. The charges for nursing services, however, could be allocated on a relative value unit basis depending upon the proportion of time each type illness would take in comparison to a standard diagnostic type of stay. With identifiable, reasonable, and equitable classifications of services delivered to patients, a much more equitable charge for nursing services

could be made to patients. Another factor which hospitals can take into account is charging for food service based upon the quantity of meals received by each patient class or by each patient. For example, a surgery patient who is not allowed to eat anything before entry into surgery, may be charged a minimum dietary rate. A higher rate than the minimum could be charged for the patient's first days of recovery to reflect the consumption of low cost meals relative to the average meal served to all patients.

Contribution Margin

5406

The last method of computing rates to be discussed involves the computation of a contribution margin or "overhead" percentage or a handling fee. Many departments in a hospital, such as pharmacy or central supply, provide materials or supplies to patients or to departments which eventually go to patients in a merchandise fashion. A pricing system for the services might include a charge for the cost of each material provided plus a percentage mark-up, surcharge, or handling fee to cover the cost of handling (variable costs) and the indirect and allocated costs fixed costs plus the required margin of that particular department.

Composite Rates

5407

Ancillary departments perform a variety of different services at different rates. Evaluating past composite rates, mix trends, and relationships to costs is necessary to develop a reasonable composite budget rate to use in budgeting departmental revenues.

The composite rate is easy to develop in departments in which the unit of service is the relative value unit (i.e., radiology, nuclear medicine.) In establishing rates within these departments, an average rate is used for each relative value unit. Since the units of service forecast is in relative value units, this same rate can be used to calculate the departmental budget year revenue.

The total departmental revenue from daily hospital services is normally budgeted on a composite room rate for each department or unit. The forecast of patient days represents the total days for all types of accommodations in that department or unit; hence a composite rate may be used.

Some hospitals may prefer to forecast patient days by type of accommodation and apply the current rates of the various accommodations to forecast the department's total rate setting revenue for the budget year.

Patient Service Revenues

5410

Patient service revenue is divided into two major groups; revenue from daily hospital services and revenue from ancillary services.

The guiding principle of patient service revenue accounting and budgeting is to assure that revenues are budgeted, accumulated and reported in a timely manner to permit the comparison to expenses and units of service by cost center. In addition, revenues and units of service may be separately identifiable as inpatient and outpatient, and possibly by major classes of purchaser. Separation of revenues by major purchaser class may be accumulated by use of a log, rather than by actual accumulation in the general ledger. (See Section 2230 for the use of the sixth digit to identify revenue by class of payer.)

Patient revenues generated by the daily hospital service departments are usually all attributed to inpatients. Therefore, the revenue budget is normally only applicable to the inpatient sub-classifications. Patient revenues generated by the ancillary services are often attributable to both outpatients and inpatients. It is necessary to segregate the inpatient revenue from the outpatient revenue. To accomplish this, it is necessary to prepare separate units of service forecasts for the revenue projection for the inpatient and outpatient portions of these common ancillary services.

The separate inpatient and outpatient sub-classifications of units of service and revenue will be utilized not only in planning, but also in controlling operations.

Other Operating Revenue

5420

Other operating revenue has a significant impact on the hospital's budget and operation. Other operating revenue includes revenue from patients for non-patient care services, revenue from sales to persons other than patients and transfers from restricted funds for operations. Other operating revenue can be further broken down into cost recoveries; e.g., revenue from service facilities, revenue from approved educational programs, research-related revenue and revenue from restricted funds specifically restricted for operating costs. (See Section 2410.3 for a more complete definition of other operating revenue.)

Examples of cost recoveries include cafeteria income, medical record fees, sale of scrap, telephone charges, rental of space and television rentals.

Budgeting of both cost recovery and other revenues may be directly related to the number of patients and employees. One formula for forecasting these revenues is

to multiply the current average revenue per patient or employee (as appropriate) times the budgeted number of patients or employees.

Other revenue to be budgeted for approved educational and research programs must be forecasted in other manners. The tuition revenue from approved educational programs can be forecast on the basis of number of student admissions times the projected tuition rates. Accurate data may be available as to the budget year revenue from grants, gifts and subsidies for approved educational and research programs. If such data is lacking, historic data can be utilized, but should be subject to critical review based on prospective goals and objectives.

Nonoperating Gains 5510

Non-operating gains are not directly related to patient care. Major sub-classifications of non-operating gains include unrestricted contributions, gain from unrestricted funds investment, donated services, gains on sales of hospital property, net operating profit from non-related business operations and net rental income from facilities not used in the operation of the hospital. (See Section 2420.9 for a more complete definition of non-operating gains.)

The budgeting of non-operating gains probably will have to be developed from historical data and subject to critical review for prospective changes discussed in the hospital's objectives.

Deductions From Revenue 5530

The deductions from hospital revenue are contractual adjustments, charity, and other allowances.

Guidelines For Budgeting Deductions from Revenue 5531

Hospital management must provide the required guidelines to budget these deductions from revenue. The estimates must be based on operating policies to ensure their accuracy.

Deductions for contractual adjustments are based on an analysis of the reimbursement formula for each contractual agency. In some cases, because of patient mix changes, the contractual adjustments estimated in the budget year will differ from the current interim rate. If the difference is significant and a change in the interim rate would be advantageous to the hospital, an appropriate request should be

made to the intermediary or program for a change. The request for change can be substantiated by material prepared in this budgeting process.

Hospital management must provide the required guidelines for budgeting of charity discounts and uncompensated care for Hill- Burton assisted hospitals.

Charity And Other Allowances 5532

Once gross revenue has been budgeted, the budgeting of deductions for charity and other allowances can proceed. These revenue deductions for the past several years must be summarized in computing the amount for the budget year. This summary should be reviewed by hospital management and a decision made on the amount (dependent on a percentage of revenues to be used) to be budgeted.

Charity forecasting requires careful assessment of the impact of Hill-Burton and other regulations, as well as changes in hospital managements' policies.

After the deductions from revenue have been reviewed and approved by management, they would be applied (in terms of percentages) to the budgeted patient service revenues.

Contractual Adjustments 5533

In determining the amount of contractual adjustments, the amount of program revenue must first be estimated. This amount may approximate the amount (and percentage) of the past few years, but the hospital must be alert for significant changes in utilization and departmental mix.

Third-party reimbursements must be accurately projected for the budgeting process to be a worthwhile effort. Because of changes in and variances between reimbursement formulas, accuracy can be best assured by preparing the various third-party cost reports using the budgeted figures.

The projections of units of service and revenues and expenses explained in other sections of this Manual provide the basis for preparing these contractual agencies' reports. The hospital should be certain that any changes in the reimbursement formulas effective for the budgeted year are taken into consideration. The effort required to prepare, for example, the Medicare and Medicaid reports for the budget year may appear to be substantial. However, when considered in light of the total budget effort and the significant impact of these contractual adjustments on budgeted net operating revenues, the preparation of these reimbursement reports is

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well worth the effort. These reports can also serve as a starting point for selecting reimbursement options to maximize the hospital's reimbursement for the budget year.