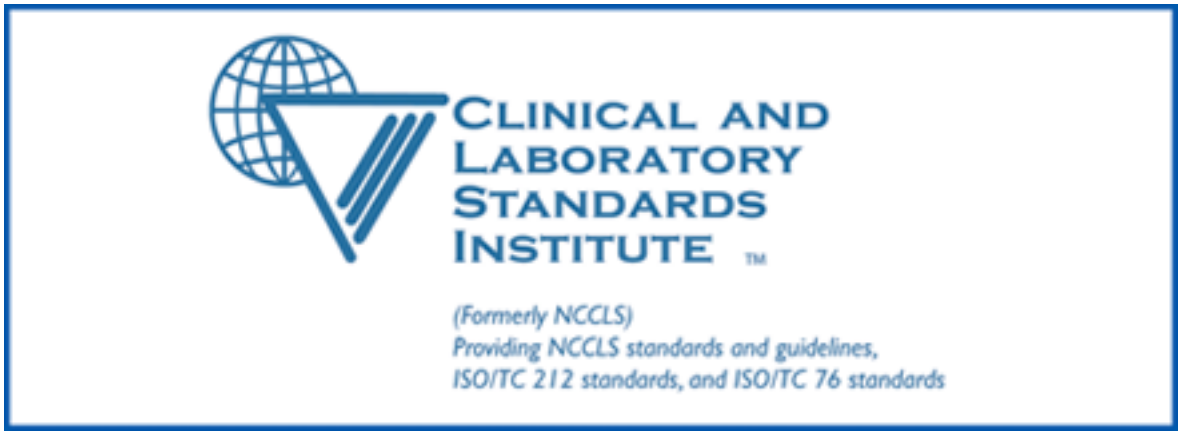
GP11-A
ISBN 1-56238-356-6
November 1998
ISSN 0273-3099

Basic Cost Accounting for Clinical Services; Approved Guideline

Volume 18 Number 14

Eleanor M. Travers, M.D., MHA, Chairholder
Dennis C. Delahunty, M.S.
Lynda L. Hunter, M.S., M.H.S.A., M.T.(ASCP), S.C.
Kenneth D. McClatchey, M.D., D.D.S.
James M. Rudar, M.B.A.



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Abstract

Basic Cost Accounting for Clinical Services; Approved Guideline (NCCLS document GP11-A) provides basic definitions and concepts for cost accounting that will enable laboratory managers and directors to evaluate the costs of producing laboratory results. In contrast to financial accounting, which provides external financial reports (e.g., for tax purposes, financial audits, and reports to stockholders) cost accounting measures internal costs in the light of management objectives. Cost accounting is, in the current economic environment, an important management and financial tool for laboratory managers. This guideline describes the conceptual foundations of cost accounting, provides an overview of various techniques for focusing resources to optimize the benefits of cost accounting, and suggests common applications for calculating costs in laboratory settings. It can also be used as a model for other healthcare services, such as nuclear medicine, nursing, and radiology. Additionally, these healthcare services can apply the common applications provided in GP11-A for calculating costs for their respective operations.

(NCCLS. *Basic Cost Accounting for Clinical Services; Approved Guideline*. NCCLS document GP11-A [ISBN 1-56238-356-6]. NCCLS, 940 West Valley Road, Suite 1400, Wayne, Pennsylvania 19087-1898 USA, 1998.)

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Foreword

Although NCCLS document *GP11-A Basic Cost Accounting for Clinical Services; Approved Guideline* describes the conceptual foundations of cost accounting and provides an overview of various techniques for focusing resources to optimize the benefits of cost accounting for the clinical laboratory, It can also be used as a model for other healthcare services, such as nuclear medicine, nursing, and radiology. Additionally, these healthcare services can apply the common applications provided in GP11-A for calculating costs for their respective operations.

When the focus on health care gravitated to regulation and managed care, cost-effective services became a primary emphasis within the healthcare arena. Laboratories have quickly adopted management techniques that allow them to maximize resources and minimize costs. All laboratories find themselves in a competitive and changing environment that forces them to become more selective and specific about test costs for special and routine use. It is critical to a laboratory's financial success in this volatile economic environment that laboratory managers know how to determine actual costs and estimate standard costs for tests based on their own equipment, methods, and test menu.

Cost accounting is an important area of acquired expertise for laboratory management staff that enables managers to identify costs for budgeting and control. Healthcare organizations, group practices, and even physician offices are being asked to look at many options, including sending laboratory tests to reference laboratories to reduce costs. Before a laboratory manager makes a decision to "make or buy" laboratory tests, it is essential to know what it costs to do a test, once it has been determined that its medical necessity is appropriate. Many laboratories do not have formal cost-accounting systems, and most laboratory practitioners have not been formally trained in accounting principles, which provided the impetus and inspiration for this work.

By its very nature, cost accounting is a pragmatic discipline, a rational system for gathering and disseminating information. In practice, cost-accounting systems range from simplistic to complex, from hand-posted notebooks to sophisticated electronic equipment. However, the latter can be overemphasized, and the goals of improving cost management and laboratory operations under stress may become secondary to data gathering and analysis. Therefore, this document is intended to provide elementary instruction for managers and bench-level staff members to simplify the complexities of laboratory cost accounting and provide a working document for improving control of costs and reporting of significant deviations from standard costs.

Designing a uniform cost-accounting system that is compatible with the needs of all laboratories is difficult because of the tremendous variation in their complexity, resource requirements, and the type of records and information that are readily available. Therefore, the techniques described in Section 4 were selected for their general applicability and simplicity of design.

The Area Committee on General Laboratory Practices currently has two cost management documents in development which will complement GP11. They are: *Cost Analysis at the Point of Care*, which addresses calculation of the cost of use, and the cost benefit of various testing methods and instruments used at the point of care; and *Total Cost Management,* which provides an overview of the basic principles of total cost management and guidance on planning and adjusting budget allowances in a capitated environment.

NCCLS welcomes constructive input and project proposals for new, specialized, cost accounting topics as well as those which may have software applications. Feedback from those working in a clinical services setting whose organizations may benefit from guidelines and standards that will help them provide more cost-effective services is welcome.

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1 Cost-Accounting Principles

In the business world, cost accounting is the discipline that provides management with vital cost information without which informed decisions about choice of procedures, personnel policies, or capital equipment expenditures cannot be made. It is important to realize that cost accounting techniques are not ends in themselves, but are tools to provide the laboratory manager with guidance as they attempt to make well-informed, long-range financial decisions in the rapidly changing clinical laboratory environment. (See Section 5 for further discussion.)

1.1 Accounting Systems and Information Needs

Cost accounting data are only estimates. They provide managers with information on the cost of a product or operation in relation to the needs of laboratory business management. Costs, therefore, must be calculated and understood with regard to the purpose the cost accounting system is intended to serve. The uses and applications of cost accounting in the laboratory are discussed in Section 5.

The system may be as simple as a single-cost-per-test analysis or as complex as a computer-based, multivariate analysis comparing actual results to established standards. A sophisticated system may be more accurate than a simple one, but its enhanced accuracy may or may not improve decision making. As the degree of sophistication increases, so does the cost in both money and time. Computer hardware and software may need to be added or expanded, and more personnel time may be required to support the system.

Another important consideration is the availability of data from an institution's "feeder" information systems (e.g., financial statements, payroll system, time cards, and purchasing system). It is important to understand these sources of information as well as the data-collection practices that are employed to record laboratory workload and expenses.

Each laboratory, therefore, should evaluate its information needs and the costs of acquiring and maintaining the information before beginning a cost-accounting operation. Additionally, in the long run, each laboratory must achieve a balance or level of comfort between cost and benefit, and simplicity and complexity of its accounting system to ensure profitability and/or efficiency.

Cost accounting defines and quantifies inputs such as labor and materials, to establish relationships between them. These relationships allow the interpretation and evaluation of the financial performance of the clinical laboratory (see Section 5).

2 Definitions

"Cost accounting" is a generic term. Although everyone knows what a "cost" is, such descriptive prefixes as "fixed," "variable," "semivariable," "standard," "direct," "indirect," "overhead," or "allocated" cause confusion. A useful set of terms for laboratory cost accounting are defined in this section.

2.1 Basic Definitions of Global Cost Terms

Cost, *n* - The amount of money expended for supplies, labor, and overhead required to produce a test.

Capital costs, *n* - Monies expended for business assets such as physical plant and laboratory equipment. **NOTE:** The operating expense associated with capital costs of equipment that is owned can be shown as depreciation (See definition below). Alternatives to equipment acquisition are leases, rentals, or other similar arrangements. A lease or rental expense is that amount of money paid to the titleholder of the equipment for the period of use of the equipment.

Actual costs, *n* - Monies actually expended for labor, materials, and all other incidentals required to produce tests. **NOTE:** These costs are recorded in the hospital's general ledger accounting system and are based upon actual payroll and payment of invoices. The closer

Related NCCLS Publications*

GP6-A Inventory Control Systems for Laboratory Supplies; Approved Guideline (1993). Gives basic recommendations for laboratorians and suppliers to develop and maintain efficient, cost-effective inventory control systems. Emphasizes the development of strong working relationship with the manufacturer and supplier. Details how to establish an internal inventory control system that is based on documented procedures, appropriate ordering decisions, and control of expenses. To facilitate record keeping, sample forms are included as well as a flow analysis chart depicting the four phases of inventory control: planning, systems development, procurement, and management.

GP9-A Selecting and Evaluating a Referral Laboratory; Approved Guideline (1998). This guideline provides an outline of reasons and criteria for choosing a referral laboratory. A checklist for evaluating potential referral laboratories is included to assist in the decision process.

*Proposed- and tentative-level documents are being advanced through the NCCLS consensus process. Therefore, readers should refer to the most recent editions.