An Exploratory Study Investigating the Pricing Structure of Services in the Context of the Dietetic Profession

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(ABSTRACT)

The payment for nutritional services is one of the most critical issues facing the dietetic profession today. Several of the recent studies have focused on the fee assessment for nutritional services by hospitals but there has been only one published study that investigated the pricing structure of services in the context of the dietetic profession. However, what research that has been done clearly show that there is an important relationship between the concept of service and the role of the dietition in the service sector, the pricing strategy in the service sector, the variables affecting the pricing structure and the pricing strategies for nutritional services. Therefore, the major purpose of this research was to determine those variables which have been identified as most influential in establishing fees charged by consulting dietitians and to establish guidelines on the price structuring of services offered in a private independent practice by a consulting dietitian. The major independent variables in this research postulated to affect the dependent variables, charge

per hour to private and contract clients, charge per hour to private clients and charge per hour to contract clients.

The dietetic profession will see increased competition for reimbursement for nutritional counseling services. This research provides questions in regard to specific pricing policies for nutritional consulting private practices.

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AN EXPLORATORY STUDY INVESTIGATING THE PRICING STRUCTURE OF SERVICES IN THE CONTEXT OF THE DIETETIC PROFESSION

Introduction

Payment for nutrition services is the most critical issue facing the dietetic profession today. As health care costs rise and insurance benefits decrease, today's consumers demand cost-effective services. As competition among health care providers increases, providers will be required to demonstrate the benefits and cost savings of their services (The American Dietetic Association, ADA, 1984). All consulting dietitians will be faced with the task of demonstrating both the value and cost-effectiveness of nutrition services. To achieve desired reimbursement for nutrition services, it is necessary to demonstrate to the client the effectiveness of the services offered in producing desirable health outcomes (improved nutrition and medical status, fewer complications, fewer medications, and decreased medical costs). Cost-conscious, health-conscious consumers will be eager to learn of the benefits--both economic and medical--that nutrition services can offer.

Nature of Problem Under Study

Very little information exists regarding the relative price/value relationship of such services or what is a fair and equitable way of setting fees for such services. While studies have been

reported for food service departments offering nutritional counseling to ambulatory clients, there have been none that focus exclusively on the assessment of fees by dietitians in private practice. The techniques for setting fees and for receiving reimbursement by third party payers are complex (Campbell and Donahue, 1984). Dietitians in private practice must determine a pricing policy. The policy must be one which reflects the practitioner's philosophy and is cost-effective to the practice. Consulting dietitians recognize an urgent need for guidelines in this area.

Context of Problem

In this section an overview of the problem and its context will be presented. The need for pricing guidelines will be established. The historical role of the dietitian will be examined and contrasted with the current role of the dietitian in the context of a changing health care environment. The need for cost justification as part of the pricing formula will be demonstrated as well as the influences on pricing resulting from changing government policies which affect health care services.

Historical Role of Dietitian

Traditionally, the largest number of dietitians have been employed as food service directors or as clinical nutritionists in a hospital setting. In many instances those providing nutritional counseling did so on a nonprofit basis requiring the subsidization of the hospital. Documentation in clinical dietetics was focused on demographic and historical records of admission data and notations of

special care given. Those data were rarely used to document the outcome of a specific service or the value of one service over another in terms of total cost or decreased number of patient days (ADA, 1984).

Current Role of Dietitians

Today, dietetic practice requiring nutritional counseling (ADA Courier, 1983) may occur in a variety of environments such as health-care facilities and agencies; educational settings; community service agencies; individual and group residencies; local, national and international governmental and regulatory bodies; and business and industries.

Definition and Role of Nutritional Counseling

Nutritional counseling (Kaufman, 1965) is far broader than traditional diet instruction and includes an assessment of nutritional needs of the client, development and implementation of an individualized nutritional care plan, referral to related services needed, and continuing follow-up and feedback of client/family compliance and changes in eating practices.

The concept of nutritional counseling (Popkin, Kaufman, and Hallahan, 1979) was first demonstrated by Frances Stern at the Boston Dispensary's Food Clinic established in 1918. Nutrition clinics have since been established in most major medical centers and many large metropolitan hospitals to provide more sophisticated nutritional counseling to ambulatory clients. Within the past fifteen years, nutritional counseling has been offered increasingly as a service to ambulatory patients in community or comprehensive family centers,

maternity and infant care projects, comprehensive health services projects for children and youth, rural or migrant health programs, and public health departments. Within the past five years, an increasing number of dietitians have been employed by physicians in group practice or have opened private practices.

Phases of Nutritional Counseling

The American Dietetic Association (JADA, 1982) asserts that the registered dietitian is accountable for establishing assessment criteria, screening clients, developing a nutritionally relevant data base, and evaluating information to identify nutrition problems and assess food practices, nutritional status, and dietary needs of the individual clients. They should construct a written nutritional care plan in consultation with the client. This plan includes client-referenced long-range goals and short-term objectives, individualized nutrient requirements and appropriate food sources, methods of feeding, dietary modification, food patterns, and the plan for diet counseling and nutrition education.

There are seven phases that nutritional counseling goes through whatever service is provided to the client (Wylie and Singer, 1975). The phases are: (1) making contact; (2) assessing nutritional status and attitude; (3) developing rapport and mutual respect; (4) introducing objective knowledge; (5) incorporating objective knowledge into the value system and setting priorities; (6) expanding nutritional consciousness; and (7) achieving independence.

Early Problems in Setting Fees

Those dietitians who pioneered the private practice sector had trouble determining how to access fees for nutritional counseling. McRae (JADA, 1967) published the following guidelines used in her private practice. The guidelines stated that to establish individual charges, it would be necessary to know the time required to teach a patient, as well as how much time would be spent preparing physician progress reports, bookkeeping and formulating acceptable plans. The guidelines also advised that a 50:50 ratio of time spent with the patient and other requirements was reasonable. Considering that ratio, a five dollar per hour base fee was recommended. A few years later, dietitians in private practice were advised (MacRae, 1975) that a base fee of twenty dollars per hour was still low but would be more reasonable.

Need For Clinical Nutrition Cost Justification

The stringent Medicare laws of 1972 convinced the dietetic profession that hospital food service departments must become cost-effective. They were warned (Smith, 1984) that as the character of the health care industry's financial environment shifts from expansion and entitlement to containment and accountability, it is clear that clinical nutrition programs must develop the means to quantify the value they deliver to the consumer. This can be done only when utilization of service can be correlated with the most widely accepted measure of value and money, through a system that provides for reimbursement.

Impact of Diagnosis Related Groups

Until October 1, 1983, Medicare reimbursement (JADA, 1984) for covered inpatient hospital services was based on the reasonable cost of such services. The Medicare program defines reasonable cost as the cost "actually incurred, excluding therefrom and apart of the incurred cost found to be unnecessary in the efficient delivery of needed health services". Thus, if the nutrition care services were deemed to be medically necessary, the services were reimbursable as part of the routine costs. Beginning with cost-reporting periods commencing on or after October 1, 1983, Medicare payments for inpatient hospital services started changing from a cost-based, retrospective reimbursement system to a prospective payment system. Under the new system, payment will be made at a predetermined, specific rate for each patient discharged. Each discharge will be classified according to one of four hundred and seventy Diagnosis Related Groups. The three DRG's that specifically deal with nutrition are: 296, Nutritional and Miscellaneous Metabolic Disorders, Age greater than 70; 297, Nutritional and Metabolic Disorders, Age 18-69; and 298, Nutritional and Miscellaneous Metabolic Disorder, Age 0-17. Nutrition intervention is indicated in six of the most commonly used DRG's (JADA, 1985). Those six are: 127, Heart failure plus shock; 182, Esophagitis, gastroenteritis, plus miscellaneous digestive disorders, patient older than age 69 plus/or complicating condition; 132, Atherosclerosis, patient older than age 69 and/or complicating condition; 88, Chronic obstructive pulmonary disease; 14, Specific cerebrovascular disorders, except transient ischemic attacks, and 294,

Diabetes, patient age 36 or older.

Medicare Coverage for Outpatients

Dietitians in private practice should be aware that the 1983 medicare program also provides coverage of nutritional services offered on an outpatient basis. These services include skilled nursing facilities, outpatient clinics, home health agencies and referrals from physicians if the physician files the claim and describes such services as physician services (JADA 1984).

Shrinking Health Services in Community

Consulting dietitians searching for funds to finance nutrition services today are confronted with budget deficits and inflation in medical care costs, which have created much competition for shrinking resources in both the public and the private sector. The array of local, state and federal programs providing support for nutrition services in ambulatory settings is minimal (Egan and Kaufman, 1985). Federal-government-related funding resources for nutritional services are elements of the following: Block Grants, Home Health, Food Stamps, Child Nutrition Programs and Supplemental Food Programs (Women, Infants and Children), Older American Programs, and Maternal and Child Health Services. The majority of the funds for these programs are spent directly for conventionally needed food. Of the remaining amount, only a small proportion is expended for nutrition education. With block grants resulting from new federal laws, decision making and accountability for the use of the funds are delegated to state and local health agencies. Emphasis on flexibility and responsibility of

each state health agency to make its own decision is important for dietitians targeting their marketing efforts.

Lack Of Studies And The Need For Studies On The Payment For Nutritional Counseling

Given the background just presented, the literature on the pricing of nutritional counseling services is extremely sparce. Only one study included a survey of dietitians belonging to the Consulting Nutritional Speciality Group. Cross (1981) reported that from twenty percent to one hundred percent reimbursement could be obtained from private insurance companies for nutrition services for persons with diabetes, heart disease, hypertension, allergies, gastrointestinal disease, and gallbladder disease. The willingness of the insurance companies to reimburse for nutritional counseling was attributed to the medical community's acceptance of the nutritionists' services. In addition, however, obtaining reimbursement for nutritional counseling from insurance companies requires proof of its benefits in reducing the cost of health care expenditures such as a reduced hospital admission rate or the prevention of severe complications for those with chronic disease.

Since only one such published study has addressed the pricing problem, much additional work is needed to investigate those variables which affect the pricing formula for the consulting dietitians. It is hypothetical that several variables affect pricing policies and those include the level of degree held, previous experience, number of years worked as a consulting dietitian, population and principal industry of the location of the private practice, number of hours worked, number

of employees, overhead and direct costs, third party reimbursement, type of client (private or institution/group), number of clients, percentage of revenue from private clients or institution/group clients, subtasks, service provided by institution, revenue of the institution, prevailing rates, personal worth, services provided to clients, time spent in counseling, importance of service provided to client, and quality assurance.

One must be aware that the assessing of nutritional fees for dietitians in private practice is different than most common methods of fee setting and thus cannot be compared or included in the studies assessing the fees for hospital food service departments. There are several reasons for this. The social interaction (Gersunj and Rosengren, 1973) between buyer and seller is much more elaborate in the production of services than with material goods and one of the most important functions of the service sector is to furnish remedies for problems which may befall individuals and groups. Problem-oriented services may vary widely in the extent and duration of consumer participation in the division of labor. Some other dimensions of considerable importance are the perceived urgency of the problem, the cost of the remedy and whether this cost is met by the primary consumer or a third party. Cost of the services varies with the situation. The higher the cost, the more persuasive one has to be in order for the customer to want the remedy.

Purpose of Study

The purpose of this study is to determine those variables which have been identified as most influential in establishing the

fees charged by consulting dietitians and to establish guidelines on the price structuring of services offered in a private independent practice by a consulting dietitian.

Research Questions

The following research question has been formulated. Do the following independent variables have a substantial impact upon the pricing of nutritional counseling services?

- Demographic characteristics
  - Population
  - Industry
- Type of client
  - Private client
  - Contract client
- Size of organization
  - Number of employees
  - Annual revenue
- Time alloted to practice
  - Full-time
  - Part-time
  - Number of years
- Quality assurance
  - Standards of practice
  - Standards of quality
- Unit product
  - Subtasks of counseling services
- Professional information
  - Route to The American Dietetic Association membership
  - Level of degree
  - Previous work experience

The dependent variable is the fee structure charged by the consulting dietitian. It will be measured by using the hourly fee as a percentage of revenue and by fee contract for specific services as a percentage of revenue.

Summary

Consulting dietitians in an independent private practice have been included in only one published study to date on reimbursement for nutritional counseling (Cross, 1981) and that study did not examine the parameters and factors that affect the pricing structure. Dietitians recognize that payment for nutritional services (ADA, 1984) is the most critical issue facing the dietetic profession today and that nutritional services must be cost-effective.

Structure of Thesis

Chapter Two; review of related literature: The review of related literature is designed to introduce the research problem as that particular problem is related to the corollary literature of the research area.

Chapter Three; methodology: This chapter will address the methodology which was chosen for processing the data. The research questions will be presented, as well as a description of the research design.

Chapter Four; results and discussion: The data germane to the problem will be presented, and then those data will be analyzed and interpreted.

Chapter Five; summary and conclusion: The conclusion that the data dictate in terms of the problem under investigation will be presented. Indication will be given as to whether the data do or do not support the hypotheses being tested.

Chapter Six; recommendations: Recommendations will be made

for further study in those areas that are recognized as worthy of further investigation.

Chapter Two

REVIEW OF LITERATURE

The review of the literature will address the following areas. The first area will discuss the concept of service and the role of the dietitian in the service sector. The second area will examine pricing strategies in the service sector. The third area focuses on variables, technology, structure, environment, quality, customer perception of quality, overhead and direct costs, which affect the pricing structure. The fourth area will explore the pricing strategy for nutritional services, in both hospital settings and in private practices.

Service Economy in the United States

In the 1950s and 1960s the United States was moving toward what has been described as the post industrial state (Sasser, Olsen, and Wyckoff, 1979). A fundamental change in the economy was occurring that was having a profound effect on its economic, social and political structure. These changes were fundamentally economic, stemming from increased productivity in the manufacturing sector. This increased productivity created a higher level of disposable income in the population, which in turn led to increasing purchases of nontangible products known as services. The implications of this were quoted from a U. S. Department of Commerce report:

> The evolution of the United States into a service economy has significant implications for U. S.

> economic growth and for economic policy formation. Services are less cyclical than goods--growing less in booms, and falling less in recessions. Services tend to be more labor intensive and to use less capital equipment than manufacturing. Productivity increases have been slower in services, and price increases generally have been more rapid. The average size of service establishments tends to be small, and there has been less concentration of production into large firms than is the case in many manufacturing industries. (These characteristics may, of course, change as technological advance affects the services sector.) A major portion of future economic growth and job creation--not just in the United States, but in the entire industrial world--is expected to originate in the service sectors. This would seem to suggest major implications for international patterns of economic growth, investment and capital formation, employment, productivity, inflation, and economic relations.

Concept of Service

Product has been defined as an overall concept that includes all objects of transaction, whether these are physical products or services. This production concept (Gronroos, 1983) could well be applied to services. The production of a service includes all activities that are required to satisfy the needs of the consumers. Service is an activity in which production and consumption take place simultaneously. The consumption of services begins when the consumer, or potential consumer, first contacts a service firm or institution and continues throughout the transaction. In order to develop an understanding of service, it is important to establish a concept of service, ie., a concept which describes how clients perceive the quality of a service.

Definition of Service

The ubiquitous phrase "goods and services" is a special example

of certain concepts and phrases that still exist in conventional marketing. While most marketers have some idea of the meaning of "goods," "services" seem to be everything else and the understanding of them is not clear. One could think of service as an act--when a service is purchased, the buyer incurs an expense. Another test of services--does the utility for the consumer lie in the physical characteristics of the product, or in the nature of the action or the performance (Rothnell, 1966). The marketing characteristics of services are:

1. Services are more likely to be expressed as rates, fees, admissions, charges, tuition, contributions, interest and the like.
2. The buyer is a client. The client, when buying a service, figuratively or literally places himself "in the hands" of the seller of the service.
3. The various marketing systems in the service category have taken on highly differentiated characteristics.
4. Since services are acts or processes and are produced as they are consumed, they cannot be inventoried, and there can be no merchant middle man since only direct sales are possible.
5. There appears to be more formal or professional approach to many services.
6. Because services cannot be mass produced, standards cannot be precise.
7. "Price-making" practices vary greatly within the service category.
8. Economic concepts of supply and demand and cost are difficult to apply to a service because of of its intangible nature.
9. There appears to be limited concentration in the service sector of the economy, eg., a few of those offering professional services, such as physicians or lawyers, receive the greatest percentage of income derived from the service sector.
10. Symbolism derives from performance rather than profession in the case of service.

Characteristics of Service Operations

The output of service operations is intangible and inseparable into units (Mills and Moberg, 1982). That intangibility leads to three other important characteristics of service operations. First, customer/clients have few objective reference points to use in perceiving the value of the service they receive. Second, the intangibility of services provides incentives on service operations to make the relationships between customers and service workers satisfying to customers. Third, being intangible, services are not amenable to output control. Other characteristics of service (Sasser et al., 1979) are perishability and simultaneity. Services are perishable; they cannot be inventoried. In a service delivery system, the absence of inventory removes from the service manager an important buffer used by most manufacturing managers to handle fluctuations in demand. Simultaneity of production and consumption compounds the problems created by the other service product characteristics. Services do not move through distribution channels. Customers must come to the service facility or the service provider must be brought to the customer.

Description of Customer-Client Interaction

The professional-client relationship (Bidwell and Vreeland, 1963) is face-to-face interaction which is effectively neutral and functionally specific. The professional commands special esoteric skills. The client needs the service these skills make possible. Between them the specific service to be rendered and the fee to be paid are agreed upon, that is, they consummate a utilitarian contract. A normative contract is also consummated, the client within the service

relationship subordinating himself on the basis of trust to the professional. The normative contract, therefore, distinguishes the clients from the customers. In general, the bargining positions, and so the price, of the professionals depend upon the extent of social demand for their services and the criticalness of these services.

Sequence of Consuming Services

Those for whom the service is being offered go through a series of steps (Olsen and Barrington, 1984). The first step is anticipation. Clients have already developed a perception about the services that are about to received. The perception are matched by individual needs such as emotion, occasion or economics such as price/value relationship. The next stage is the actual delivery of the service itself. Since this is the most important and yet the most vulnerable part of the service sequence, a special effort must be made to try to make as much of the process tangible as possible. Focus must be placed on the handling of intangibles associated with each phase of the service delivery process. Those phases are: initial interactions; establishing role relationships; creating and maintaining the mood and atmosphere; physical product delivery; feedback management; and residue enhancement. The last stage of the sequence is the residue state, which is very important in the more contained interaction of the client and the person delivering the service. A bad experience anywhere in the stages of service can leave a lasting and negative feeling.

Definition of a Consultant

Consulting is an umbrella work, covering a multitude of

variations and connotations. The consultant may be one who, out of the background of experience and judgement, suggests a ready solution, or the consultant may be an individual who is capable of generating an answer to a particular problem. Anyone employing (Guss, 1966) a consultant must expect to pay for the learning time which a consultant must give to the orientation of the problem. Consultants are normally employed on the basis of a proposal which is a written statement of the problems as they see it, the methods by which they hope to attack the problem, the kind of probable solution they expect, the degree of certainty with which they view success and the time and cost of the undertaking. The employer must expect the consultant's fee to cover all aspects of the undertaking.

Why Customers Buy Professional Services

Clients engage professional services because they must. One seeks the services of a consultant because of the need to secure advanced technology (Sibson, 1971). People turn to outside professional services because they have no practical alternative but the employment of licensed specialists. Others purchase professional services because the supplier possesses specialized knowledge. Often, professional firms, because of special knowledge and prior experience, can frequently do the work less expensively and in less time. People also retain professional services to have the advantage of an outsider's opinion. Objectivity of view is an extremely important reason for buying professional services.

Changing Role of the Dietitian

In the 1970's the private practice sector witnessed the expansion of the practicing dietitians role (Laqutra and Danish, 1981, Engen et al., 1983) from that of diet educator (reviewing a diet sheet) to that of nutrition counselor. Dietitians since then have introduced a gradual approach to behavior-change goals, incorporating into counseling sessions such components as assessment, shaping, in-office practice activities, client self-monitoring and follow-up to facilitate that change.

Current Role of Private Practice

The services now offered by the dietetic practitioner encompass a wide area and are as diversified as one wishes. The registered dietitian in private practice as defined by The American Dietetic Association (Pace et al., 1984) develops, implements, and evaluates plans on the basis of needs; collaborates with other professionals in interpreting and communicating nutrition care principles; generates and uses research to enchance dietetic practice and analyzes and justifies the use of resources.

Expertise of the Dietitian

Dietitians have a unique knowledge of food, which includes food composition; cooking; availability of foods; food combinations for meals; economic, social, ethnic, and physical factors affecting food composition; the marketing of foods; and the role of foods in the maintenance of health (Danish, 1979). The dietitian in private practice must be able to offer these services to the client as well all other nutritional counseling practices.

Role of the Consulting Dietitian in Private Practice

Consulting dietitians (Selkowitz, 1985) provide nutritional counseling incorporating special dietary modification and normal nutritional needs for individuals and groups. Counseling services encompass nutritional assessment and nutrient analysis, weight management, family nutrition planning, nutritional guidance for maternal, infant, pediatric, adolescent, adult and geriatric clients as well as other services according to the training and the interest of the consulting dietitian. A dietitian in private practice (Knis, 1979) can also offer clients menu plans especially designed for their particular bodily requirements, personal preferences, and family and/or social commitments.

Consulting dietitians also offer services such as behavioral weight control counseling skills (Snetselder et al., 1981) that include learning to define the specific problem, to encourage clients to try out new eating behaviors and to implement alternate plans if those previously tried have failed. Evaluation of individual client nutrition is an on going process (Behm and Schiller, 1985).

Spectrum of Employment

The consulting dietitian (ADA, 1984) is being hired by athletes and entertainers to supervise their nutritional intake. Ambulatory-care centers, extended-care centers, nursing homes, hospices and other institutions are employing the consulting dietitian. Other organizations using the consulting dietitian are Health

Maintenance Organizations, independent practice associations, fitness centers, rehabilitation centers, and drug control centers.

Other Areas of Specialization

Not all consulting dietitians wish to become involved with services spread over a large area, and those who do not confine their expertise to more specialized practice. Direct patient care, administration, food service management, consultation for a specific groups and publication are a few of these specialized areas (Stokes, 1981 and McCoy, 1982, 1984).

Phases of Nutritional Counseling

Whatever the service provided, nutritional counseling (Wylie and Singer, 1975) goes through the following phases: making contact; assessing nutritional status and attitude; developing rapport and mutual respect; introducing objective knowledge; incorporating objective knowledge into the value system and setting priorities; expanding nutritional consciousness; and achieving independence. The environment, time constraints, role negotiations, (Glanz, 1979) which the amount of influence a dietitian can exert and access to information all figure in the fee milieu.

Developing a Pricing Strategy

Judd (1961) defined a marketed service as a market transaction by an enterprise or entrepreneur where the object of the market transaction is other than the ownership of a tangible commodity.

A fundamental marketing decision problem is the determination of price for a product or service (Monroe and Zoltners, 1979). It has

become apparent that firms that produce products or services must develop positive and responsible pricing policies to respond to economic uncertainties, limited availability of productive resources and working capital and changing government policies and regulations.

Establishing a pricing strategy (Sibson, 1971) is crucial and involves specialized processes. The inputs are the marketing strategy, financial needs and goals, competitive considerations and possible influence of regulatory controls. The process first focuses on the selection of basic methods, then on the mechanism and mathematics involved. It must be interwoven with the concept of services provided; for example, if the services provided are innovative and of high value, premium prices based in part upon value pricing may be appropriate. In evolving a pricing strategy, the quite different view of the client must also be considered. The client tends to view price in terms of the overall amount of money that has been expended.

Pricing Structures

As noted before, effective pricing is crucial to success in professional service enterprises (Sibson, 1971). Many opportunities for flexibility in pricing structures exist. A wide variety of pricing methods has evolved in professional service enterprises. The cost pricing approach is merely the services area application of the traditional method of pricing in a product-oriented business. Each of the elements of cost for a given service is determined, and the total cost is derived for various levels of business activity and time utilization. From these calculations, a price is then determined that, at the various levels of activity and standard-time utilization, will

yield a desired profit. Some direct competitive pricing of services is used by professional service enterprises. Most professional businesses have some idea of the billing rates of various levels of professionals in other firms, and this becomes one factor in fee setting. This approach has the advantage of being equitable; that is, the professional services enterprise is merely charging the going rate in the open market.

The competitive pay approach to a professional services enterprise is really a special variation of the competitive services approach. It starts with a determination of the competitive rates of pay for employees of the service enterprise. Competitive rates are then established for the company. These rates are then used to provide a basis for pricing the services offered.

Another method of pricing is contingency payment pricing. Using this pricing method, the service business sets a fee but the payement of the fee is contingent upon work successfully accomplished. A variation is to set a basic fee with an additional fee due upon successful completion of work. In theory, the contingency system offers the optimum in incentive compensation or motivation. It requires, however, a very careful definition of what is a successful performance.

One method widely used by certain kinds of professional service businesses is the value pricing system. This system calls for a total fee based not on the cost of the service provided, but on the value of the service to the client. Certainly it is inherently fair and sound to price worth rather than cost. Measures of time

expended, competitive pay, costs, and so forth are only rough guides to value. Value pricing assumes that a new idea, a new and better method, or knowledge that means a great deal to the client should be paid for in proportion to its value to the client, particularly if the service is crucial to the client's broader purpose and the price is a small percentage of the total cost of a larger undertaking.

A final system of pricing, not so much a method as it is a conclusion drawn from the application of a number of methods, prevails wherever a service is uniformly priced throughout an area. Uniform prices in a professional services business are a conclusion that has been reached on an arbitrary and intuitive basis. In professional service industries, uniform pricing is almost never the result of the interplay of supply and demand.

Structure, Technology and Objectives of a Private Practice

To ensure effective pricing for services offered, consulting dietitians must make crucial decisions about the structure of their private practice. They must be aware how the structure, technology, goals and objectives of the practice will influence the organization's pricing structure.

Service Technology

All firms, those producing products or those providing a service, perform actions upon an object in order to make some changes in that object. The object or "raw material" may be a living being, human or otherwise, and is a symbol of an inanimate object. In the course of changing this material in an organizational setting (Perrow,

1967) the individual must interact with others. The form that this interaction takes we call the structure of the organization. It involves the arrangements or relationships that permit the coordination and control of work.

Sets of Procedures

The knowledge and qualifications (Rousseau and Cooke, 1984) possessed by employees provide a base for the organization in that they can be used to develop and prescribe sets of procedures for accomplishing tasks. The coupling of information held by different individuals about how to do the work can lead to the development of abstract technology components in the form of standardized sets of procedures. Standard procedures reflect an organized set of responses to organization conditions and stimuli. The sets of procedures can be used for transforming raw material into services, can focus on input control conversion, or output control. Rousseau and Cooke (1984) state:

> Interaction between technology and structure is endemic in organizations and technology and structure are implicitly confounded beyond the most elemental activities, programs and individuals.

Service Technology and Structure

Aldrich (1972) found that while high technology does have a diffused relationship with the structural dimensions, the correlation between structuring of activities and the component variables in specialization, standardization, and formalization and size was of much more importance. The more technically diffused a firm, the greater the degree of "made to orderness" in its product. Also, the evidence gathered (Harvey, 1968) consistently suggests that firms

characterized by the sociotechnical mode of "technical diffuseness--low internal structure" tend to exhibit flexibilities of organization and general readiness for change which facilitated innovation when the need for it arose.

Definition of Structure

Formal organization has been defined (Goehle, 1975) as the stable and explicit pattern of prescribed relationships designed to enable those employed to work together in the achievement of objectives, and informal organization as the pattern of relationships which actually exist from day to day operations. Data gathered from twenty-three organizations, (Hall, 1967) suggests that the occupational base of an organization may influence the structure and norms of the organization. The self-regulatory norms of professionals reduce the utility of organizationally generated rule systems for performance of tasks.

Structural Elements

Telem (1985) defines the structural elements as tasks, technology, people, structure and management. They are highly interdependent so that changing any one may result in a compensatory change in the others. Other aspects are power, conflict, interests, organizational stress and role sets.

Uncertainty and Structure

Complex organizations (Goehle, 1975) are open systems, hence indeterminate and faced with uncertainty, but at the same time subject to criteria or rationality, and hence needing determinativeness and

certainty. Organization rationality is some combination of constraints, contingencies and controllable variables. Structure is a fundamental vehicle by which organizations achieve bounded rationality, but if structure affords numerous shares of bounded rationality, it must also facilitate the coordinated action of those independent elements. The fundamental problem faced by complex organizations is coping with uncertainty. This uncertainty is therefore the essence of the administrative process.

Environment and Structure

In a study (Kimberly, 1975) of one hundred and twenty-three sheltered workshops, defined as "a work-oriented rehabilitation facility with a controlled working environment and individual vocational goals which utilizes work experience and related service for assisting the handicapped person to progress toward normal living and productive vocational status", it was found that as open systems, organizations engage in various transactions with environments. These transactions are complex, variable across the organization and environments, and reciprocal. At a given time, however, there are various environmental constraints which can limit the structural form that organizations can adopt.

Customer Contact in Service Organizations

The one item that distinguishes one service system from another in terms of what they can and cannot achieve in the way of efficiency is that extent of customer contact in the creation of service. Customer contact (Chase, 1978) refers to the physical

presence of the customer in the system. The extent of contact may be defined as the percent of time the customer must be in the system relative to the total time it takes to serve him. It follows that service systems with high customer contact are more difficult to control and more difficult to rationalize than those with low customer contact. In high contact systems, the customer can affect the time of demand, the exact nature of the service and the quality of the service since he tends to become involved in the process itself.

High Contact Nature of Interaction

Because of the high contact with clients in the professional system, specific goals and objectives should be clearly stated in the light of their unique environments. Professional services tend to face a turbulent, ill-structured environment (Chase and Tansk, 1983). There are few well-established techniques and there is little certainty about methods, or whether or not they will work. It also means that there may be a variety of different tasks to perform, in the sense that raw materials are not standardized.

Complex Environments

Professional employees, especially those in high contact interactions with the client (Mills et al., 1983) face varying amounts of uncertainty. They need to adjust their information processing capabilities in order to adapt successfully to the different environment. The dependency of the professional on the client and the difficulty in being able to predict the client's behavior create an uncertain environment. The presence of complex environments

(heterogeneous or abstract) must suggest the strategy adopted by organizations is one of structured decomposition. This is an attempt to monitor and apprehend complex elements in heterogeneous environments more efficiently by differentiating their structure. The role of the professional in the workflow renders the structure of the organization to the desires of the decision units and their ability to employ proactive strategies for effectiveness. The primary attribute of the emerging professional organization structure is to facilitate the role creation and negotiation of its participants. These elements are processes that arise in the presence of the nebulous nature of the professional's work.

Service Quality

Some guidelines can be found in the literature on consumer behavior as to how service quality is perceived. According to consumer behavior theories (Gronroos, 1983), consumers form expectations concerning the future performance of a product when purchasing it. As they consume the product, they compare the quality to their prior expectations. It has been found that higher levels of performance lead to higher evaluations if expectations are held constant. Conflict arousal depends on product performance relative to the expectations of the consumer. In any consumption situation, it is possible that if a product performs above or below expectations, arousal will increase and conflict will result.

The perceived quality of a given service will be the outcome of an evaluation process where consumers compare their expectations with the service they perceive they have received. The higher the

degree of the consumer's personal involvement in the consumption process, the more important product performance or outcome will be to post-consumption evaluations. Services are products which require high consumer involvement in the consumption process. Hence, the consumer's experience of a service can be expected to be an important influence on his or her post-consumption evaluation of the service. What the consumer receives in his or her interactions with the service firm is clearly important to the evaluation of the quality of service. Because the service is produced in interaction with the consumer, this quality will not account for the total quality which customers perceive they have received. They obviously will also be influenced by the way in which the quality was transferred to them. The extent of production-related routines which the consumer is expected to perform himself or herself, such as goal setting, changing lifestyle, compliance, and feedback, will probably influence his or her perception of the service.

Buyers' Perceptions of Price

In recent years there has been a growing awareness of the complex role of price as a determinant of a purchase decision. According to economic theory, price is assumed to influence buyer choice because price serves as an indicator of purchase cost. That is, assuming the buyer has perfect information concerning prices and wants satisfaction of comparable product alernatives, he can determine a product mix that maximizes his satisfaction for a given budget constraint (Monroe, 1973). However, the extent that buyers are conscious of the prices they pay influences the way prices are perceived and the role price plays in buyer choice.

The buyer generally does not have complete information about the quality of alternative product offerings; yet he forms perception from the information available. When price information is available and when the buyer is uncertain about product quality. It would seem reasonable to use price as a criterion for assessing quality. The perceived value of a product may produce an accentuation in the assessed quality of the product. In single-cue studies, respondents tend to choose the higher-priced brands of products perceived to be heterogeneous. It was also found that the use of price to judge quality was a generalized attitude. In the multi-cue studies, it was found that when price was the only differential information, a positive price-quality relationship was observed. Moreover, the positive price-quality relationship was enhanced when the products were perceived to be heterogeneous in quality and when the comparative price differences were accentuated.

In a review of recent studies, (Monroe and Petroshius, 1981) found that the available evidence on how buyers perceive prices suggested the following: (1) For most purchases, buyers have limited information available and limited information processing capability. As a result, price may serve as an indicator of product quality as well as an indicator of purchase cost. Hence, price may have both attracting and repelling attributes. (2) The results from previous price-quality studies are inconsistent. However, there does appear to be a positive perceived price-quality relationship. Both brand name and store image tend to mediate this relationship and, for some

products, dominate the influence of price on purchasing decisions. (3) Buyers generally have a range of acceptable prices for considered purchases, rather than one acceptable price. People may refrain from purchasing a product when the price is perceived to be either too high or too low. (4) Price evaluations are comparative in nature. That is, a price to be evaluated is compared with some other price or reference. These reference prices serve to help the buyer determine whether the price being evaluated is too low or too high. (5) The reference prices change over time and are influenced by the prices the individual is evaluating. As a result, a reference price will move in the direction of the judged price. Higher prices will lead to a higher reference price. (6) Prices that are perceived to be too different from the reference price will be categorized and judged as representing a different purchase alternative. They are not likely to be considered as "believable", "correct", or "fair" purchase alternatives. (7) When prices are perceived to be similar, then price is unlikely to be influential when the buyer chooses from similar product/service alternatives.

Effect of Price on Product Evaluations

Perception (Monroe and Krishnan, 1984) is the process of organizing, interpreting, and deriving meaning from stimuli through the senses. Sensation is the process of receiving these sense impressions. Perceived product quality is the perceived ability of a product to provide satisfaction relative to the available alternatives.

It has been previously concluded that brand name information dominated price information in the perception of quality. However,

finding a more positive effect for price when brand information is present than when brand information is absent suggests that the interaction of price and brand information not only is stronger, but that the influence of price on quality perception is stronger in the presence of brand information than by itself. The implication is not that brand name dominates the influence of price, but rather, increases the influence of price on quality perceptions. Results confirm the hypothesis that perception of quality increases as price increases. This observation agrees with the logic that an inference of quality is more likely to occur when subjective price comparisons are possible. Price cues should have an increasingly powerful effect on product evaluations as brand familiarity decreases. That is, in cases of low brand familiarity or absence of a brand name, the price cues should provide additional, useful information not available through the brand name cue.

Price Effects on Choice and Perceptions

In research using one hundred and sixty members of an university community, Obermiller and Wheatly (1984) tested the hypotheses that strong prior beliefs in quality differences among brands in a product class should enhance the likelihood that consumers will employ a price-value heuristic or use price as a cue to quality. Thus, consumers will show a greater preference for higher-priced brands in product categories for which they hold strong prior beliefs in quality differences than in product categories for which they hold weak prior beliefs in quality differences. Moreover, strong beliefs in quality differences should be more resistant to change than weak

beliefs. As a result, in a product category for which consumers have weak beliefs in quality differences, we should expect evidence of similarity from either taste or information to result in greater shifts from high to low-priced brands than in product categories for which consumers have strong beliefs in quality differences. Consequently, there will be a main effect of prior beliefs on initial preference and an interaction between prior beliefs and evidence of similarity with respect to change in preference. The results of the study showed that the subjects were receptive to evidence and changed beliefs, attitudes, and behavior consistent with their experience and information, even those with strong prior beliefs. Also, although objectively some subjects opted for less when they could have had more, when viewed from the perspective of subjective perceptions, all subjects appear to have opted for more. Some individuals' perceptions of quality were sufficiently enhanced to offset the marginal utility of price differences despite evidence of information and experience.

Quality Differences and Brand Choice

Two studies by Obermiller and Wheatley (1985) using fifty-five students and eighty-four customers as subjects researched the hypothesis that subjects who were given data consistent with a belief in large brand quality differences would make a price-quality inference and prefer the higher-priced alternative and that the subjects who were given data consistent with a belief in low brand quality would not infer quality from price and would, therefore, prefer the lower-priced alternative. The studies provided evidence that prior beliefs about quality differences among brands apparently influence product choice.

When presented with price information, subjects tended to pick the lower price alternative when they believed that there were small differences in the quality of brands. Conversely, when consumers felt that there were large differences among brands they were more inclined to choose the higher-priced brand.

Effect of Brand and Price Information on Product Evaluation

Research by Dodds and Monroe (1985) was based on the theories that higher prices will lead to greater perceived quality, and consequently, to a greater willingness to purchase based on perceived quality. At the same time, the higher price represents a measure of what must be sacrificed to purchase the good and leads to a lesser willingness to buy. Perceived value represents a trade-off between two variables, perceived quality and sacrifice. Willingness to buy is positively related to perceived value. As price increases beyond an acceptable upper price, it would be expected that perceived value and also willingness to buy would both decrease because the sacrifice demanded becomes too important in the trade-off with perceived quality. Thus, it would be expected that perceived value and willingness would decrease after first increasing. Interaction of brand name and price will cause the subjects to perceive the product to be higher in quality and value, and to be more willing to purchase the product.

The results, using three hundred and sixty-eight students as subjects, showed that as price increased from the low-price group to the medium-price group, perceived quality increased. Results obtained from the medium-price and high-price groups were not statistically different. Evidence supported the hypothesis that perceived quality

will increase and perceived value and willingness to buy will decrease as price increases and indications were that at the low and high prices the brand effect favored the brand name.

Effect Of Years In Operation On Performance

Not only the client's perception of quality affects the pricing structure but also several other factors such as annual revenue, length of time in business, and number of employees. These factors should be considered when determining the price of services that are being offered clients. By using yearly sales, total number of employees and total number of customers as criteria for research into twelve new businesses selling educational courseware, (Van de Vin, Hudson, and Schroder, 1984) it was found that the firms were divided evenly into two groups; low and high performing. In all twelve businesses the low performing companies were the newer businesses while the high performing companies had been in business for at least four years. The high performing companies all attributed their success on the development of multiproducts and did not mention their pricing structure.

Size Of Firm By Revenue

Comparing one hundred and seventeen industries in 1959-1960 and 1960-1961; and one hundred and eighteen in 1961-1962, Marcus (1985) found that the size of the firm (revenue) influences profitability in some, but not all. It was theorized that since profitability is ultimately determined by several complex factors--product prices, factor costs, the production function--whose relationship to the size

of the firm might vary among industries in a manner which cannot be readily identified, it is not surprising that when offered with no qualifications, the hypothesis that the rate of return increases with the size of the firm cannot be supported. However, Hall and Weiss (1985) researched four hundred and sixty-seven firms and their conclusions were that size as measured by revenue does tend to result in high profit rates. They reported that there is significant revenue requirement from firms with high revenue and that the revenue very likely has a greater effect on profit rate.

Overhead And Direct Costs

Other factors to be examined within the price structure are the direct product cost and the fixed period cost. Direct product costs (Monroe, 1979) are generated with the product or service and exist when the product is made or the service offered. The period portion of variable cost does not vary directly with the product or services but instead varies with overall output. There are also fixed period costs that are not identifiable with any specific product or service. Overhead is that portion of period costs that cannot be objectively traced to particular operations, products, or other profit segments. Overhead application involves assigning overhead costs to individual units within a profit segment.

Fixed And Overhead Costs

The unit product cost (Corr, 1974) which must include fixed overhead depends on the following: (1) the total amount of fixed overhead, (2) the various bases used to allocate overhead costs to different products or service lines and to various units of product or

service, and (3) the expected volume of production for each product or service.

Standards Of Quality

Quality assurance must also be considered when deciding on a pricing structure for services. The American Dietetic Association (1982) asserts that the registered dietitian holds the professional role that is responsible for assuring the availability and quality of all aspects of dietetic practice. The registered dietitian is accountable for establishing assessment criteria, screening clients, developing a nutritionally relevant data base, and evaluating information to identify nutrition problems and assess food practices, nutritional status, and dietary needs of individual clients. They should construct a written nutrition care plan in consultation with the client. This plan includes client-referenced long-range goals and short-term objectives, individualized nutrient requirements and appropriate food sources, methods of feeding, dietary modifications, food patterns, and the plan for diet counseling and nutrition education. Responsibilities which are intra-professional include providing leadership for the advancement of contemporary dietetic practice in all aspects of nutrition care service, developing and maintaining standards of quality for dietetic practice, applying findings of current research to the practice of dietetics, and engaging in applied nutrition research to study problems related to dietetic practice.

Standards Of Practice

Although dietetics is one profession composed of many diverse areas, all practitioners are responsible for the quality of their practice (JADA, 1985). Defined goals and directions are imperative if one is to attain professional self-realization in a cost-effective manner. Standards of practice are statements of these responsibilities and establish a common ground for evaluating the quality of all dietetic practice. The first standard requires an individual quality assurance program for each practitioner. Quality assurance programs provide one with valuable data and documentation to support and to justify current needs and future proposals. The second standard describes the assessment, development, implementation, and evaluation of the individual plan for practice. The plan for practice, based upon assessment of consumer needs, emphasizes that a market exists for a practice. Standard three reinforces the need for collaboration and other communications with other professionals, personnel, and consumers. The fourth standard is the requirement of the continual pursuit of knowledge and skills. Professional ethics place responsibility on the practitioner to accurately evaluate continuing education activities. Standard five is based upon the concept that application of research principles is a fundamental component of quality dietetic practice. The last, standard six, indicates that one must remain accountable for the effective use of resources. The dietetic practitioner must be prepared to identify, monitor, analyze, and justify the use of other resources, such as personnel, money, equipment, materials and facilities.

Impact of Diagnosis-Related Groups on Nutrition Care

Medicare reimbursement for inpatient nutrition care cost before October 1, 1983, was simply built into the facility's costs and was not reimbursable as a separate cost and if the nutrition services were seen as medically necessary, the services were reimbursable as part of the routine costs under Part A of the Medicare program (JADA, 1984). However, a new system was implemented in October 1, 1983, and Medicare payments for hospital services changed to a prospective payment system. Payment is made at a predetermined, specific rate for each patient discharge. Each discharge is classified according to Diagnosis-Related Groups. There are 3 DRG's that specifically deal with nutrition and nutrition intervention is indicated in 6 of the most commonly used DRG's (JADA, 1985).

Justification of the Fee For Services Offered

No matter whether a consulting dietitian limits the services offered to a specialized few or offers a broad spectrum of services, the question that arises for each service offered is what guidelines should be used as to the setting of the fee for that service.

Profit Motive

Whether the business produces a product or a service, its financial success (Rapp, 1984) will be measured by the extent to which the proceeds from the sales of services surpass the aggregate related costs. The more fully employed the productive resources are, the greater the possibility that the total return from ones efforts will

be increased, provided that the price is right. Volume alone will not do the trick--profitable volume will.

Pricing Strategies for Nutritional Services

Since the 1960's and 1970's the United States has become a service-oriented economy (Monroe, 1979), and the demand for services is still increasing. In virtually all instances this rapid increase in demand has led to rapid increases in prices, because pure services consist mainly of labor, and productivity gains have been low. Many of these price increases have resulted from a naive and unsophisticated approach to pricing without regard to underlying shifts in demand, the rate that supply can be expanded, prices of available substitutes, consideration of the price-volume relationship, or the availability of future substitutes. The pricing strategies for a modern business organization are complex and important. There are many kinds of pricing decisions that a firm must make. It must decide on what specific price to charge for each service marketed. Each specific price charged depends on the type of customer to whom the service is sold.

The same principles apply to establishing a fee for nutrition services (Lange, 1984) as when corporations establish a fee for a product or service. That product or service must be developed or defined in specific measurable terminology. In dadition, data for product service pricing must be accumulated, including sales/use projections, usage trends, direct and indirect costs, and other economic considerations. Data should be produced regarding time spent per tasks, time spent per case, relative importance of the

task to patient care, a combination of time and value to give a weighting factor, materials needed to perform a task, time in direct patient consultation and preparation time necessary to provide consultation. Because dietitians are also interested in obtaining reimbursement from third party payers, studies need to be done to statistically define the benefits, and cost effectiveness of nutritional support (Cerra, 1985).

Criteria For Pricing Structure

In order to establish guidelines, the consulting dietitian must decide what criteria will be used for the pricing structure. Size (both number of employees and yearly revenue), number of clients, years in operation, standards of quality, client perception of quality, type of client, number of clients and competition are some of the criteria that must be considered.

Consumer Involvement in Selecting A Consulting Dietitian

Health values, attitudes, and behavior (Fitz, Posner and Baldyoa, 1983) influence the population's attitudes toward nutrition services and care. They also influence the consumer involvement in decision making policies in health care, as well as the willingness of the consumer to pay for these services. Whether consumers seek dietitians for services is partly determined by the types of competition dietitians have, the consumer's ability to pay for these services, and the amount of knowledge they have about the quality and range of services from which they choose.

Shrinking Health Services in the Community

Budget deficits and inflationary medical costs confront the consulting dietitians searching for funds to finance nutritional services from federal, state and local revenue. Competition for the shrinking resources in both public and private sectors has been created. Local, state and federal program providing support for nutrition services is limited and little money is available for nutritional education (Egan and Kaufman, 1985). State and local health departments are responsible for the appropriation of these funds and these regulatory agencies should be the target of marketing strategies by the consulting dietition.

Medicare Coverage for Outpatients

Consulting dietitians in private practice should be cognizant that Medicare will provide coverage for nutritional services in certain outpatient settings. Nutrition care services are available to patients in skilled nursing facilities to the extent that such services are appropriate and available for hospital inpatients. In addition, Medicare provides coverage and reimbursement for outpatient clinic and home health provision of nutrition care services. Such services are covered in a clinic visit (or a visit to a physician's office) if billed by the physician as a physician service.

Aspects of Dietary Service Cost

Consulting dietitians know that cost-containment pressures create a necessity to justify dietetic service (Mason et al., 1982) at many levels, from local administrators to state and federal policy

makers. When resources are scarce as they are now, decisions will be made in favor of those services when can best benefit society. Practitioners must have an affirmative answer to the question "Which dietetic services are worth the cost?", if they expect to continue to participate in the health care process. Positive data from cost/benefit research conceivable provides tools for advocacy with third-party payers in both public and private sectors and for marketing professional services.

Summary

In summary, what research that has been done clearly shows that there is an important relationship between the concept of service and the role of the dietitian in the service sector, the pricing strategy in the service sector, the variables affecting the pricing structure and the pricing strategy for nutritional services. Dietitians in private practice will need information on pricing strategies for the service sector to determine their individual pricing structure. This research provides information on technology, structure, environment, clients perception of quality, number of years operating, number of employees, number of clients, revenue, standards of quality, and overhead and direct costs. In addition, this research may help to establish guidelines for providing cost/benefit data to health insurance providers as well as the individual client.

Chapter Three

Purpose

The purpose of this study is to determine those variables which have been identified as most influential in establishing fees charged by consulting dietitians and to establish guidelines on the price structuring of services offered in a private independent practice by a consulting dietitian.

Objectives

The objectives are:

1. To measure the differences in price structuring of consulting dietitians who have only private clients, those who have only contract clients and those who have both, private and contract clients.
2. To determine if the length of time in private practice affects the price structuring of the organization.
3. To identify the variables associated with size (as measured by number of employees, part time and full time, nonprofessional or professional, and the annual gross revenue as well as the influence of third party reimbursement and client perception of price/value relationships),

on the pricing structure.

4. To determine if the price structuring of services offered by the consulting dietitian is affected by the standards of quality, as defined by The American Dietetic Association, and which provide guidelines to how those services should be performed.

5. To discover the association of price structure and the following factors: route to The American Dietetic Association membership, level of degree held, previous experiences, environment (size of city or town--principal occupation), subtasks of services performed (initial contact--preparation--presentation--records--evaluation), type of employment (full-time--part-time), number of hours worked, type of private client, type of contract client, number of private clients, and number of contract clients.

Research Question

The following research question has been formulated for the purpose of this study. Do the following independent variables have a substantial impact upon the pricing of nutritional services?

Demographic characteristics
- Population
- Industry

Type of client
- Private Client
- Contract Client

Size of organization
- Number of employees
- Annual revenue

Time allotted to practice
- Full-time
- Part-time
- Number of years

Quality assurance
- Standards of practice
- Standards of quality

Unit product
- Subtasks of counseling services

Professional information
- Route to The American Dietetic Association membership
- Level of degree
- Previous work experience

Unit of Analysis

Dependent Variables

The research objectives will be utilized to investigate the impact of the independent variables on the pricing structure of consulting dietitians in independent private practice who have only private clients; those who have only contract clients; and those who have both private and contract clients. The dependent variable will be measured by utilizing the following: the hourly rate as a percentage of revenue and the fee contract for specific services as a percentage of revenue. Justification of this measure is found in Lange (1984) and Monroe (1979).

Independent Variables

The independent variables (A - P) likely to have influence upon the pricing structure are: (The numbers attached to each subcategory

of the general outline correspond to the number of the question on the questionnaire instrument).

A. Education and previous work experience

1. Method by which membership into The American Dietetic Association was obtained.

2. Level of academic degree held.

3. Previous work experience.

8. Number of years worked as a consulting dietitian. [The influence of the number of years a business had been operating on revenue was identified by Van de Vin, Hudson and Shcroder (1984)].

B. Demographic characteristics

4. Population of city/town where consulting.

5. Principal industry of city/town.

C. Type of private practice

6. Part time or full time consulting dietitian.

7. Average number of hours worked per day and per week.

D. Size of private practice as to number of employees

9. Number of nonprofessional and professional employees (full-time and part-time) working in organization. [Importance examined by Van de Vin, Hudson and Shcroder, (1984)].

E. Size of private practice as to annual revenue

10. Annual gross revenue for 1985 and 1986. [The influence of revenue on price was discussed by Marcus (1985) and Hall and Weiss (1985)].

16. Percent of revenue obtained from private clients.

27. Percent of revenue obtained from contract clients.

F. Type of client for whom service is provided

11. Private client.
[One who is the primary consumer and is responsible for payment of fee for nutritional counseling as defined by Gersunj and Rosengren (1973].

24. Contract client.
[Health care facilities, educational settings, community service agencies, business and industries, physician groups, individual and group residencies, are a few of the organizations employing consulting dietitians as listed by The American Dietetic Association (1984)].

G. Number of clients

12. Private clients.

26. Contract clients.
[Van de Vin, Hudson and Schroder (1984) investigated the importance of the number clients to revenue].

H. Type of private client.

13. Physician referred.

14. Walk-ins.

15. Seen in physician's office.

I. Is fee based on flat hourly rate

17. Private clients.

28. Contract clients.
[Importance of successful pricing strategies were discussed by Monroe, (1979) and Rapp, (1984)].

J. Is fee based on individual services

18. Private clients.

29. Contract clients.

K. Charge per hour to clients

19. Private clients.

30. Contract clients.

L. Third party reimbursement

20. Is third party reimbursement received? [Dietitians belonging to the Consulting Nutritional Specialty Group reported that reimbursement could be obtained from private insurance companies for nutritional services relating to diabetes, heart disease, hypertension, allergies, gastrointestional disease and gallbladder disease (Cross, 1981)].

21. Percent of revenue that is received from third party reimbursement.

M. Percentage of time used to complete each subtask for services performed for private and contract clients.

22. Percentage of time used to complete each subtask for services performed for private clients.
[These subtasks have been identified by Whylie and Singer (1975) and The American Dietetic Association (1984)].

23. Importance of subtasks in determining the fee for private clients.

31. Percentage of time spent to complete each subtask for services provided for contract clients.

32. Importance of subtasks in determining the fee for contract clients.

N. Type of contract client

25. Type of institution/group for whom service is provided.

O. Factors influencing the setting of fee

33. Services performed by the institution.
Annual revenue of institution.
Prevailing rate in area.
Personal worth.
Services provided to the institution.
[Discussed by Sibson (1971)].

34. Actual counseling time.
Experience of the dietitian.
Education of the dietitian.
Number of years in consulting.
Importance of the service provided to the client.
[Identified by Chase (1978) and Sibson (1971)].

35. Formal policy for quality standards.
Continuous evaluation of values and goals. Collaboration and communication with other professionals.
Application of research principles.
Professional goals.
[Defined by The American Dietetic Association (1982) and (1985)].

36. Criteria the dietitian uses to judge effectiveness.

P. What the dietitian perceives as the highest fee charged could be based on price/value relationship perception of client.

37. (A) For private client.
(B) For contract client.
[Consumer behavior as to how price/value relationship is perceived has been investigated by Obermiller and Wheatley (1984, 1985) and Dodds and Monroe (1985)].

Methodology

Methodology (leedy, 1974) is merely an operational framework within which facts are placed so that their meaning may be seen more clearly. The research methodology must always consider the parameters and nature of the data. The data of this research will be treated as observations which are quantified and must be evaluated in terms of appropriate statistical procedures. The principal research approach will be the analytical survey method which is appropriate for data that are quantitative in nature and need statistical assistance to extract their meaning.

In the analytical survey one is concerned primarily with the problem of estimation and prediction. The statistical methods employed are those techniques that are most often referred to as belonging to the domain of inferential statistics. The essential nature of quantitative data is that they are measurable. The measurement of data is expressed by means of scales of value. The ordinal scale indicating a measurement of the degree of difference in the categorical classifications will be used for this survey.

Statistics

Inferential statistics (Daniel and Terrell, 1983) deals with the concepts and techniques involved in reaching conclusions about a body of data when we examine only part of the data. In analyzing data gathered by a business operation, we want to know something about the relationship between two variables. We can examine the nature of the relationships between variables using regression analysis and correlation analysis. Regression analysis helps one determine the probable form of the relationship between variables. The objective of this method of analysis is usually to predict or estimate the value of one variable corresponding to a given value of another variable. Correlation analysis is concerned with measuring the strength of the relationship between variables. When we compute measures of correlation from a set of bivariate data, our interest focuses on the degree of correlation between the variables.

Instrument

A questionnaire (appendix A) was used to gather data from

dietitians who are participating in a private, independent consulting practice. The data will enable quantitative observations by correlation coefficients and multiple regression analysis to be made on variables pertaining to existing guidelines for pricing structures.

The first section of the questionnaire determined the route to The American Dietetic Association membership, the level of academic degree held, previous work experiences, and demographic characteristics. It investigated the size of the private practice by questions related to the number of hours worked, number of employees, revenue, length of time the practice has been in operation and third party reimbursement.

The second section of the questionnaire is concerned with private clients. The percentage of total clients, type (physician referred or walk-in), private clients seen in physician's offices and revenue from private clients are addressed. Hourly charges and the basis of the charge are investigated, ie., flat or hourly charge. The importance to the fee of subtasks (initial contact, preparation, presentation, record, evaluation) are determined.

The third section of the questionnaire is related to contract clients. The types of contract clients (nursing homes, renal dialysis centers, physicians' groups, athletic groups, health maintenance organizations, ambulatory care organizations, college/ universities, restaurants, home care organizations, community health centers, industries, newspapers/magazines, television/radio), revenue and percentage of total revenue are determined. Hourly charges and what the charge was based on will be investigated. The importance to the fee of subtasks (initial contact, preparation, presentation,

record, evaluation) are explored.

The fourth section of the questionnaire contains questions pertaining to service attributes, dimensions of nutritional counseling, standards of quality and standards of practice.

Data Gathering

The data in this study were gathered through the distribution of a questionnaire to those registered dietitians and members of The American Dietetic Association belonging to the Consulting Nutritionists Practice Group. Three hundred and eighty-nine questionnaires were mailed. A total of 159 responses were received before the deadline date of March 20, 1987. The respondents for the three poplulation categories were 99 consulting dietitians who had both private and contract clients, 25 consulting dietitians who had only private clients and 16 consulting dietitians who had only contract clients. The questionnaire provided a means for measuring pricing structure of services offered by those dietitians in private practice based on length of time in private practice, number of employees, annual revenue and other factors contributing to decisions affecting price structure.

The subjects selected were sent an initial letter (appendix B) explaining the purpose of the questionnaire and requesting their help. This process was repeated until one hundred and forty subjects had returned an acceptable questionnaire. Each questionnaire was assigned a code number. If the subject failed to return the questionnaire, as determined by the code number, a follow-up letter (appendix C) was sent. If the questionnaire was not returned after the second mailing,

a third mailing was sent which included the follow-up letter, a copy of the questionnaire and a self-addressed stamped envelope. If there was no response from the subject following the third mailing, a telephone call was made to those subjects who failed to respond.

Questions 1 through 18, 20 through 22, 24 through 31 and questions 36 and 37 were broken down into categories and assigned code numbers giving an ordinal rank indicating degree of difference. Optional responses could be given to some questions. In such cases, those responses were assigned a code number of zero or were omitted if the response was low. A five-point Lickert-type scale (1 = very important, 2 = often important, 3 = important, 4 = seldom important, 5 = never important) was used to rate the responses to questions 23, 32, 33, 34, and 35 which provided an ordinal measurement scale.

A pilot study was conducted to validate the questionnaire. Twenty-five members of the Virginia Consulting Nutritionists Practice Group were randomly selected from the 1985 Directory of the Consulting Dietitians. The respondents were asked to complete and critique the questionnaire. Eighteen questionnaires were returned. The suggestions and changes were incorporated into the questionnaire and the revised questionnaire was distributed a second time to the members of the same group of dietitians living in the Tidewater area.

A table of random numbers and the membership list for 1987 was used in randomly selecting members for participation in the study. A sample size of one hundred and forty consulting dietitians was obtained. The sample size was determined by using the formula to determine the

sample size with the confidence coefficient being 95% with the z value being 1.96, the standard deviation being .5, and the confidence interval being 1.0 and p = .1.

Chapter Four

RESULTS AND DISCUSSION

Purpose

The purpose of this chapter is to present detailed results of the survey data. These results are divided into three categories. The first examines the survey data from consulting dietitians who have private and contract clientele, the second examines the survey data from consulting dietitians who provide services to only private clients and the third examines the survey data from consulting dietitians who offer their services to only contract clients.

Each category is organized into sections. The first section examines frequency, and where applicable, means and standard deviation data. The second section presents correlation data in regard to the research question and the third section discusses the regression models in relation to the research question.

The three sections have been further divided into subsections. Subsection 1 studies the demographic information. Subsection 2 examines the type of client. Subsection 3 inspects the size of the organization. Subsection 4 examines the time allotted to the private practice. Subsection 5 evaluates the impact of quality assurance. Subsection 6 discusses the importance of unit product to fees. Subsection 7 studies the professional information.

The questions 23, 32, 33, 34 and 35 were measured on the

following scale:

1	2	3	4	5
very important	often important	important	seldom important	never important

The frequencies represent the number of responses for each of the five points on the scale.

Response Rate

Three hundred and eighty-nine questionnaires were mailed to consulting dietitians who were engaged in a private practice. A total of 159 responses (40.8%) were received before the deadline date of March 20, 1987. Of these, 140 (35.9%) were randomly chosen for the study. The respondents for the three population categories were 99 (71.4%) consulting dietitians who had both private and contract clients, 25 (16.4%) consulting dietitians who had only private clients, and 16 (10.7%) consulting dietitians who had only contract clients. After an initial inspection of the returned questionnaires, it was found that out of 159 responses only 7 (4.4%) had answered parts B and C of question 25 properly. The respondents were asked to rank those organizations with whom they had contracts from the largest amount of revenue to the least amount of revenue received in 1985 (B) and 1986 (C). Due to the low response rate of parts B and C, they were eliminated. Those questionnaires with more than 8 (5%) of the total responses omitted were discarded.

Profile of Nonresponses

To ensure that the study was not biased by the nonresponse of consulting dietitians representing those that had only private clients

and consulting dietitians who had only contract clients, a study of nonrespondents was conducted. Forty nonrespondents were randomly selected, and were contacted by telephone and asked to participate in the survey by answering the questionnaire. A copy of the questionnaire, along with a stamped, self-addressed envelope was mailed to each of the nonrespondents. Of the forty nonrespondents contacted, seventeen (42.5%) returned the questionnaire. Thirteen (76.4%) were consulting dietitians with only private clients and four (23.5%) were those consulting dietitians whose practice consisted of only contract clients. The profile of the nonrespondents conformed to that of the respondents. It was determined from this that the study was not biased by nonresponse from the two groups of consulting dietitians.

Demographics

Population and Industry

The population of the locations where consulting dietitians operated their private practices were widely distributed. The majority of all three categories, consulting dietitians with private and contract clients (29%), consulting dietitians with only private clients (36%), and consulting dietitians with only contract clients (31%), were in a population between 10,000 and 69,999. Table 4.1 shows the complete distribution.

The percent of respondents for the principal industry of city/town was manufacturing 42%, for those with both private contract clients; 56% manufacturing for those with private clients; and for both manufacturing and services, 38%, for those with only contract clients.

In this category it was found the responses indicated that light manufacturing and heavy manufacturing could be combined in a category which became manufacturing. Armed services was combined with government to become the fourth category. All responses for the category, other, cited service industries such as medical centers, tourism or insurance companies which became the fifth category. Table 4.2 presents the complete results.

Type of Client

Private Client

The percent values of the average number of private clients seen in one year were widely distributed in the category of private and contract clients with 20% less than 10 and 30% over 100 clients. The average number of private clients for consulting dietitians with only private clients were also widely distributed with 16% less than 10 and 30% over 100 cleints. The complete results are shown in Table 4.3.

The largest number of clients that were physician referred to the consulting dietitians with private and contract clients (Table 4.4) was 60% having over 50% of the clients. The consulting dietitian with only private clients had the largest percent value with 87% having over 50% of their clients being referred.

The percent values of the number of nonreferred clients of consulting dietitians with private and contract clients was 65% with less than 9% and 8% with over 50%. The percent values of dietitians with nonreferred private clients were also unevenly distributed

with 76% having less than 9% and 8% having over 50%. Table 4.5 presents the complete results.

The percent values of private clients seen in a physician's office (Table 4.6) were widely distributed with consulting dietitians with private and contract clients having 57% seeing less than 9% and 60% over 50%. The consulting dietitians with private clients had 56% seeing less than 9% and 36% seeing over 50% in the physicians' offices.

Contract Clients

The consulting dietitians with private and contract clients surveyed had contracts with eleven of the organizations listed in the questionnaire. The percentage values had a broad dispersement with 10% being contracted by restaurants and 56% being contracted by physicians' groups.

The percentage values of organizations to which consulting dietitians with only contract clients provided services had a broad distribution with 6% having contracts with colleges/universities, HMO's, and newspapers/magazines, and 75% having contracts with nursing homes/small hospitals. Table 4.7 presents the complete results.

The percentage values of the average number of contract clients of the consulting dietitians with private and contract clients was also widely distributed with 70% having less than 10 and 12% having over 100. The percent values of the average number of contract clients for consulting dietitians with only contract clients were unevenly distributed with 87% having less than 10 clients and 7% having over 100 clients. Table 4.8 shows the results.

Size of Organization

Number of Employees

The percentage values of the number of part-time nonprofessional employees (Table 4.9) of the consulting dietitians with private and contract clients were widely distributed with 65% having no employees and 1% having over 5. The percentage values of the number of part-time nonprofessional employees of dietitians with only private clients were also widely distributed 64% having no employees and 1% having over 5 employees. The percentage values of the number of part-time employees of consulting dietitians with only contract clients were unevenly distributed with 88% having no employees and 13% employing 1.

The percentage values of the number of full-time employees with those consulting dietitians with private and contract clients had a wide disbursement with 92% having no employees and 2% having over 5. Consulting dietitians who have only private clients had 92% with no employees and 8% with 2. The third category, consulting dietitians with only contract clients did not have any full-time nonprofessional employees.

Predictably, the percentage values of the number of part-time professional employees of consulting dietitians with private and contract clients were widely distributed with 74% employing none and 5% employing 5. The consulting dietitians with only private clients had 73% that had no employees and 4% that had 4. The percentage values of the number of part-time professionals employed by the consulting dietitians with contract clients only were unevenly distributed with 88% employing none and 6% employing 2.

Consulting dietitians with private and contract clients had a vast spread of the percentage values of full-time professional employees with 88% having no employees and 4% having over 5. The percent values of the number of full-time professional employees of consulting dietitians with private clients were 96% with no employees and 4% over 5. Again, the consulting dietitian with only contract clients had no full-time professional employees. Table 4.10 presents the results.

Annual Revenue

The percentage values of the annual revenue received in 1985 by consulting dietitian with private and contract clients had a broad distribution with 31% receiving less than $4,999 and 31% and 2% receiving over $65,000. The percentage values of the annual revenue received in 1985 by consulting dietitians with private clients had a distribution of 9% receiving between $15,500 and $20,499 and 57% receiving less than $4,999. The percentage values of the annual revenue received by consulting dietitians with contract clients had a broad dispersion with 6% receiving between $25,500 and $30,499 and 31% receiving less than $4,999. See Table 4.11 for the complete results.

Similarily, the percent values of the annual revenue received in 1986 by the consulting dietitians with both private and contract clients were widely distributed with 20% receiving less than $4,999 and 5% receiving over $65,000. The percentage values of the annual revenue for 1986 of the consulting dietitians with private clients had a broad distribution with 52% receiving less than $4,999 and 4% receiving between $25,500 and $30,499. The percentage values of the

annual revenue received in 1986 of consulting dietitians with only contract clients had a wide distribution with 6% receiving between $30,500 and $35,499 and 31% receiving less than $4,999. Table 4.12 presents the complete results.

Charge Per Hour to Private Clients

The percentage values of the charge per hour to private clients by consulting dietitians with private and contract clients were widely dispersed with the majority, 25%, charging between $30 and $39 and 2% charging over $90. Table 4.13 shows the complete results. The percent values of the charge per hour by consulting dietitians with private clients were widely dispersed with 1% charging between $50 and $59 and 48% charging between $30 and $39.

Total Revenue From Private Clients

The percentage values of the firms' total revenue received from private clients (Table 4.14) of consulting dietitians with private and contract clients had a wide distribution with 32% receiving less than 10% and 20% receiving between 76% and 100%. The percentage values of the total revenue received by consulting dietitians with only private clients had a wide distribution with 16% receiving less than 10% and 60% receiving between 76% and 100%. The correct response to this question by those respondents that had only private clients should have been 100%. Due to the inaccurate responses obtained, this question was omitted from the multiple regression analysis and the correlation coefficient.

Basis for Charge Per Hour to Private Clients

The percentage values of the flat hourly rate charge and the varying charges for individualized services to private clients as rated by the respondents with private and contract clients was 85% charging a flat hourly fee and 15% not charging a flat hourly rate and, as could be expected, 15% charging a varying fee for individualized services. Table 4.15 shows the complete results. The percentage values of the flat hourly rate and the varying charges for individual services as basis for the charge per hour by dietitians with only private clients were unevenly distributed with 76% charging a flat hourly rate and 24% not charging a flat hourly rate. Respondents charging varying fees for individualized services were 76% and 24% not charging varying fees. Due to the large response rate for the flat hourly rate, this question was omitted from the multiple regression analysis and the correlation coefficient.

Third Party Payment

Forty-seven percent of the respondents received third party payment and fifty-three percent did not receive third party payment of consulting dietitians with private and contract clients. The percent values of revenue received from third party payment were widely distributed with 74% receiving less than 9%, and 7% receiving over 50%. The respondents with only private clients had 39% who received third party payment and 61% who did not receive it. The percent values of revenue obtained from third party payment had a wide distribution with 64% receiving less than 9% and 4% receiving over 50%. The complete results may be seen in Table 4.16.

Charge Per Hour to Contract Clients

The percent values of the charge per hour to contract clients by consulting dietitians with private and contract clients had a majority of 45% receiving between $20 and $29. The percentage values of the charge per hour to contract percentage values of the charge per hour to contract clients by dietitians who had only contract clients had a majority of 44% receiving between $20 and $29. The complete results are shown in Table 4.17.

Total Revenue From Contract Clients

The largest percent values of the firms' total revenue received from contract clients by consulting dietitians with both private and contract clients was 18% receiving between 20% and 29%. The largest percent value of the firms' total revenue received from contract clients by consulting dietitians with only contract clients was 80% receiving over 50% of the total revenue from contract clients. The percent of revenue obtained from contract clients, if they are the only clients should be 100%. Due to the inaccurate responses obtained, this question was omitted from the multiple regression analysis and the correlation coefficient. Table 4.18 presents the complete results.

Basis of Charge Per Hour to Contract Clients

The percent values of the flat hourly rate charge and the fee based on services charged to contract clients by respondents with private and contract clients was unevenly distributed. Eighty per cent of the respondents charged a flat hourly fee and 20% did not charge a flat hourly fee. The percentage values of respondents who charged by the service provided were 25% and 75% for those who did

not charge by the service provided. The difference between the two percentage values could be due to the fact that many consulting dietitians charge a facility a flat hourly rate; for example, $25 for routine services, such as charting, but would charge a fee for performing services of a special nature, eg., $150 a week for a 3 week menu cycle.

Consulting dietitians with only contract clients who charged clients a flat hourly rate were 88%, and those who did not charge a flat hourly rate were 13%. As could be expected, the percentage values of those who charge by the service provided were 13% and those who did not charge by the service provided were 88%. Due to the large response rate for the flat hourly fee, this variable was omitted from further analysis. Table 4.19 shows the complete results.

Relative Importance of Factors in Setting Fees

The consulting dietitians with private and contract clients rated the importance of the following factors (Table 4.20), the services performed by the institution/group/organization; the annual revenue of the institution/group/organization; the prevailing rates in the area; the respondents' personal worth; and the services provided for the institution/group/organization. The factors, personal worth and services provided for the institution/group/organization were considered the most important with the percentage value of personal worth 64%, and a mean of 1.52 and the percentage value of service provided 64%, and a mean of 1.58.

The consulting dietitians with private clients rated the prevailing rates in the area and the respondents' personal worth as

the most important with the percentage values of 57% for both factors and a mean of 1.82 for the prevailing rate and a mean of 1.52 for the personal worth. Table 4.21 shows the complete results.

Consulting dietitians with only contract clients rated the services provided for the institution/group/organization as the most important with a percentage value of 44% and a mean of 2.00. See Table 4.22 for the complete results.

Dimensions of Nutritional Counseling

The dimensions of nutritional counseling as listed on the questionnaire were, the actual counseling time with the client, the experience and the education of the dietitian, the number of years the dietitian has been in counseling, and the importance of service to the client. The consulting dietitians with both private and contract clients rated the actual counseling time with the lcient as the most important with a percentage value of 76% and a mean of 1.36. Table 4.23 presents the complete results. The consulting dietitian with private clients (Table 4.24) also rated the actual counseling time spent with clients as the most important with a percent value of 74% and a mean of 1.57. The respondents with contract clients (Table 4.25) rated the actual time spent with the client also as the most important with a percentage value of 63% and a mean of 1.75.

Client Perception of Price/Value Relationships

The respondents' perception of the highest fee a client would pay based on the clients' perception of price/value relationship of prevention or wellness counseling as rated by counsulting dietitians

who had both private and contract clients had a majority of 27% choosing $50 with a mean of $48 and a standard deviation of 31.26. The consulting dietitians with only private clients perception of the highest fee a client will pay based on the client's perception of the price/value relationship of prevention or wellness counseling had a majority of 16% choosing $50 with a mean of $45 and a standard deviation of 21.16. The highest fee a client would pay, based on the consulting dietitians with contract clients percentions of their client's perception of price/value relationship of prevention or wellness counseling, was estimated as $0 by the majority (25%), with a mean of 29% and a standard deviation of 20.12. Table 4.26 presents the complete results.

The consulting dietitians with private and contract clients perception of the highest fee that would be paid for computerized nutritional assessment for residents/patients/clients in a contract service was estimated as $25 by the majority (18%) with a mean of $33 and a standard deviation of 28.28. The majority of the respondents with private clients only perception of the highest fee a client would pay for computerized nutritional assessments for residents/patients/clients in a contract service estimated that clients by a majority of 32% with a mean of $26 and a standard deviation of 28.7. The perception of those consulting dietitians with only contract clients of the highest fee a client would pay for a computerized nutritional assessment for a client in a contract service with a majority of 31%, with a mean of $23 and a standard deviation of 21.44. Table 4.27 presents the complete results.

Time Alloted to Practice

Type of Employment and Hours Worked

The percentage value for consulting dietitians with private and contract clients with 27% working full-time and 73% working part-time. The percentage values of the number of hours worked per day had a wide distribution with 14% working between 1 and 2 hours and 54% working between 6 and 8 hours. The percent values of the number of hours worked per week were 12% working between 1 and 4 hours and 17% working over 40 hours.

The percentage value for consulting dietitians with private clients who worked part-time was 88% and full-time 12%. The percentage values for the number of hours worked per day were 38% between 1 and 4 hours and 33% between 6 and 8 hours. The percent values of the number of hours worked per week had a distribution of 12% working between 1 and 4 hours and 12% working over 40 hours.

The percentage value for consulting dietitians with contract clients who worked part-time was 88% and those who worked full-time were 13%. The percentage values for the number of hours worked per day were 36% working between 1 and 4 hours and 43% working between 6 and 8 hours. The percentage values of the number of hours worked per week had a distribution of 44% working between 5 and 9 hours and 13% working over 40 hours. Table 4.28 shows the complete results.

Quality Assurance

Standards of Practice

Of the standards of practice which are, a formal policy for

quality standards, a continuing evaluation of values, goals, and processes, collaboration and communication with other professionals, application of research principles, and professional growth of knowledge and skills (Table 4.29), the consulting dietitians with private and contract clients rated as the most important the professional growth of knowledge and skills with a percentage value of 62% and a mean of 1.52. The consulting dietitians with private clients rated as the most important the professional growth to knowledge and skills with a percentage value of 83% and a mean of 1.39. Table 4.30 shows the complete results. Those consulting dietitians with contract clients also rated the professional growth knowledge and skills and the most important with a percent value of 63% and a mean of 1.75. Table 4.31 present the complete results.

Criteria for Judging Effectiveness

The criteria the consulting dietitian used to judge their effectiveness were as follows: follow up; client goals are met; objective measurement; behavior modification and client ability to verbalize rationale; and client referral (Table 4.32). The consulting dietitians with private and contract clients considered behavior modification as the most important with a percent value of 74%. Those with private clients considered behavior modification the most important also with a percent value of 57% and those with contract clients considered the clients behavior modification as the most important criteria with a percentage value of 63%.

Unit Product of Counseling Services

Time Spent in Performing Subtasks for Private Clients

Initial contact--the percent of time spent in performing this subtask ranged from 0 to 75 percent with a mean of 26% and a standard deviation of 15 as rated by consulting dietitians with private and contract clients. The largest number (24%) spent 20% of their time on initial contacts. Consulting dietitians with private clients had a majority of 17% spending 10%, 20% and 30% of their time with a mean of 25% and a standard deviation of 15.

Preparation--the percent of time spent on this subtask ranged from 0% to 40% with a mean of 13% and a standard deviation of 7. The majority (37%) spent 10% of their time on preparation as rated by consulting dietitian with private and contract clients. The percent of time spent on preparation for consulting dietitians with private clients ranged from 5% to 40%, with a mean of 15% and a standard deviation of 8 with the majority (39%) spending 10% of the time on preparation. Table 4.33 shows the complete results for the initial contact and preparation.

Presentation--time spent in doing the actual presentation ranged from 0% to 80% with a mean of 34% and a standard deviation of 18% and the majority (21%) spending 20% as rated by the consulting dietitians with private and contract clients. The time spent in preparation by those dietitians with private clients ranged from 10% to 75% with a mean of 37% and a standard deviation of 19 and the majority (26%) spending 20% of their time on this subtask.

Records--time spent on record keeping ranged from 1% to 40%

with a mean of 17% and a standard deviation of 15.25 and the majority (48%) spending 10% of their time as rated by consulting dietitians with private and contract clients. The time spent in record keeping by dietitian with private clients ranged from 5% to 40% with a mean of 5% and a standard deviation of 7, with the majority (48%) spending 10% on this subtask. Table 4.34 presents the complete results for presentation and records.

Evaluation--consulting dietitians with private and contract clients' time spent on evaluation ranged from 0% to 75% with a mean of 14% and a standard deviation of 11. The majority (40%) spent 10% of their time evaluating clients as rated by consulting dietitians with private and contract clients. The time spent in evaluation ranged from 5% to 30% with a mean of 11% and a standard deviation of 6 as rated by consulting dietitians with private clients and the majority (48%) spending 10% of their time on evaluation. Table 4.35 present the complete results.

Other--this variable was omitted from the research due to the low response rate.

Importance of Subtasks for Private Clients

Of the five subtasks (Table 4.36) which are; initial contact, preparation, presentation, record keeping, and evaluation; presentation was rated by the consulting dietitians with private and contract clients as the most important with a percent value of 72% and a mean of 1.48. The subtasks (Table 4.37) rated by the consulting dietitians with private clients as being the most important was also presentation with a percentage value of 61% and a mean of 1.70.

Time Spent Performing Subtasks for Contract Clients

Initial contact--the percentage of time spent in performing this subtask by consulting dietitians who had both private and contract clients ranged from 0% to 60% with a mean of 19% and a standard deviation of 14, with a majority (22%) spending 10% of their time doing this subtask.

This subtask, as rated by consulting dietitians with contract clients ranged from 5% to 60% with a mean of 24% and a standard deviation of 14.08, with the majority (38%) spending 10% of their time on it.

Preparation--consulting dieitians with private and contract clients spent time that ranged from 0% to 75% on this subtask with a mean of 20% and a standard deviation of 15. The majority (25%) spent 10% of their time on it.

The percent of time spent on this subtask by consulting dietitians with contract clients ranged from 5% to 40% with a mean of 15% and a standard deviation of 8.42. The majority (31%) also spent 10% of their time on it. Table 4.38 presents the complete results of the initial contact and preparation.

Presentation--the time spent in presentation ranged from 0% to 80% with a mean of 30% and a standard deviation of 17 as rated by the consulting dietitian who had both private and contract clients. The largest percent (20%) spent 20% of their time on it.

The time spent on presentation by consulting dietitians with contract clients ranged from 0% to 48% with a mean of 35% and a standard deviation of 19, with the majority (25%) spending 10% of

their time on it.

Records--consulting dietitians with private and contract clients spent time in record keeping that ranged from 0% to 80% with a 17% mean and a 15 standard deviation. The majority (36%) spent 10% of their time on it, while the time spent in record keeping by consulting dietitians with contract clients ranged from 5% to 50% with a mean of 5% and a standard deviation of 7.44, the majority (19%) spent 50% of their time on this subtasks. Table 4.39 shows the complete results for presentation and record keeping.

Evaluation--The time spent on evaluation by consulting dietitians with private and contract clients ranged from 0% to 75% with a mean of 14% and a standard deviation of 11. The majority of the respondents (41%) spent 10% of their time on it.

Consulting dietitians with contract clients spent time in evaluation that ranged from 5% to 30% with a mean of 11% and a standard deviation of 6, with a majority (20%) spending 50% of their time on it. Table 4.40 presents the complete results.

Other--this variable was omitted from the research due to the low response rate.

Importance of Subtasks

The five subtasks are, initial contact, preparation, presentation, record keeping, and evaluation. The consulting dietitians with private and contract clients rated presentation as very important with a percentage value of 72% and a mean of 1.43 (Table 4.41). The consulting dietitians with contract clients rated

presentation as very important with a percentage value of 69% and a mean of 1.56. Table 4.42 shows the complete results.

Professional Information

Route to Membership in The American Dietetic Association

The percentage values of the method by which membership in The American Dietetic Association was obtained by respondents who had private and contract clients (Table 4.43) were broadly distributed with 9% obtaining membership by the three year experience and 53% obtaining membership by a BS degree and intership. Consulting dietitians with only private clients had a widely distributed range of percent values with 9% obtaining membership through the three year experience and 52% obtaining membership by a BS degree and intership. The percent values of the method by which membership was obtained by consulting dietitians with only contract clients was unevenly distributed with 6% obtaining membership by the coordinated undergraduate program and by the three year experience, and 69% obtaining membership by a BS degree and internship. Table 4.43 shows the complete results.

Level of Academic Degree

The percent values of level of the academic degree held by consulting dietitians with private and contract clients were distributed widely with 50% having a Masters and 5% having a Doctorate. The percentage values of level of the academic degree held by consulting dietitians with only private clients had a broad distribution with 9% having a Doctorate and 52% having a BS. The level of academic degrees

held by consulting dietitians with contract clients only were unevenly distributed with 69% having a BS and 6% having a Doctorate. Table 4.44 shows the complete results.

Previous Work Experience

The percent values of the previous work experience by consulting dietitians with private and contract clients had a broad distribution with 19% having worked in public health and 79% having previously been in clinical dietetics. The consulting dietitians with only private clients had an uneven distribution with 13% having been in public health and 91% having worked as clinical dietitians. The percentage values of consulting dietitians with only contract clients were widely distributed with 6% having been in public health and 69% having been in administrative dietetics. Table 4.45 presents the complete results. For this variable it was found that the majority of respondents who had checked the category "other" had listed public health as their previous occupation, therefore, public health became the fifth occupation.

Number of Years Worked As a Consulting Dietitian

The percentage values of the number of years worked as a consulting dietitian by consulting dietitians with private and contract clients had a broad distribution with 3% being consulting dietitians for over 20 years, an 38% having been a consulting dietitian for less than 4 years. Consulting dietitians with only private clients had a broad distribution with 4% having been in counseling between 10 and 14 years and 57% having been in counseling less than 4 years. The percent values of the number of years worked by consulting

dietitians with only contract clients had a wide dispersion with 6% being a consultant for over 20 years and 38% being a consultant between 5 and 9 years. See Table 4.46 for the complete results.

Correlation Coefficients

Correlation analysis refers to the techniques used in measuring the closeness of the relationship between the independent and dependent variables (Shoa, 1976). Correlation coefficient values range from -1 tol. For this research study a coefficient was considered meaningful if the absolute value was .20 or greater, and which was statistically significant at .05 probability level. After the data had been adjusted, the variables were intercorrelated using the program CORR (SAS, 1985). Values were obtained for the Pearson product-moment correlation, the Spearman correlation, the Kendall Tau B correlation and the Hoeffding dependence correlation. The results recorded will be for the Pearson product-moment correlation unless otherwise noted.

Private and Contract Clients

The independent variables, population and industry, were correlated with the charge per hour to private clients and the charge per hour to contract clients. The significant correlation was:

	Private	Contract
Population	.37	.29

The correlation values indicate that the population was a factor in the charge per hour to both private and contract clients with most respondents having a private practice in locations with populations between 10,000 and 69,000. This is illustrated in Table 4.47 which

shows the means, standard deviations, coefficient alphas and the intercorrelation. The principal industry of the location was not significant in determining the charge per hour for the nutritional service provided.

Type of Client

Private Client

Four variables were correlated with the charge per hour to both private and contract clients and intercorrelated. Of the four variables only one variable was considered to be statistically significant. It is:

	Private	Contract
Average number of Private Clients	.21	.23

The correlation values indicated that the percentage of average number of private clients was a factor in the charge per hour to private and contract clients with 29% of the respondents having over 100 private clients. The correlation values of the three variables, number of private clients seen in a physicians' office, percent of private clients that are not physician referred and the percent of private clients seen in physicians' office were not significant in determining the charge per hour for the nutritional service provided. Table 4.48 shows the mean, standard deviation, coefficient alphas and the intercorrelation.

Contract Clients

Organizations Contracted For Services

One variable, organizations to which services was provided,

was correlated with the charge per hour to both private and contract client. This variable was not significant in determining the charge per hour for the nutritional services provided.

Number of Contract Clients

One variable was correlated with the charge per hour to both private and contract clients. This variable, average number of contract clients was not significant in determining the charge per hour for nutritional services provided.

Size of Organization

Number of Employees

Three variables were correlated with the charge per hour for consulting dietitians with private and contract cleints. They were:

	Private	Contract
Number of Part-Time Nonprofessional	.28	.24
Number of Full-Time Nonprofessional	--	.25
Number of Part-Time Professional	.22	--

The correlation values indicated that the number of part-time employees was a factor in determining the charge to private and contract clients. The number of full-time nonprofessional employees was significant in determining the charge to contract clients and the number of part-time professional employees was significant in determining the charge to the private clients. Table 4.49 illustrates means, standard deviations, coefficient alphas and the intercorrelation.

Annual Revenue

1985 and 1986

Two variables were correlated with the charge per hour to private and contract clients and intercorrelated. They were:

	Private	Contract
1985	.24	--
1986	.24	--

The correlation values indicate that the annual revenue was significant in determining the charge per hour for nutritional services provided to private clients but not significant in determining the charge per hour for nutritional services provided to contract clients. Table 4.50 shows the means, standard deviation, coefficient alphas and intercorrelation.

Charge Per Hour

The two independent variables were correlated. The significant correlation is:

	Private	Contract
Fee for private clients	--	.42
Fee for contract clients	.42	--

The correlation values indicate that the variables, fee charged per hour to private clients and the fee charged per hour to contract clients, have substantial impact in determining the charge per hour for the nutrition services provided to private and contract clients. Table 4.51 presents the means, standard deviations, coefficient alphas and intercorrelation.

Total Revenue From Private Clients

The variable, percentage of total revenue received from private clients, was correlated with the charge per hour to both private and contract clients. The significant results were:

	Private	Contract
Percentage of total revenue	.21	.23

The correlation values indicate that the percentage of total revenue received from private clients was a factor in the charge per hour to contract clients with most respondents receiving less than 10% of their total revenue from private clients. The correlation values also indicate that the percentage of total revenue received from private clients had a significant impact on the charge to the private client. Table 4.52 shows the means, standard deviations, coefficient alphas and intercorrelation.

Third Party Payment

The variables, receiving third party payment and the percentage of revenue received from third party payment were correlated with the charge per hour to private and contract clients. Neither variable was significant in determining the charge per hour for the nutritional services provided.

Total Revenue From Contract Clients

The variable percentage of total revenue received from contract clients was correlated with the charge per hour to both private and contract clients. The variable was not significant in determining the charge per hour for the nutritional services provided.

Total Revenue From Contract Clients

The variable percentage of total revenue received from contract clients was correlated with the charge per hour to both private and contract clients. The variable had no significant impact in determining the charge per hour for nutritional services provided.

Importance of Factors in Setting Fees

Five variables were correlated with the charge per hour to private and contract clients. The correlation values of these five variables, service performed by the institution/group/organization, annual revenue of institution/group/organization, prevailing rates in the area, personal worth and services performed for the institution/group/organization, were not significant in determining the charge per hour for the nutritional services provided.

Dimensions of Nutritional Counseling

Five variables were correlated with the charge per hour to both private and contract clients. The correlation values indicate that the five variables, actual counseling time with client, experience of dietitian, education of dietitian, number of years in counseling and the importance of service to the client, were not significant in determining the charge per hour for the nutritional services provided.

Client Perception of Price/Value Relationship

Two variables, the client's perception of the price/value relationship for prevention or wellness counseling and the client's perception of the price/value relationship for computerized nutritional assessments for residents/patients/clients of a contract client, were

correlated with the charge per hour to private clients and contract clients. The correlation values indicate that the client's perception had no significance in determining the charge per hour for nutritional services provided.

Time Allotted to Practice

Type of Employment

Three variables were correlated with the charge per hour to private and contract clients. Two variables were significant in determining the charge per hour to private clients. They were:

	Private	Contract
Full-time or part-time employment	.24	--
Number of hours worked	.20	--

The correlation value of the number of hours worked per day indicated the variable was not significant in the charge per hour for nutritional counseling service provided. Table 4.53 presents the means, standard deviations, coefficient alphas and intercorrelation.

Quality Assurance

Standards of Practice

Five variables were correlated with the charge per hour to private and contract clients. The correlation values of the five variables, formal policy, continuing evaluation of values, goals and processes, collaboration and communication, application of research principles and professional growth of knowledge and skills, indicate the variables were not significant in determining the charge per hour for

nutritional services provided.

Criteria for Judging Effectiveness

The five main criteria the respondents listed as used for judging their effectiveness were correlated with the charge per hour to both private and contract clients. The correlation values of the five variables, follow up, client goals are met, objective measurement, eg., height, weight, laboratory values, behavior modification and client's ability to verbalize rationale and client referrals, indicate that the variables had no significant impact in determining the charge per hour for the nutritional services provided.

Unit Product of Counseling Services for Private Clients

Time Spent in Performing Subtasks

Five variables were correlated with the charge per hour to both private and contract clients. The correlation values of the five variables, initial contact, preparation, presentation, records and evaluation to the private clients indicated that there was no strong correlation between the variables and the charge per hour for the nutritional services provided.

Importance of Subtasks

Five variables were correlated with the charge per hour to both private and contract clients. The correlation values of the five variables, initial contact, preparation, presentation, records and evaluation to the private clients indicated that the variables were not significant in determining the charge per hour for the nutritional

services provided.

Unit Product of Counseling Services for Contract Clients

Time Spent in Performing Subtasks

Four variables were correlated with the charge per hour to both private and contract clients. They were:

	Private	Contract
Initial Contact	.21	--
Preparation	--	.27
Records	--	.23
Evaluation	--	.22

The correlation values indicate the strongest correlation is between preparation and the charge per hour to contract clients. There is a strong correlation between initial contact and the charge per hour to private clients and between records and evaluation and the charge per hour to contract clients. The correlation values of the variable, presentation, yielded no significant values. Table 4.54 presents the means, standard deviations, coefficient alphas and intercorrelation.

Importance of Subtasks

Five variables were correlated with the charge per hour to both private and contract clients. One correlation value indicated a strong correlation with the charge per hour to contract clients. It was:

	Private	Contract
Records	--	.34

The correlation values for the four variables, initial contact,

preparation, presentation and evaluation, indicate that the variables were not significant in determining the charge per hour to the private and contract clients. Table 4.55 shows the means, standard deviations, coefficient alphas and intercorrelation.

Professional Information

Four variables were correlated with the charge per hour to both private and contract clients. The correlation values of the four variables, method by which membership to The American Dietetic Association was obtained, level of academic degree held and previous experiences and the number of years in counseling, indicate the variables were not significant in determining the charge per hour for the nutritional counseling service provided.

Private Clients

Demographics

Population and Industry

Two variables were correlated with the charge per hour to private clients. The correlation values indicate that neither population nor industry were a significant factor in determing the charge per hour for the nutritional services provided.

Type of Client

Private Client

Four variables were correlated with the charge per hour to private clients. The correlation values of the four variables,

average number of private clients, clients who were physician referral, clients who were not physician referral and clients seen in physicians' offices, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Size of Organization

Number of Employees

Three variables were correlated with the charge per hour to private clients. The correlation values of the three variables, number of part-time nonprofessional employees, number of full-time nonprofessional employees and the number of part-time professional employees, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Annual Revenue

Two variables were correlated with the charge per hour to private clients. The correlation values of the two variables, total income in 1985 and total income in 1986, indicate that the variables had no strong correlation in determining the charge per hour for the nutritional service provided.

Total Revenue

The variable percentage of total revenue received from private clients was correlated with the charge per hour to private clients. The correlation yielded no significant values in determining the charge per hour for the nutritional services provided.

Third Party Payment

The variables were correlated with the charge per hour to private clients. The correlation values of two variables, receiving third party payment and the percentage of revenue received from third party reimbursement, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Factors Important in Setting Fees

Five variables were correlated with the charge per hour to private clients. The correlation values of the five variables, services performed by the institution/group/organization, annual revenue of the institution/group/organization, prevailing rates in area, personal worth and services provided to the institution/group/organization, indicate that the five variables were not significant in determining the charge per hour for the nutritional service provided.

Dimensions of Nutritional Counseling

Five variables were correlated with the charge per hour to private clients. The correlation values of the five variables, actual counseling time spent with the client, experience of the dietitian, education of the dietitian, number of years in counseling and the importance of the service to the client, indicate that the five variables were not significant in determining the charge per hour for the nutritional service provided.

Client Perception of Price/Value Relationships

Two variables were correlated with the charge per hour to private clients. The correlation values of the two variables, prevention or wellness counseling for the private clients and computerized nutritional assessments for residents/patients/clients of contract clients, indicate that the two variables were not significant in determining the charge per hour for the nutritional service provided.

Time Alloted to Practice

Four variables were correlated with the charge per hour to private clients. The correlation values of the four variables, full-time or part-time employment, number of hours worked per day, and number of hours worked per week indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Quality Assurance

Standards of Practice

Five variables were correlated with the charge per hour to private clients. One variable was significant in determining the charge per hour for the nutritional service provided. It was:

	Private
Professional growth of knowledge and skill	.41

The correlation values of the four variables, formal policy, continuing evaluation of values, goals and processes, collaboration and

communication with other professionals and application of research principles indicate that the four variables were not significant in determining the charge per hour for the nutritional service provided. Table 4.56 presents the mean, standard deveiation, coefficient alpha and intercorrelation.

Criteria For Judging Effectiveness

Five variables were correlated with the charge per hour to the private client. The correlation values of the five variables indicate that the variables, follow up, client goals were met, objective measurement, behavior modification and client verbalization of rationale and client referrals were not significant in determing the charge per hour for the nutritional service provided.

Unit Product of Counseling Services

Time Spent in Performing Subtasks

Five variables were correlated with the charge per hour to private clients. Two of the variables' correlation values indicate that the variables were significant in determining the charge per hour for the nutritional service provided. They were:

	Private
Preparation	.44
Records	.38

The correlation values of the three variables, initial contact, preparation and evaluation, indicate the three variables were not significant in determining the charge per hour for the nutritional service provided. Table 4.57 shows the means, standard deviations,

coefficient alphas and intercorrelation.

Importance of Subtasks

Five variables were correlated with the charge per hour to private clients. The correlation values of the five variables, initial contact, preparation, presentation, records and evaluation, indicate that the five variables were not significant in determining the charge per hour for the nutritional service provided.

Professional Information

Four variables were correlated with the charge per hour to private clients. The correlation values of one of the variables indicates that it was significant in determining the charge per hour for the nutritional service provided. It was:

	Private
Level of academic degree held	.36

The correlation values of the three variables, method by which membership to The American Dietetic Association was obtained, previous work experience and the number of years in counseling indicate the variables were not significant in determining the charge per hour for the nutritional service provided. Table 4.58 presents the mean, standard deviation, coefficient alpha and the intercorrelation.

Contract Clients

Population and Industry

Two variables were correlated with the charge per hour to the contract client. The correlation values of the two variables,

variables, population and industry, indicate the two variables were not significant in determining the charge per hour for the nutritional service provided.

Type of Client

Contract Clients

One variable, contract clients, was correlated with the charge per hour to the contract client. The correlation value of the variable indicate the variable was not significant in determining the charge per hour for the nutritional service provided.

Number of Contract Clients

One variable was correlated with the charge per hour to the contract client. The correlation value of the variable, number of contract clients indicate that the variable was not significantly important in determining the charge per hour for the nutritional service provided.

Size of Organization

Number of Employees

Two variables were correlated with the charge per hour to the contract client. The correlation values of the two variables, number of part-time nonprofessional employees and number of part-time professional employees, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Annual Revenue

1985 and 1986

Two variables were correlated with the charge per hour to the contract client. The correlation values of the two variables, annual revenue for 1985 and annual revenue for 1986, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Total Revenue From Contract Clients

The correlation alpha of the variable, percentage of total revenue, yielded no significant value in determining the charge per hour for nutritional service provided.

Factors Important in Setting Fees

Five variables were correlated with the charge per hour to the contract client. The correlation value of one of the variables indicate the variable was significant in determining the charge per hour for the nutritional service provided. It was:

	Contract
Services provided institution/group/organization	.54

The correlation values of the variables, services provided by the institution/group.organization, annual revenue of the institution/group/organization, prevailing rates in the area and personal worth, indicate the four variables were not significant in determing the charge per hour for the nutritional service provided. Table 4.59 presents the mean, standard deviation, coefficient alpha and intercorrelation.

Dimensions of Nutritional Counseling

Five variables were correlated with the charge per hour to the contract clients. The correlation value of one variable, actual counseling time, indicates that the variable was significant in determining the charge per hour for the nutritional service provided. It was:

	Contract
Actual counseling time	.62

The correlation values of four of the variables, the experience of the dietitian, the education of the dietitian, the number of years as a consulting dietitian and the importance of the service to the client, indicate that the variables were not significant in determining the charge per hour for nutritional service provided. Table 4.60 presents the mean, standard deviation, coefficient alpha and the intercorrelation.

Client Perception of Price/Value Relationships

Two variables were correlated with the charge per hour to the contract client. The correlation values of the two variables, preventive/wellness nutritional counseling for private clients and computerized nutritional assessments for residents/patients/clients of a contract client, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Time Alloted to Practice

Three variables were correlated with the charge per hour to the contract client. The correlation values of the three variables,

full-time employment or part-time employment, number of hours worked per day, number of hours worked per week, indicate that the variables were not significant in determining the charge per hour for the nutritional counseling service provided.

Quality Assurance

Standards of Practice

Five variables were correlated with the charge per hour to the contract client. The correlation values of the five variables, formal policy, continuing evaluation of values, goals and processes, collaboration and communication with other professionals, application of research principles and professional growth of knowledge and skill, indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Criteria For Judging Effectiveness

Three variables were correlated with the charge per hour to the contract client. The correlation values of the three variables, client goals, objective measurement and behavior modification and client verbalization of rationale indicate that the variables were not significant in determining the charge per hour for the nutritional service provided.

Unit Product of Counseling Services for Contract Clients

Time Spent in Performing Subtasks

Five variables were correlated with the charge per hour to the contract client. The correlation values of the five variables,

initial contact, preparation, presentation, records and evaluation, indicate the variables were not significant in determining the charge per hour for the nutritional service provided.

Importance of Subtasks

Five variables were correlated with the charge per hour to the contract client. The correlation values of the five variables, initial contact, pereparation, presentation, records and evaluation were not significant in determining the charge per hour for the nutritional service provided.

Professional Information

Four variables were correlated with the charge per hour to contract clients. The correlation values of the four variables, method of obtaining membership in The American Dietetic Association, level of academic degree held, previous work experience, and number of years in counseling indicate that the variables were not significant in determining the charge per hour for nutritional services provided.

Lack of Meaningful Predictors

All correlations for the following independent variables with other independent variables were either not statistically significant ($p > .05$) or were not substantially intercorrelated to suggest meaningful predictors ($|r| < .20$):

Private and Contract Clients

number of contract clients/percent of revenue Criteria used for judging effectiveness Professional information

Private Client

population/industry

type of client

criteria for judging effectiveness

professional information

Contract Client

population/industry

number of contract clients/revenue from clients

number of employees

criteria for judging effectiveness

The lack of meaningful predictors indicate that there would be no purpose in reporting outcomes by the categories defined by these variables. For example, there would be no statistically significant and meaningful relationships for professional information or criteria for judging effectiveness.

For the following independent variables, all correlations with the dependent variables were either not statistically significant ($p > .05$) or were not substantially intercorrelated to suggest meaningful predictors ($|r| < .20$):

Private and Contract Clients

third party payment

contract client/percent of total revenue

factors influencing pricing strategy

client perception of price/value relationship

dimensions of nutritional counseling

standards of practice

criteria for effectiveness

professional information

Private Clients

population and industry

information on private client

annual revenue

third party payment

size of organization

factors influencing pricing strategy

dimensions of nutritional counseling

client's perception of price/value relationship

time allotted to practice

criteria for effectiveness

importance of subtasks

Contract Client

population and industry

annual revenue

factors influencing pricing strategy

size of organization

contract clients (type, number and percent of revenue)

client perception of price/value relationship

time allotted to practice

standards of practice

subtasks

professional information

The lack of meaningful predictors could possibly be due to the wide

range of variables presented to the respondents. It could also be due to the fact that these identified categories were developed by the researcher from personal experience and were not as important to other consulting dietitians in private practice.

Regression Analysis

Linear regression is a statistical procedure used to study relationships between variables (SAS, 1985). The General Linear Models procedure uses the method of least squares to fit general linear models. When more than one dependent variable is specified, the variables that have the same pattern of missing values within the data set are automatically grouped together ensuring that the analysis for each dependent variable brings into use all possible observations. GLM allows any degree of interacting, it provides for continuous-by-continuous, continuous-by-class and continuous nesting effects. The dependent variables being considered are the hourly fees charged by consulting dietitians with both private and contract clients, consulting dietitians with only private clients and consulting dietitions who have only contract clients.

Analysis of the data, based on the correlation analysis, revealed the possible models for measuring the impact of the independent variables upon the pricing of nutritional counseling services.

Private and Contract Clients

Private client information/charge per hour to private and contract clients

Private Clients

Subtasks/charge per hour to private cleints

Contract Clients

Factors influencing pricing strategy/charge per hour to contract clients

Following the development of the models the dependent and independent variables were entered into a General Linear Models procedure. The statistical methods which will be reported are the F value, PR> F, R-Square, and the beta value. The models resulting explain the variance in the dependent variable by the independent variable.

Private and Contract Clients

Private Client Information/Charge Per Hour

One independent variable accounted for 26% for private clients and 40% for contract clients of the variance in the dependent variables. It was average number of private clients. Table 4.61 presents the beta value and mathematical models. As noted by the regression model the private client information has substantial impact on the pricing of nutritional counseling services.

Private Client

Subtasks

Two variables accounted for 53% of the variance in the dependent variable. They were (1) preparation and (2) records. As indicated by the regression model, the two variables had substantial impact on the pricing of nutritional counseling services to private clients. Table 4.62 presents the beta value and mathematical models.

Contract Clients

Dimensions of Nutritional Counseling

One independent variable accounted for 51% of the variance for the dependent variable. It was actual counseling time with client. The beta value and mathematical model are presented in Table 4.63. As illustrated by the regression model, the dimension of nutritional counseling has meaningful influence on the charge per hour to the contract client for nutritional counseling services.

Models in Order of Significance

Based upon the data generated from this research project, the following models are presented in order of significance. The significance is based on their ability to explain the variance in the dependent variable.

Subtasks--two significant variables explaining 53% of the variance for the dependent variable, charge per hour to private clients.

Dimensions of nutritional counseling--one significant variable explaining 51% of the variance for the dependent variable, charge per hour to contract clients.

Private clients--one significant variable explaining 26% of the variance for the dependent variable, charge per hour to private clients and 40% of the variance for the dependent variable, charge per hour to contract clients.

Private and Contract Clients

The model of average number of private clients is the best

model for measuring the effect on determining the charge per hour for nutritional counseling services to the private client and the contract client. The model measures the average number of private clients which can be used as an effective guideline for both the charge for nutritional services to private clients and the charge for nutritional services to contract clients.

Private Clients

The models of the subtasks, preparation and records are the best models for measuring the effect on determining the charge per hour for nutritional counseling services to private clients. The models measure the preparation that goes into the presentation of nutritional counseling to the private client and the importance of the records which monitor the clients progress toward plans and goals and which may be used to implement satisfactory strategies for the charge per hour to private clients for nutritional services provided.

Contract Clients

The model of the services provided to the institution/group/organization is the best model for determining the charge to contract clients. The model measures the effect of the service performed by the consulting dietitian on the contract clients and provides practical interpretation for the charge per hour of nutritional services provided for clients.

Validity and Reliability of Measure

Internal validity (Leedy, 1974) is the basic minimum without

which any experiment is uninterpretable. As has been indicated by previously reported correlation coefficients, good validity and reliability was demonstrated by the relationships of the independent variables and the dependent variables, among the independent variables and among the dependent variables. For example, a good correlation exists between the variables "number of hours worked per week," "number of hours worked per day," "number of years worked as a consulting dietitian" and "full-time or part-time employment." It is recognized that the number of hours worked per week generally will depend on the number of hours worked per day as well as whether the consulting dietitian works full-time or part-time.

The correlation coefficients on the dependent variables, charge per hour to private clients and charge per hour to contract clients are also evidence of reliability. If the responses had been selected arbitrarily, the correlation coefficient would be very low and nonsignificant at the .05 possibility level. The coefficient alpha (.0001) for the dependent variables exhibits consistency with which the responses were given by the respondents for the survey.

Summary

This chapter presented the results and discussion of the research study. Frequency data and statistically meaningful correlations are presented. Multiple regression analysis was used to examine the effect of several independent variables on the dependent variables, charge per hour to private and contract clients, charge per hour to private clients and charge per hour to contract clients.

Finally, validity and reliability of the survey instrument was discussed.

Table 4.1

Population of Area Where Private Practice Is Located

	Private and Contract Client			Private Client			Contract Client		
Statement	Percent	(%)	n	Percent	(%)	n	Percent	(%)	n
Less than 9,999	5		5	4		1	13		2
10,000-69,999	29		28	36		9	31		5
70,000-149,999	16		15	12		3	13		2
150,000-249,999	10		10	16		4	6		1
250,000-499,999	14		14	4		1	6		1
500,000-1,000,000	18		17	16		4	19		3
Over 1,000,001	8		8	12		3	13		2

Private and contract client n = 97
Private Client n = 25
Contract Client n = 16

Table 4.2

Principal Industry of Area Where Private Practice Is Located

	Private and Contract Client			Private Client			Contract Client		
Statement	Percent	(%)	n	Percent	(%)	n	Percent	(%)	n
College/ University	25		25	24		6	25		4
Farming	19		19	12		3	25		4
Manufacturing	42		42	56		14	38		6
Government	22		22	20		5	13		2
Services	26		26	16		4	38		6

Table 4.3

Average Number of Private Clients

	Private and Contract Client		Private Client	
Statement	Percent (%)	n	Percent (%)	n
Less than 10	20	20	16	4
11 - 25	16	16	16	4
26 - 50	12	12	8	2
51 - 75	12	12	12	3
76 - 100	9	9	12	3
Over 100	30	30	36	9

Private and contract client n = 98
Private client n = 24

Table 4.4

Number of Physician Referred Private Clients

	Private and Contract Client		Private Client	
Statement	Percent (%)	n	Percent (%)	n
Less than 9%	15	15	4	1
10% - 19%	5	5	4	1
20% - 29%	3	3	0	0
30% - 39%	9	9	0	0
40% - 49%	7	7	4	1
Over 50%	60	59	87	20

Private and contract client n = 98
Private client n = 25

Table 4.5

Number of Nonreferred Private Clients

	Private and Contract Client		Private Client	
Statement	Percent (%)	n	Percent (%)	n
Less than 9%	65	63	76	19
10% - 19%	9	9	8	2
20% - 29%	5	5	4	1
30% - 39%	5	5	0	0
40% - 49%	7	7	4	1
Over 50%	8	8	8	2

Private and contract client n = 97
Private client n = 25

Table 4.6

Number of Private Clients Seen in Physicians' Offices

	Private and Contract Client		Private Client	
Statement	Percent (%)	n	Percent (%)	n
Less than 9%	57	56	56	14
10% - 19%	7	7	0	0
20% - 29%	3	3	0	0
30% - 39%	2	2	8	2
40% - 49%	2	2	0	0
Over 50%	60	59	36	9

Private and contract client n = 99
Private client n = 25

Table 4.7

Type of Contract Client

	Private and Contract Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n
Nursing Homes/ Small Hospital	47	47	75	12
Physicians Group	56	56	13	2
Athletic Groups	22	22	0	0
HMO	23	23	6	1
Colleges/ Universities	25	25	6	1
Restaurants	10	10	0	0
Home Care Organizations	25	25	19	3
Ambulatory Care Organizations	27	27	19	3
Community Health Center	22	22	0	0
Industries	24	24	25	4
Newspapers/ Magazines	17	17	6	1
Television/ Radio	17	17	0	0

Table 4.8

Average Number of Contract Clients

	Private and Contract Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n
Less than 10	70	69	87	13
11 - 25	9	9	13	2
26 - 50	5	5	0	0
51 - 75	4	4	0	0
76 - 100	0	0	0	0
Over 100	12	12	7	1

Private and contract client n = 99
Contract client n = 16

Table 4.9

Number of Nonprofessional Employees

Part-Time Nonprofessional

	Private and Contract Client			Private Client			Contract Client		
Statement	Percent	(%)	n	Percent	(%)	n	Percent	(%)	n
0	65		64	84		21	88		14
1	23		23	12		3	13		2
2	9		9	0		0	0		0
3	0		0	4		1	0		0
4	0		0	0		0	0		0
5	2		2	0		0	0		0
Over 5	1		1	0		0	0		0

Private and contract client n = 99
Private client n = 25
Contract client n = 16

Full-Time Nonprofessional

	Private and Contract Client			Private Client			Contract Client		
Statement	Percent	(%)	n	Percent	(%)	n	Percent	(%)	n
0	92		91	92		23			
1	5		5	8		2			
2	1		1	0		0			
3	0		0	0		0			
4	0		0	0		0			
5	0		0	0		0			
Over 5	2		2	0		0			

Private and contract client n = 99
Private client n = 25
Contract client n = 16

Table 4.10

Number of Professional Employees

Part-Time Professional

	Private and Contract Client			Private Client			Contract Client		
Statement	Percent	(%)	n	Percent	(%)	n	Percent	(%)	n
0	74		73	92		23	88		14
1	13		13	0		0	6		1
2	5		5	4		1	6		1
3	2		2	0		0	0		0
4	1		1	4		1	0		0
5	0		0	0		0	0		0
Over 5	5		5	0		0	0		0

Private and contract client n = 99
Private client n = 25
Contract client n = 16

Full-Time Professional

	Private and Contract Client			Private Client			Contract Client		
Statement	Percnet	(%)	n	Percent	(%)	n	Percent	(%)	n
0	88		87	96		24			
1	3		3	8		2			
2	3		3	0		0			
3	2		2	0		0			
4	0		0	0		0			
5	0		0	0		0			
Over 5	4		4	4		1			

Private and contract client n = 99
Private client n = 25
Contract client n = 16

Table 4.11

Revenue

1985

Statement	Private and Contract Client Percent	(%)	n	Private Client Percent	(%)	n	Contract Client Percent	(%)	n
Less than 4,999	31		31	57		13	31		5
5,000 10,499	15		14	22		5	38		6
10,500 15,499	15		14	13		3	6		1
15,500 20,499	11		10	9		2	13		2
20,500 25,499	11		10	0		0	6		1
25,500 30,499	5		5	0		0	6		1
30,500 35,499	2		2	0		0	0		0
35,500 40,499	3		3	0		0	0		0
40,500 45,499	2		2	0		0	0		0
45,500 50,499	2		2	0		0	0		0
50,500 55,499	1		1	0		0	0		0
55,500 60,499	0		0	0		0	0		0
Over 65,000	2		2	0		0	0		0

Private and contract client n = 94
Private client n = 23
Contract client n = 16

Table 4.12

Revenue

1986

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n	Contract Client Percent (%)	n
Less than 4,999	20	20	52	13	31	5
5,000 10,499	16	16	20	5	19	3
10,500 15,499	16	16	12	3	13	2
15,500 20,499	10	10	8	2	25	4
20,500 25,499	13	13	4	1	6	1
25,500 30,499	7	7	4	1	0	0
30,500 35,499	5	5	0	0	6	1
35,500 40,499	4	4	0	0	0	0
40,500 45,499	2	2	0	0	0	0
45,500 50,499	1	1	0	0	0	0
50,500 55,499	0	0	0	0	0	0
55,500 60,499	0	0	0	0	0	0
Over 65,000	5	5	0	0	0	0

Private and contract client n = 99
Private client n = 25
Contract client n = 16

Table 4.13

Charge Per Hour to Private Clients

	Private and Contract Client		Private Client	
Statement	Percent (%)	n	Percent (%)	n
Less than $9	0	0	0	0
$10 - $19	3	3	16	4
$20 - $29	23	23	32	8
$30 - $39	25	25	48	12
$40 - $49	22	22	20	5
$50 - $59	13	13	20	5
$60 - $69	8	8	1	2
$70 - $79	2	2	0	0
$80 - $89	1	1	0	0
Over $90	2	2	0	0

Table 4.14

Total Revenue From Private Clients

	Private and Contract Client		Private Client	
Statement	Percent (%)	n	Percent (%)	n
Less than 10%	32	31	16	4
11% - 25%	6	6	0	0
26% - 50%	15	15	8	2
51% - 75%	19	19	16	4
76% - 100%	28	27	60	15

Private and contract client n = 98
Private client n = 25

Table 4.15

Basis of Charge Per Hour

Private Client
Flat Hourly Fee

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
Yes	85	83	76	19
No	15	15	24	6

Private and contract client n = 98
Private client n = 25

Private Client
Flat Hourly Fee

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
Yes	15	25	24	6
No	85	83	76	19

Private and contract client n = 98
Private client n = 25

Table 4.16

Third Party Reimbursement
For Private Clients

Number Receiving Third Party Reimbursement

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
Yes	47	46	44	11
No	53	52	56	14

Private and contract client n = 98
Private client n = 25

Revenue Received from Third Party Reimbursement

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
Less than 9%	74	70	64	16
10% - 19%	8	8	20	5
20% - 29%	4	4	8	2
30% - 39%	5	5	4	1
40% - 49%	2	2	0	0
Over 50%	7	7	4	1

Private and contract client n = 95
Private client n = 25

Table 4.17

Charge Per Hour to Contract Clients

Statement	Private and Contract Client Percent (%)	Private and Contract Client n	Contract Client Percent (%)	Contract Client n
Less than $9	0	0	0	0
$10 - $19	26	26	38	6
$20 - $29	45	45	44	7
$30 - $39	31	31	19	3
$40 - $49	6	6	0	0
$50 - $59	13	13	0	0
Over $60	17	17	0	0

Table 4.18

Total Revenue Received from Contract Clients

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
Less than 9%	14	14	13	2
10% - 19%	5	5	7	1
20% - 29%	18	18	0	0
30% - 39%	1	1	0	0
40% - 49%	9	9	0	0
Over 50%	53	52	80	12

Private and contract client n = 99
Contract client n = 15

Table 4.19

Basis of Charge Per Hour

Contract Client
Flat Hourly Fee

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
Yes	80	79	88	14
No	20	20	13	2

Private and contract client n = 98
Contract client n = 16

Contract Client
Service Provided Fee

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
Yes	25	24	13	2
No	75	72	88	14

Private and contract client n = 96
Contract client n = 25

Table 4.20

Relative Importance of Factors in Setting Fees
For
Private and Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Services performed by institution/group/ organization	20	19	21	21	18	2.98
2. Annual revenue of institution/group/ organization	18	18	20	25	21	3.13
3. Prevailing rates in area	57	18	14	6	5	1.85
4. Personal worth	64	27	5	2	2	1.52
5. Services provided for institution/group/ organization	64	23	9	0	4	1.58

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 99

Table 4.21

Relative Importance of Factors in Setting Fees
For
Private Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Services performed by institution/group/ organization	14	10	19	29	29	4.08
2. Annual revenue of institution/group/ organization	9	17	17	17	39	3.61
3. Prevailing rates in area	57	17	17	4	4	1.82
4. Personal worth	57	26	4	4	9	1.52
5. Services provided for institution/group/ organization	52	17	9	9	13	2.13

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 21

Table 4.22

Relative Importance of Factors in Setting Fees
For
Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Services performed by institution/group/ organization	38	0	31	19	13	2.69
2. Annual revenue of institution/group/ organization	13	6	31	31	19	3.38
3. Prevailing rates in area	31	13	19	25	13	2.75
4. Personal worth	38	38	6	6	13	2.19
5. Services provided for institution/group/ organization	44	25	25	0	6	2.00

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 16

Table 4.23

Dimensions of Nutritional Counseling

For

Private and Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Actual counseling time with client	76	16	6	1	1	1.36
2. Experience of the dietitian	49	34	12	3	2	1.76
3. Education of the dietitian	34	33	25	4	3	2.08
4. Number of years counseling	24	24	39	9	3	2.42
5. Importance of the service to the client	53	29	12	5	1	1.73

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 99

Table 4.24

Dimensions of Nutritional Counseling

For

Private Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Actual counseling time with client	74	0	33	4	0	1.57
2. Experience of the dietitian	65	9	17	4	4	1.74
3. Education of the dietitian	44	30	13	4	9	2.04
4. Number of years counseling	29	32	13	17	9	2.60
5. Important of the service to the client	44	26	22	4	4	2.00

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 21

Table 4.25

Dimensions of Nutritional Counseling
For
Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Actual counseling time with client	63	13	19	0	6	1.75
2. Experience of the dietitian	31	31	25	0	13	2.31
3. Education of the dietitian	19	25	44	6	6	2.56
4. Number of years counseling	13	44	19	13	13	2.69
5. Importance of the service to the client	38	38	25	0	0	1.88

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 16

Table 4.26

Client Perception of Price/Value Relationship

Prevention/Wellness Counseling

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent	(%) n	Percent	(%) n	Percent	(%) n
$000.00	8	8	8	2	25	4
20.00	5	5	4	1	6	1
25.00	6	6	--	--	6	1
30.00	6	6	8	2	19	3
35.00	9	9	12	3	13	2
40.00	8	8	16	4	--	--
45.00	1	1	4	1	19	3
50.00	27	27	16	4	6	1
55.00	1	1	--	--	--	--
60.00	10	10	16	4	6	1
65.00	2	2	4	1	--	--
70.00	3	3	--	--	--	--
75.00	3	3	--	--	--	--
80.00	2	2	--	--	--	--
85.00	1	1	--	--	--	--
90.00	--	--	4	1	--	--
100.00	6	6	--	--	--	--
250.00	1	1	--	--	--	--
Mean	$48.23		$45.40		$28.75	

NOTE: Percentage values may not equal 100% due to rounding

Table 4.27

Client Perception of Price/Value Relationship

Computerized Nutritional Assessment

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent	(%) n	Percent	(%) n	Percent	(%) n
$000.00	15	15	32	8	31	5
5.00	3	3	--	--	--	--
10.00	4	4	8	2	6	1
15.00	2	2	4	1	6	1
20.00	9	9	8	2	--	--
25.00	18	18	4	1	19	3
30.00	9	9	8	2	13	2
35.00	6	6	12	3	--	--
40.00	9	9	4	1	--	--
45.00	1	1	--	--	6	1
50.00	13	13	8	2	6	1
55.00	1	1	--	--	--	--
65.00	1	1	--	--	--	--
70.00	--	--	--	--	6	1
75.00	2	2	8	2	--	--
100.00	4	4	4	1	--	--
150.00	2	2	--	--	--	--
Mean	$32.53		$26.20		$23.13	

NOTE: Percentage values may not equal 100% due to rounding

Table 4.28

Time Allotted to Private Practice

Type of Employment

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n	Percent (%)	n
Part-Time	73	72	88	22	88	14
Full-Time	27	27	12	3	13	2

Number of Hours Worked Per Day

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n	Percent (%)	n
1 - 2	14	2	38	8	36	5
3 - 4	32	24	29	6	21	3
6 - 8	54	40	33	7	43	6

Number of Days Worked Per Week

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n	Percent (%)	n
1 - 4	12	12	12	3	--	--
5 - 9	8	8	24	6	44	7
10 - 15	12	12	28	7	13	2
16 - 20	20	20	16	4	6	1
21 - 25	3	3	--	--	13	2
26 - 30	11	11	4	1	6	1
31 - 35	7	7	--	--	6	1
36 - 40	9	9	4	1	--	--
Over 40	17	17	12	3	13	2

Table 4.29

Standards of Practice
For
Private and Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Formal policy for quality standards	27	28	29	8	9	2.46
2. Continuing evaluation of values, goals, and processes	42	30	25	3	1	1.92
3. Collaboration and communication with other professionals	47	30	20	3	0	1.80
4. Application of research principles	38	29	24	8	2	2.08
5. Professional growth of knowledge and skills	62	26	10	2	0	1.52

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 - NEVER IMPORTANT

** n = 98

Table 4.30

Standards of Practice
For
Private Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Formal policy for quality standards	26	30	22	22	0	2.39
2. Continuing evaluation of values, goals, and processes	52	22	22	4	0	1.78
3. Collaboration and communication with other professionals	48	26	22	4	0	1.83
4. Application of research principles	57	17	13	9	4	1.99
5. Professional growth of knowledge and skills	83	4	9	0	4	1.39

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 23

Table 4.31

Standards of Practice

For

Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Formal policy for quality standards	19	38	31	6	6	2.43
2. Continuing evaluation of values, goals, and processes	31	25	25	13	6	2.38
3. Collaboration and communication with other professionals	31	38	25	6	0	2.06
4. Application of research principles	31	31	31	0	6	2.19
5. Professional growth of knowledge and skills	63	13	19	0	6	1.75

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 16

Table 4.32

Criteria for Judging Effectiveness

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n	Contract Client Percent (%)	n
1. Follow up	34	34	26	6	13	2
2. Client goals are met	47	47	43	10	50	8
3. Objective measurements	48	48	64	16	56	9
4. Behavior modification	74	74	68	17	63	10
5. Client referral	53	53	57	13	6	4

NOTE: Percentage value may not equal 100% due to rounding

Table 4.33

Time Spent on Subtasks of Nutritional Counseling for Private Clients

Initial Contact

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
0%	2	2	--	--
5%	2	2	9	2
9%	1	1	--	--
10%	14	13	17	4
12%	1	1	--	--
15%	7	7	9	2
20%	24	24	17	4
21%	--	--	4	1
25%	11	11	9	2
30%	12	12	17	4
35%	3	3	--	--
40%	6	6	9	2
50%	14	14	4	1
53%	1	1	4	1
60%	1	1	--	--
75%	1	1	--	--

Preparation

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
0%	2	2	--	--
2%	1	1	--	--
4%	1	1	--	--
5%	16	15	13	3
9%	1	1	--	--
10%	37	35	39	9
13%	1	1	--	--
15%	13	12	9	2
20%	17	16	26	6
21%	--	--	4	1
25%	8	8	--	--
30%	2	2	4	1
40%	1	1	4	1

NOTE: Percentage values may not equal 100% due to rounding

Table 4.34

Time Spent on Subtasks of Nutritional Counseling for Private Clients

Presentation

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
0%	1	1	--	--
5%	3	3	--	--
10%	6	6	4	4
13%	1	1	--	--
15%	1	1	--	--
20%	21	20	26	6
21%	--	--	4	1
25%	13	13	--	--
30%	10	10	22	5
35%	5	5	--	--
40%	8	8	13	3
45%	1	1	--	--
50%	18	18	17	4
55%	1	1	--	--
60%	3	3	--	--
65%	2	2	--	--
68%	1	1	--	--
70%	2	2	4	1
75%	1	1	9	2
80%	1	1	--	--

Records

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
0%	1	1	--	--
1%	1	1	--	--
5%	25	25	26	6
10%	48	48	48	11
12%	1	1	--	--
15%	10	10	13	3
16%	--	--	4	1
20%	7	7	4	1
25%	4	4	--	--
30%	1	1	--	--
40%	1	1	4	1

NOTE: Percentage values may not equal 100% due to rounding

Table 4.35

Time Spent on Subtasks of Nutritional Counseling for Private Clients

Evaluation

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n
0%	3	3	--	--
4%	1	1	--	--
5%	18	17	26	6
10%	40	39	48	11
15%	11	10	9	2
20%	16	15	9	2
21%	--	--	4	1
25%	4	4	--	--
30%	3	3	4	1
40%	1	1	--	--
50%	2	2	--	--
75%	1	1	--	--

NOTE: Percentage values may not equal 100% due to rounding

Table 4.36

Importance of Subtasks on Nutritional Counseling for Private Clients and the Charge Per Hour to

Private Clients and Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Initial contact	66	13	11	8	2	1.66
2. Preparation	45	33	23	7	4	2.02
3. Presentation	72	13	12	2	1	1.48
4. Records	26	21	38	11	4	2.47
5. Evaluation	38	29	19	10	4	2.13

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 92

Table 4.37

Importance of Subtasks on Nutritional Counseling for Private Clients and the Charge Per Hour to

Private Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Initial contact	44	26	13	9	9	2.13
2. Preparation	39	30	22	0	0	2.0
3. Presentation	61	17	17	0	4	1.70
4. Records	30	13	26	13	17	2.74
5. Evaluation	30	22	26	9	13	2.52

*1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

** n = 23

Table 4.38

Time Spent on Subtasks of Nutritional Counseling for Contract Clients

Initial Contact

	Private and Contract Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n
0%	5	5	13	2
1%	1	1	--	--
4%	1	1	--	--
5%	13	12	6	1
6%	--	--	6	1
10%	22	22	38	6
15%	7	7	6	1
17%	--	--	6	1
20%	15	15	6	1
24%	1	1	--	--
25%	13	12	6	1
30%	9	9	--	--
40%	5	5	6	1
50%	7	7	6	1
60%	1	1	--	--

Preparation

	Private and Contract Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n
0%	4	4	6	1
5%	9	9	6	1
7%	1	1	--	--
10%	25	24	31	5
15%	13	12	6	1
20%	17	16	25	4
21%	1	1	--	--
25%	14	13	6	1
29%	--	--	6	1
30%	4	4	--	--
34%	--	--	6	1
40%	3	3	--	--
45%	1	1	6	1
50%	5	5	--	--
60%	1	1	--	--
75%	2	2	--	--

NOTE: Percentage values may not equal 100% due to rounding

Table 4.39

Time Spent on Subtasks on Nutritional Counseling for Contract Clients

Presentation

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
0%	2	2	6	1
2%	1	1	—	—
5%	4	4	—	—
10%	13	12	25	4
13%	—	—	6	1
15%	2	2	6	1
20%	20	20	19	3
25%	9	9	—	—
29%	—	—	6	1
30%	13	12	19	3
35%	4	4	—	—
40%	12	12	6	1
48%	1	1	—	—
50%	11	11	6	1
60%	2	2	—	—
65%	1	1	—	—
70%	2	2	—	—
75%	1	1	—	—
80%	1	1	—	—

Records

Statement	Private and Contract Client Percent (%)	n	Contract Client Percent (%)	n
0%	2	2	—	—
1%	1	1	—	—
3%	1	1	—	—
5%	18	18	6	1
10%	36	36	13	2
15%	12	12	13	2
16%	1	1	—	—
20%	7	7	—	—
25%	7	7	6	1
27%	—	—	6	1
30%	3	3	13	2
36%	—	—	6	1
40%	3	3	13	2
45%	—	—	6	1
50%	5	5	19	3
60%	1	1	—	—
70%	1	1	—	—
80%	1	1	—	—

NOTE: Percentage values may not equal 100% due to rounding

Table 4.40

Time Spent on Subtasks of Nutritional Counseling for Contract Clients

Evaluation

	Private and Contract Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n
0%	2	2	6	1
2%	1	1	--	--
3%	1	1	--	--
5%	20	19	--	--
10%	41	39	40	6
12%	1	1	--	--
15%	7	7	13	2
20%	14	13	20	3
21%	1	1	--	--
25%	5	5	13	2
30%	1	1	--	--
35%	1	1	--	--
40%	3	3	--	--
50%	1	1	--	--
55%	--	--	7	1
75%	1	1	--	--

NOTE: Percentage values may not equal 100% due to rounding

Table 4.41

Importance of Subtasks of Nutritional Counseling for Contract Clients and the Charge Per Hour to

Private and Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Initial contact	51	12	18	16	4	2.10
2. Preparation	58	22	13	4	3	1.73
3. Presentation	72	18	7	1	2	1.43
4. Records	37	24	18	13	8	2.32
5. Evaluation	36	32	20	6	6	2.14

**1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

* n = 97

Table 4.42

Importance of Subtasks of Nutritional Counseling for Contract Clients and the Charge Per Hour to

Contract Clients

Statement**	Response Percentage (%)					
	1*	2	3	4	5	Mean
1. Initial contact	31	25	25	13	6	2.38
2. Preparation	50	38	6	0	6	1.75
3. Presentation	69	19	6	0	6	1.56
4. Records	44	29	19	6	13	2.25
5. Evaluation	44	19	19	6	13	2.25

** 1 = VERY IMPORTANT
2 = OFTEN IMPORTANT
3 = IMPORTANT
4 = SELDOM IMPORTANT
5 = NEVER IMPORTANT

* n = 16

Table 4.43

Method of Membership
to ADA

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n	Contract Client Percent (%)	n
*Cup	12	12	22	5	6	1
Masters	26	26	17	4	19	3
Three Year Experience	9	9	9	2	6	1
Bachelor of Science with Internship	53	52	52	12	69	11

*Coordinated Undergraduate Program

Table 4.44

Level of Academic Degree

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n	Percent (%)	n
Bachelor of Science	45	45	52	12	69	11
Masters	50	49	39	9	24	4
Doctorate	5	5	9	2	6	1

Table 4.45

Previous Work Experience

Statement	Private and Contract Client Percent (%)	n	Private Client Percent (%)	n	Contract Client Percent (%)	n
Out Patient Clinic	38	38	43	10	25	4
Teaching	39	39	48	11	31	5
Clinical Dietitian	79	79	91	21	56	9
Administrative Dietitian	39	39	30	7	69	11
Public Health	19	19	13	3	6	1

Table 4.46

Number of Years Worked as a Consulting Dietitian

	Private and Contract Client		Private Client		Contract Client	
Statement	Percent (%)	n	Percent (%)	n	Percent (%)	n
Less than 4	38	38	57	13	31	5
5 - 9	35	35	26	6	38	6
10 - 14	17	17	4	1	13	2
15 - 19	6	6	--	--	13	2
Over 20	3	3	13	3	6	1

Table 4.47

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Population and Industry of Area Where Private Practice is Located and the Charge Per Hour to Private and Contract Clients

	MEAN	SD	ALPHA	Correlation with Private	Correlation with Contract
*Pop	3.88	1.84	.0002 (P) .005 (C)	.37	.29
Ind	4.30	2.31	.25	--	--

*Pop = Population
Ind = Industry

Table 4.48

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Average Number of Private Clients and the Charge Per Hour to Private and Contract Clients

	MEAN	SD	Alpha	Correlation with Private	Correlation with Contract
*Avg.	4.69	1.90	.04 (P) .03 (C)	.21	.23

*Average number of private clients

Table 4.49

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Number of Employees and the Charge Per Hour to Private and Contract Clients

	MEAN	SD	Alpha	Correlation with Private	Correlation with Contract
*PT Non	1.55	.98	.004 (P) .02 (C)	.28	.24
FT Non	8.19	.88	.01	--	.25
PT Pro	22.39	1.28	.03	.22	--

*PT Non = Part-Time nonprofessional
FT Non = Full-Time nonprofessional
PT Non = Part-Time professional

Table 4.50

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Annual Gross Revenue and the Charge Per Hour to Private and Contract Clients

				Correlation with	
	MEAN	SD	Alpha	Private	Contract
1985	3.52	3.81	.02	.24	--
1986	4.11	3.01	.02	.24	--

Table 4.51

Means, Standard Deviations, Alpha Levels and Correlation Coefficients of Charge Per Hour to Private and Contract Clients

				Correlation with	
	MEAN	SD	Alpha	Private	Contract
Private	4.61	1.34	.0001	--	.42
Contract	4.11	1.66	.0001	.42	--

Table 4.52

Means, Standard Deviations, Alpha Levels and Correlation Coefficients of Total Revenue From Private Clients and the Charge Per Hour to Private and Contract Clients

	MEAN	SD	Alpha	Correlation with Private	Correlation with Contract
*% TR	3.07	1.63	.04 (P) .03 (C)	.21	.23

*Percentage of Total Revenue From Private Clients

Table 4.53

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for the Type of Employment and the Charge Per Hour to Private and Contract Clients

				Correlation with	
	MEAN	SD	Alpha	Private	Contract
*FT/PT	1.28	.45	.02	.24	--
#Hrs/W	8.08	2.73	.05	.20	--

*FT/PT = Full-Time or Part-Time employment
#Hrs/W = Number of hours worked per week

Table 4.54

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Time Spent in Subtasks for Contract Clients and the Charge Per Hour to Private and Contract Clients

	MEAN	SD	Alpha	Correlation with Private	Correlation with Contract
*IC	19.73	14.29	.04	.21	--
Prep	19.52	14.89	.01	--	.27
Rec	16.72	15.19	.03	--	.23
Eval	13.85	11.05	.04	--	.22

*IC = Initial Contact
Prep = Preparation
Rec = Records
Eval = Evaluation

Table 4.55

Means, Standard Deviations, Alpha Level and Correlation Coefficients for Importance of Subtasks for Contract Clients and the Charge Per Hour to Private and Contract Clients

				Correlation with	
	MEAN	SD	Alpha	Private	Contract
Records	2.32	1.31	.0009	--	.34

Table 4.56

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Standards of Practice for Private Clients and the Charge Per Hour to Private Clients

	MEAN	SD	Alpha	Correlation with Private
*Pro Gro	1.39	.99	.05	.41

*Professional Growth of Knowledge and Skills

Table 4.57

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Time Spent in Performing Subtasks and the Charge Per Hour to Private Clients

	MEAN	SD	Alpha	Correlation with Private
*Prep	15.04	8.42	.04	.44
Rec	11.35	6.32	.04	.38

*Prep = Preparation
Rec = Records

Table 4.58

Means, Standard Deviations, Alpha Levels and Correlation Correlations for Level of Academic Degree and the Charge Per Hour to Private Clients

	MEAN	SD	Alpha	Correlation with Private
*AD	4.61	1.31	.05	.36

*Level of Academic Degree Held

Table 4.59

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Factors Important in Setting Fees and the Charge Per Hour to Contract Clients

	MEAN	SD	Alpha	Correlation with Contract
*Service	1.93	1.16	.04	.54

*Services Provided Institution/Group/Organization

Table 4.60

Means, Standard Deviations, Alpha Levels and Correlation Coefficients for Dimensions of Nutritional Counseling and the Charge Per Hour to Contract Clients

	MEAN	SD	Alpha	Correlation with Contact
*ACT	1.73	1.22	.01	.62

*Actual Counseling Time

Table 4.61

Multiple Regression Results for the Dependent Variable Charge Per Hour to Private and Contract Clients and the Independent Variable Average Number of Private Clients

Multiple R-Square = .26

F = 1.34

PR > F = .05

Intercept 3.52

Model 3.52 + 1.11 = Average number of private clients

Variables	Coefficient (B)	F For (B)	Prob > F
Average no. of clients	1.11	3.77	.05

Table 4.62

Multiple Regression Results and the Dependent Variable Charge Per Hour to Private Clients and the Independent Variables Subtasks

Multiple R-Square = .53

F = 3.80

Prob. > F = .02

Intercept -5.58

Model - 5.58 + .16 (prep) + .09 (rec) = time spent in doing the subtasks preparation and records

Variables	Coefficient (B)	F for (B)	Prob > F
Preparation (prep)	.16	5.97	.03
Records (rec)	.09	6.80	.02

Table 4.63

Multiple Regressions Results for the Dependent Variable Charge Per Hour to Contract Clients and the Independent Variable Actual Counseling Time With Client

Multiple R-Square = .51

F = 1.86

Prob. > F = .04

Intercept 2.43

Model 2.43 + .56 = actual counseling time spent with client

Variables	Coefficient (B)	F for (B)	Prob > F
Actual counseling time spent with client	.56	6.99	.03

Chapter Five

SUMMARY AND CONCLUSION

Introduction

This chapter provides an overview of the research study presented in the previous chapters. First, the purpose of the study will be stated. Second, it will discuss the objectives with respect to the research question. Finally, a summary of results, possible explanations for outcomes, and the influence these results may have on the consulting dietitian in private practice is provided.

As government activity in the legislation of health care fees increased, the need for the consulting dietitian in private practice to demonstrate the benefits and cost of nutritional services effectiveness has also increased. Detailed guidelines for pricing of the individual nutritional counseling services are needed. Consulting dietitians in private practice must determine a payment policy which is consistent with the practitioner's philosophy.

It is an accepted fact that customers/clients have few objective points to use in perceiving the services they receive (Mills and Mosberg, 1981). Before deciding on a price policy or strategy, serveral factors should receive careful thought (Monroe, 1979). The effect of proposed prices on demand, costs, competition and other elements of the marketing strategy should be carefully analyzed.

Purpose

The purpose of this study was to determine those variables which have been identified as most influential in establishing guidelines on the price structuring of services offered in a private, independent practice by a consulting dietitian.

Objectives

The objectives are:

1. To measure the differences in price structuring of consulting dietitians who have only private clients, those who have only contract clients and those who have both, private and contract clients.
2. To determine if the length of time in private practice effects the price structuring of the organization.
3. To define the impact of the variables associated with size (as measured by number of employees, part-time and full-time and nonprofessional or professional, and the annual gross revenue, as well as the influence of third party reimbursement and client perception of price/value relationships), on the pricing structure.
4. To determine if the price structuring of services offered is affected by the standards of quality, as defined by The American Dietetic Association, and which provide guidelines to how those services should be performed.
5. To discover the association of price structure and the following factors: route to The American Dietetic

Association membership, level of academic degree held, previous experience, environment (size of city or town--principal occupation), subtasks of service performed, (initial contact, preparation, presentation, records, evaluation), type of employment (full-time or part-time), number of hours worked, type of private client, type of contract client, number of private clients, and number of contract clients.

Summary of Results

Demographic Characteristics

The results of this survey indicated that neither the population nor the principal industry of the area in which the respondents' private practice was located produced an important relationship between the dependent variables charge per hour to private and contract clients, charge per hour to private clients and charge per hour to contract clients.

Type of Client

Selkowitz (1985) and The American Dietetic Association (1984) state that the consulting dietitian provides nutritional counseling incorporating special dietary modification and normal nutrition to institutions, groups and organizations as well as individial clients. One of the most important functions (Gersunj and Rosengren, 1973) of the service sector is to furnish remedies for problems which may befall individuals and groups.

This research study produced no significant relationships

between the consulting dietitian with only private clients and the charge per hour to the client nor the consulting dietitian with only contract clients and the charge per hour. There was a meaningful relationship with the dependent variable, charge per hour to private (26%) and contract clients (40%) and the independent variable, average number of private clients.

Size of Organization

The independent variables, the number of employees and the total annual revenue of 1985 and 1986 had no significant relationship with the dependent variables, charge per hour to private and contract clients, charge per hour to only private clients and charge per hour to only contract clients.

This survey found that the independent variables, percentage of total revenue, charge per hour to private clients, charge per hour to contract clients, the importance of specified factors, and the clients perception of the price/value relationship produced no meaningful relationship with the dependent variables charge per hour to private and contract clients, charge per hour to only private clients and charge per hour to only contract cleints.

There was a significant relationship between the independent variable the dimension of nutritional counseling--the actual counseling time spent with the client--which is explained by 51% of the variance, and the dependent variable charge per hour for nutritional counseling services to the contract client. There was no significant influence on the dependent variables charge per hour for nutritional counseling to the private client or the charge per hour to clients by consulting

dietitians who provided nutritional counseling services to both private and contract clients.

Sibson (1971) states that many clients retain professional firms because of their special knowledge and prior experience they are able to do the work less expensively and in less time. The total cost is determined for various levels of business activity and time utilization. A price is determined that, using time spent with the client as a guideline, will yield a desired profit.

Due to this, one important method of pricing for the consultant is contigency payment pricing (Sibson, 1971). Using this method, the service business sets a fee but the payment of the fee is contingent upon the work being successfully accomplished.

Service systems are distinguished by the extent of customer contract in the creation of service (Chase, 1978). Customer contact refers to the physical presence of the customer in the system. The extent of contact may be defined as the percent of time the customer must be in the system relative to the total time it takes to serve him. Service systems with high customer contact are more difficult to control than those with low customer contact. In high contact systems, the client can affect the time of demand, the exact nature of the service and the quality of the service since he tends to become involved in the process itself. The client should be aware that the more time that is spent in the system, the higher the charge for the service will be.

Time Allotted to Practice

This study revealed that there was no strong relationship between the independent variables, full or part-time employment, number

of hours worked per day and number of hours worked per week, and the dependent variables, charge per hour to private and contract clients, charge per hour to private clients only and charge per hour to contract clients only.

Quality Assurance

The independent variables; formal policy for quality standards, continuing evaluation of values, goals, and processes, collaboration and communication with other professionals, application of research principles and professional growth of knowledge and skill did not produce a significant relationship with the dependent variables, charge per hour to private and contract clients, charge per hour to only private clients and charge per hour to only contract clients.

There was no significant relationship between the criteria used to juedge effectiveness and any of the three variables.

Unit Product

Establishing a pricing strategy is crucial (Sibson, 1971) and involves specialized processes. The process must focus on the selection of basic methods and must be interwoven with the concept of services provided. For example, if the services are of high value, premium prices based upon value pricing is appropriate. Each of the elements of cost for a given service should be determined.

Nutritional counseling goes through the following phases no matter what service is provided to the client (Wylie and Singer, 1975): the initial contact; preparation, which includes the assessing the nutritional status of the client; presentation where objective

knowledge is introduced as well as incorporating objective knowledge into the value system; keeping accounts of the expanding nutritional consciousness (record keeping); and evaluation of achievements.

Problem oriented services (Gersun and Rosengren, 1973) may vary widely in the extent and duration of consumer participation. Some other dimensions of considerable importance are the perceived urgency of the problem, the cost of the remedy and whether this cost is met by the primary consumer or a third party. The cost of the services varies with the situation.

Overhead is that portion of period costs that cannot be objectively traced to a particular operation product or other profit segment (Monroe, 1979). To determine full cost, this overhead must be allocated to the profit segments, eg., the five subtasks. The direct unit product costs are generated with the service and can be traced to the individual subtask performed.

Corr (1974) agrees that the unit product cost must include fixed overhead and that various bases be used to allocate overhead costs to different service lines and to various units of service.

This study implies that the individual subtasks of a nutritional counseling service had no significant influence on the dependent variables, charge per hour to private and contract clients and charge per hour for nutritional counseling services to only contract clients. There was a strong relationship between the independent variables, preparation ($r = 44$) and records ($r = 38$), and the dependent variable, charge per hour for nutritional counseling services to only private clients.

Professional Information

This research revealed no strong influence between the independent variables, method of obtaining membership in The American Dietetic Association, level of academic degree held, previous experience before becoming a consulting dietitian and the number of years as a consulting dietitian, and the dependent variables, charge for nutritional counseling services to private and contract clients, charge per hour for consulting services to private clients and charge per hour for consulting services to contract clients.

Implication of This Study to Consulting Dietitians in Private Practice

The present study demonstrated a relationship between the charge per hour of consulting dietitians with both private and contract clients and the average number of private clients. This study also revealed a relationship between the charge per hour of consulting dietitians with only private clients and the subtasks, preparation and records. A relationship between the charge per hour of consulting dietitians with only contract clients and the actual counseling time spent with the contract clients was also found.

These relationships, however, are too limited to be of practical use. The results provide a clear indication that there are no significant guidelines for pricing strategies for the 3 population categories. The lack of but one significant relationship with consulting dietitians who provided nutritional counseling services to private and contract clients and with the consulting dietitians who have only contract clients would suggest that little attention

had been given to their pricing structures. Consulting dietitians who have only private clients indicated there was a significant relationship with two independent variables but the relationships does not give a concise understanding of the pricing philosophy.

The findings suggest that the research methodologies should not examine the peripheral relationships between the charge per hour to clients and the practitioner's payment policy extensively. A more direct understanding of the consulting dietitian's philosophy and further investigation to find if it is cost effective, requires research beyond the replication of the charge per hour for nutritional counseling services/demographic/type of client/size of organization/ time alloted to practice/quality assurance/unit product cost/and professional information relationship.

The pricing structure decision is complex. Factors to be considered in addition to those mentioned above would be: marketing strategy, financial needs and goals, possible influence of regulatory controls, direct competitive pricing, value pricing (Sibson, 1971), structure (Perrow, 1967 and Kimberly, 1975) and techniques (Chase and Tansk, 1983).

Chapter Six

RECOMMENDATIONS FOR FUTURE RESEARCH

This study examined a fairly homogeneous group of consulting dietitians who had both private and contract clients, who had only private clients and who had only contract clients. It has clearly shown that in some aspects the private practices were similar. A few of the similar categories were the principal industry, the method of obtaining membership into The American Dietetic Association, the level of degree held, the dietitians' previous work experience, and the number of employees. It is, however, conceivable that this study could have had different results if only one of the three classifications of consulting dietitians had been researched. Therefore, future studies should examine each classification in depth to more clearly define the specific guidelines used in the pricing structure for nutritional counseling services.

This research measured the type of client, the number and percent of revenue obtained from that type of client and if the client was a physician referral or was not referred by a physician. One must question whether this information is germane to the pricing structure for nutritional services.

Future studies should be more encompassing in scope, particularly with regard to factors of establishing a rationale and plan for implementation. To successfully implement a payment system,

a specific, defined strategy is required. Components of the strategy may include developing a rationale, determining goals, delineating objectives and planning actions to attain these objectives.

Additional studies should be considered to determine how the consulting dietitian establishes fees for each identified service. There are many factors to consider when setting fees. Lange (1984) states that the service must be developed or defined in specific measurable terminology. In addition, data for product service pricing must be accumulated, including sales/use projections, usage trend, direct and indirect costs and other economic considerations.

More studies should be conducted on the education of users and the marketing of nutritional services. To achieve desired reimbursement for nutritional services by clients and third party payers, it is necessary to demonstrate the effectiveness of the service offered in producing desirable results (medical and economical).

This study covered too broad a scope of consulting dietitians in private practice and should not be generalized across the board to the three classification of consulting dietitians. Limited research work suggests that each classification be considered individually. However, it has hopefully given impetus to other research regarding specific pricing policies for nutritional consulting private practices.

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QUESTIONNAIRE

1. Please check the method by which you obtained membership in the American Dietetic Association.
   - ☐ 1. Cup
   - ☐ 2. Masters with six month work experience.
   - ☐ 3. Three year traineeship
   - ☐ 4. BS with internship

2. Please check which level of degree you hold.
   - ☐ 1. Bachelor of Science
   - ☐ 2. Master
   - ☐ 3. Doctorate

3. Please check previous experiences before becoming a consulting dietitian.
   - ☐ 1. Out patient clinic
   - ☐ 2. Teaching
   - ☐ 3. Clinical dietetics
   - ☐ 4. Administrative dietetics
   - ☐ 5. Other _____

4. Population of city/town in which you now consult. Please check the appropriate answer.
   - ☐ 1. Less than 9,999
   - ☐ 2. Between 10,000 and 69,999
   - ☐ 3. Between 70,000 and 149,999
   - ☐ 4. Between 150,000 and 249,999
   - ☐ 5. Between 250,000 and 499,999
   - ☐ 6. Between 500,000 and 1,000,000
   - ☐ 7. Over 1,000,001

5. Please check the principle industry of city/town and outlying districts.
   - ☐ 1. College/University
   - ☐ 2. Farming
   - ☐ 3. Heavy manufacturing
   - ☐ 4. Light manufacturing
   - ☐ 5. Government
   - ☐ 6. Armed services
   - ☐ 7. Other, please specify _____

6. Please check your type of employment as a consulting dietitian.
   - ☐ 1. Part time
   - ☐ 2. Full time

7. Please check the average number of hours you work as a consulting dietitian.

   Number of hours per day
   - ☐ 1. 1 - 2
   - ☐ 2. 3 - 5
   - ☐ 3. 6 - 8

   Number of hours per week
   - ☐ 4. 1 - 4
   - ☐ 5. 5 - 9
   - ☐ 6. 10 - 15
   - ☐ 7. 16 - 20
   - ☐ 8. 21 - 25
   - ☐ 9. 26 - 30
   - ☐ 10. 31 - 35
   - ☐ 11. 36 - 40
   - ☐ 12. Over 40

8. Please check the number of years worked as a consulting dietitian.
   - ☐ 1. Less than 4
   - ☐ 2. 5 - 9
   - ☐ 3. 10 - 14
   - ☐ 4. 15 - 19
   - ☐ 5. Over 20

9. Please check the number of employees you use in your consulting business. Nonprofessional employees—clerical, cleaning, maintenance, etc. Professional employees—dietitians, physicians, nurses, etc.

   Part time nonprofessional
   - ☐ 1. 0
   - ☐ 2. 1
   - ☐ 3. 2
   - ☐ 4. 3
   - ☐ 5. 4
   - ☐ 6. 5
   - ☐ 7. Over 5

   Full time non-professional
   - ☐ 8. 0
   - ☐ 9. 1
   - ☐ 10. 2
   - ☐ 11. 3
   - ☐ 12. 4
   - ☐ 13. 5
   - ☐ 14. Over 5

   Part time professional
   - ☐ 15. 0
   - ☐ 16. 1
   - ☐ 17. 2
   - ☐ 18. 3
   - ☐ 19. 4
   - ☐ 20. 5
   - ☐ 21. Over 5

   Full time professional
   - ☐ 22. 0
   - ☐ 23. 1
   - ☐ 24. 2
   - ☐ 25. 3
   - ☐ 26. 4
   - ☐ 27. 5
   - ☐ 28. Over 5

10. Please check your 1985 annual gross revenue as a consulting dietitian. Please check your annual gross revenue (estimated or actual if available) as a consulting dietitian for 1986.

1985	1986	
☐	☐	1. Less than 4,999
☐	☐	2. 5,000 - 10,499
☐	☐	3. 10,500 - 15,499
☐	☐	4. 15,500 - 20,499
☐	☐	5. 20,500 - 25,499
☐	☐	6. 25,500 - 30,499
☐	☐	7. 30,500 - 35,499
☐	☐	8. 35,500 - 40,499
☐	☐	9. 40,500 - 45,499
☐	☐	10. 45,500 - 50,499
☐	☐	11. 50,500 - 55,499
☐	☐	12. 55,500 - 60,499
☐	☐	13. Over 60,500

The following section—questions 11 through 23—will cover factors that affect the pricing of services provided to a private client. In this context, a private client will be defined as one who pays for your services either out of personal funds or through private health insurance coverage.

11. Does your practice provide consultation for private clients?
☐ 1. Yes ☐ 2. No

12. Please check the average number of private clients that were seen over the last year per full time consulting dietitian.
☐ 1. Less than 10
☐ 2. 11 - 25
☐ 3. 26 - 50
☐ 4. 51 - 75
☐ 5. 76 - 100
☐ 6. Over 100

13. Please estimate the percentage of private clients that are physician referred. Check the appropriate answer.
☐ 1. Less than 9%
☐ 2. 10% - 19%
☐ 3. 20% - 29%
☐ 4. 30% - 39%
☐ 5. 40% - 49%
☐ 6. Over 50%

14. Please estimate the percentage of private clients that are walk-ins. Please check the appropriate answer.
☐ 1. Less than 9%
☐ 2. 10% - 19%
☐ 3. 20% - 29%
☐ 4. 30% - 39%
☐ 5. 40% - 49%
☐ 6. Over 50%

15. Please estimate the percentage of private clients that are seen in physicians' offices. Check the appropriate answer.
☐ 1. Less than 9%
☐ 2. 10% - 19%
☐ 3. 20% - 29%
☐ 4. 30% - 39%
☐ 5. 40% - 49%
☐ 6. Over 50%

16. Please estimate the percentage of your firm's total revenue obtained from private clients. Check the appropriate answer.
☐ 1. Less than 10%
☐ 2. 11% - 25%
☐ 3. 26% - 50%
☐ 4. 51% - 75%
☐ 5. 76% - 100%

17. Is your charge to private clients a flat hourly rate?
☐ 1. Yes ☐ 2. No

18. Do your charges to private clients vary based on the individual service that you provide the client, e.g., weight reduction, wellness/prevention counseling, diabetic diet counseling, low cholesterol or low sodium diet counseling?
☐ 1. Yes ☐ 2. No

19. Please check your charge per hour to private clients. If the charge is based on service provided (refer to question 18), please list the service next to the applicable rate. Please indicate if the charge is a flat hourly rate.

Services provided or hourly rate

☐ 1. Less than $9 _____
_____

☐ 2. $10 - $19 _____
_____

(Question 19 is continued on the next column.)

☐ 3. $20 - $29 _____
_____

☐ 4. $30 - $39 _____
_____

☐ 5. $40 - $49 _____
_____

☐ 6. $50 - $59 _____
_____

☐ 7. $60 - $69 _____
_____

☐ 8. $70 - $79 _____
_____

☐ 9. $80 - $89 _____
_____

☐ 10. Over $90 _____
_____

20. Do you receive third party reimbursement?
☐ 1. Yes ☐ 2. No

21. Please check the percentage of revenue that comes from third party reimbursement.
☐ 1. Less than 9%
☐ 2. 10% - 19%
☐ 3. 20% - 29%
☐ 4. 30% - 39%
☐ 5. 40% - 49%
☐ 6. Over 50%

22. For the time spent counseling private clients, please indicate the percentage devoted to each of the following subtasks. Please total 100%.

Percentage
_____ 1. Initial contact—assessing nutritional status and identifying goals.
_____ 2. Preparation—developing a plan to introduce objective knowledge.
_____ 3. Presentation—implementation of plan and incorporating objective knowledge to help set priorities.
_____ 4. Records—maintaining progress reports and identifying nutritional problems.
_____ 5. Evaluation—reassessing nutritional status—has level of nutritional consciousness been raised and has client achieved independence.
_____ 6. Other, please specify _____
100%

23. Please rate the subtasks by their importance in determining the fee charged to your private clients. 1 = very important, 2 = often important, 3 = important, 4 = seldom important, 5 = never important. Please check the appropriate answer.

1. Initial contact
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

2. Preparation
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

3. Presentation
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

4. Records
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

5. Evaluation
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

6. Other, please specify _____
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

The following section—questions 24 through 32—will cover factors that affect the pricing of services provided to contract clients. A contract client will be defined as an organization that hires a consulting dietitian to provide nutritional services that are: (a) covered by medicare, such as nursing homes, renal dialysis units, home health organizations, physicians' groups and outpatient clinics; (b) financed by federal government-related funding resources such as WIC programs, Older American programs or Maternal and Child health Services; and (c) organizations which have consulting dietitians as staff member in order to improve and expand the services offered to clients such as athletic groups, Health Maintenance Organizations, restaurants, industries, newspapers, magazines, radio/TV stations, and colleges/universities.

24. Does your practice provide services for institutions, groups and/or organizations?
☐ 1. Yes ☐ 2. No

25. Please check (A) all of the following for whom you provide services. Please rank those organizations with whom you have contracts from the largest amount of revenue to the least amount of revenue you received in (B) 1985 and (C) 1986. 1 = most revenue, 14 = least revenue.

A	B	C		
____	____	____	1.	Nursing Homes
____	____	____	2.	Renal Dialysis Centers
____	____	____	3.	Physician's Groups
____	____	____	4.	Athletic Groups
____	____	____	5.	Health Maintenance Organizations
____	____	____	6.	Colleges/Universities
____	____	____	7.	Restaurants
____	____	____	8.	Home Care Organizations
____	____	____	9.	Ambulatory Care Organizations
____	____	____	10.	Community Health Centers
____	____	____	11.	Industries
____	____	____	12.	Newspapers/Magazines
____	____	____	13.	Television/Radio
____	____	____	14.	Other, please specify ____

26. Please check the number of clients that are contract clients.
☐ 1. Less than 10
☐ 2. 11 - 25
☐ 3. 26 - 50
☐ 4. 51 - 75
☐ 5. 76 - 100
☐ 6. Over 100

27. Please estimate the percentage of your firm's total revenue obtained from contract clients. Check the appropriate answer.
☐ 1. Less than 9%
☐ 2. 10% - 19%
☐ 3. 20% - 29%
☐ 4. 30% - 39%
☐ 5. 40% - 49%
☐ 6. Over 50%

28. Is your charge to contract clients a flat hourly rate?
☐ 1. Yes ☐ 2. No

29. Is your fee based on the individual services provided to contract clients, for example, charting, in-services, home visits, individualized recipes, menus, production charts, nutritional assessments?
☐ 1. Yes ☐ 2. No

30. Please check your charge per hour to contract clients. If the charge is based on individual services (refer to question 29), list the service next to the applicable rate. Please indicate if the charge is a flat hourly rate.

Service provided or hourly rate

☐ 1. Less than $9 _____
☐ 2. $10 - $19 _____
☐ 3. $20 - $29 _____
☐ 4. $30 - $39 _____
☐ 5. $40 - $49 _____
☐ 6. $50 - $59 _____
☐ 7. Over $60 _____

31. For the time spent providing services for contract clients please indicate the percentage utilized in each of the following subtasks. Please refer to question 22. Please total to 100%.

Percentage

____ 1. Initial contact
____ 2. Preparation
____ 3. Presentation
____ 4. Records
____ 5. Evaluation
____ 6. Other, please specify _____
100%

32. Please rate the subtasks in importance in determining the fee charged to your contract clients. 1 = very important, 2 = often important, 3 = important, 4 = seldom important, 5 = never important. Please check the appropriate answer.

1. Initial contact
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

2. Preparation
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

3. Presentation
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

4. Records
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

5. Evaluation
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

6. Other, please specify _____
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Please rate the following questions (33-35) in importance with the following scale. Please check the appropriate answer

1	2	3	4	5
Very Important	Often Important	Important	Seldom Important	Never Important

33. Of the following factors, please indicate their relative importance in setting your fees. Check the appropriate answer.

1. Services performed by institution/group/organization such as nursing home, physicians' group, WIC programs, Maternal and Child Health Services, industries, colleges/universities.
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
2. Annual revenue of institution/group/organization
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
3. Prevailing rates in your area
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
4. Your personal worth
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
5. Services you provide for the instituiton/group/organization
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

34. Please check according to influence, the following dimensions of nutritional counseling in setting your fee.

1. Actual counseling time with client
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
2. Experience of dietitian
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
3. Education of dietitian
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
4. Number of years in consulting
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
5. Importance of service to client
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

35. Please rate by importance the following standards of practice that you feel produce the maximum quality control. Please check the appropriate answer.

1. Formal policy for quality standards—established performance criteria to measure quality practice
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
2. Continuing evaluation of values, goals, and processess-evaluation of processess and outcomes
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
3. Collaboration and communication with other professionals, personnel and clients—obtain interpretation of nutritional information from others
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
4. Application of research principles—use of research findings in all aspects of practice
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
5. Professional growth of knowledge and skills—defined goals and direction for professional development
   1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

36. Please list the 5 main criteria you use for judging your effectiveness.

37. What do you perceive as being the highest fee a client would be willing to pay if your fee for services provided was based on the client's perception of price/value relationship for:

$ ___ 1. Prevention/wellness one on one counseling for a private client.

$ ___ 2. Computerized nutritional assessments for residents/patients/clients in a contract service.

Appendix B
Cover Letter

COLLEGE OF HUMAN RESOURCES

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DEPARTMENT OF HUMAN NUTRITION AND FOODS

March 1, 1987

Dear Colleague:

The Consulting Nutritionists Practice Group offers many benefits to its members. The best being that it provides a medium in which new ideas and resources are exchanged.

All of us are interested in what can be charged for the different services provided by a dietitian in private practice. The enclosed questionnaire, for my master's research, will be of help in deciding what your pricing philosophy should be. It will provide guidelines and explanations on what the existing fees are and how those fees are assigned to specific services. The results of the survey will be shared with those in the practice group who are interested.

The private practice sector is growing. With you help it can achieve a more business oriented stature. Please fill out the questionnaire and return it to me in the self-addressed envelope.

Thank you for your willingness to help.

Sincerely,

Shirley Haskins, R.D.

Appendix C
Questionnaire Follow-Up Letter

COLLEGE OF HUMAN RESOURCES

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DEPARTMENT OF HUMAN NUTRITION AND FOODS

February 15, 1987

Dear Colleague:

All of us are busier these days than we should be, and most of us have a hard time keeping abreast of our obligations. I know how the little extras sometimes receive our best intentions, but I also know that in reality none of us have the time which we would desire to fulfill those intentions.

From the questionnaire which reached you—I hope—about a month ago, I have had no reply. Perhaps you mislaid the questionnaire, or it may have been misplaced in the mail. A number of things could have happened to it.

In any event, I am enclosing another copy of the questionnaire. I am sure you will try to find fifteen minutes somewhere in your busy schedule to check its several items and drop it in the nearest postal box. Most of them have been returned. I would like to get them all back.

Thanks. I appreciation your assistance.

Sincerely,

Shirley Haskins, R.D.

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