MANAGING PROFESSIONALS IN HEALTH CARE ORGANIZATIONS:
Implications From A Study of Dental Franchises

by

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ABSTRACT

One of the most important recent developments in the provision of health care has been the development of alternative delivery systems and managed care systems. This development, however, comes into conflict with the traditional styles of the provision of health care, especially the autonomy of the individual clinician. Such a conflict has serious implications for the medical and dental professions as well as for the viability of managed health care systems.

This dissertation discusses the impact of professional autonomy on the management and financial success of one type of alternative delivery system - the dental franchise. In contrast to comparatively low failure rates of non-professional franchises, the failure rate of dental franchises has been quite high. Two hypotheses have been suggested to explain this failure. One hypothesis was that dental franchises were failing due to poor management decisions, and inadequate management of employees. The alternative hypothesis was that failure was due to the presence of special difficulties in managing dental professionals, who expect a far larger degree of autonomy than most employees, and the absence of adequate management theory to deal with this special group.

A case-study approach is used in which the dentist-franchisees and central organization personnel are studied via detailed questionnaires and personal interviews. Two of the dental franchises examined have failed and one is still in existence. Results from this study support the
alternative hypothesis; that failure was primarily due to incompatibility between the autonomous nature of the dental professional and the strict management control required by franchising. Franchise management control systems evoked resistance among the professionals, and conflict that was difficult to resolve. Therefore, for a managed dental care program to be successful, it must ensure professional compliance through the development of a system that encompasses principles of professional clinical autonomy.

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CHAPTER 1
INTRODUCTION

Among the most important developments in the field of health care today has been the development of alternative delivery systems and managed care systems designed to introduce business approaches to medicine and dentistry. These changes in health care delivery systems, however, conflict with the traditional provision of health care, in particular, the professional autonomy of the individual clinician. This conflict has serious implications for the medical and dental professions as well as for the viability of managed health care systems.

Alternative systems to deliver medical and dental care have been encouraged by government, employers, and insurance companies in order to control the rapid escalations in the cost of health care. These systems generally entail a greater degree of management involvement and control than do more traditional forms of health care. The effect of this increased role of management is complicated by issues involving professional autonomy. Management of health care no longer just applies to the business aspects such as records and accounting, but now extends to the management of both the care and the care-givers. The success of managed care organizations may be highly dependent upon the desire of medical and dental professionals for autonomy.
Academics have studied professional autonomy in order to better understand why professionals react the way that they do. (Ku 1990, Burns et al. 1990, Lichtenstein 1984) Key issues in the professional literature include conflict, power, and autonomy. The many years of education involved and the specific nature of the service industry attract, promote, and create a unique kind of individual - the health care professional. (Freidson 1972)

Past academic research on professional dominance has primarily focused on the nature of the medical professional in the hospital environment. (Linn 1985, Okoronfor 1983, Shortell 1985) Little investigation has been done on professionals in other settings, such as franchise, health maintenance organization or other forms of alternative delivery systems.

The autonomous nature of the professional may contribute to even greater difficulty in models such as medical or dental franchises. Health professionals such as physicians and dentists may be less likely to adhere to franchise orders or rules than is the typical franchisee. Such noncompliance leads to great difficulties especially in a franchise setting where the business is structured around management and control.

The focus of this thesis is to utilize one specific alternative delivery system, i.e. dental franchising, as the vehicle to explore issues surrounding management of professionals. In general terms, franchising is "a system
in which franchisors offer management expertise and marketing resources to small business enterprises with limited capital, to help them achieve success." (Seltz 1987 p1) More specifically, the franchisor sells to a franchisee an already successful business approach including the right to do, use or sell a good or service that is the property of the franchisor. In exchange, the franchisee pays an initial or annual fee and/or royalty or license fees.

Franchising is one of the most prominent and profitable of any type of businesses in the United States today. (Seltz 1982) There are over 50,000 franchised businesses which account for more than one-third of all current retail sales. Franchising has experienced spectacular growth in the past ten years. In 1989, a total of 509,000 franchise outlets of all kinds accounted for $640 billion in sales, a 52 percent increase since 1983. (DeGeorge 1989) Dun and Bradstreet report that on average, franchises have a much lower failure record than comparable non-franchised businesses. (Walker and Cross 1988, Atkinson 1969)

In an effort to duplicate the success rate of franchises in other industries, the first dental franchise center started operation in California only months after the 1977 Supreme Court decision that legalized advertising in medicine. (Bates v Georgia 1977) In 1980, Dental World Inc., a New York based franchisor, became the first franchise to sell stock in a public offering. In spite of small market share, (only two to five percent of all dental care is
provided through all types of non-traditional practices), (Council on Dental Practice 1983) the existence of franchise dentistry has generated much controversy since its recent introduction. (Eagan 1984)

Dental franchises have not, for the most part, performed well. (Yavner 1988) Currently, only two out of twelve established dental franchises are still in existence. (see Table 4-2) The reasons for the poor performance of most dental franchises are not readily apparent.

As part of this research, two alternative hypotheses concerning dental franchise failures were initially proposed. One hypothesis was that dental franchises were failing because of poor management decisions and inadequate management of employees. A second hypothesis was that failure was due to the presence of special difficulties in managing dental professionals, who expect a far larger degree of autonomy than most employees, and the absence of adequate management theory to deal with this special group.

To test these hypotheses, a case-study approach analyzing three dental franchises was employed. Two of these franchises, Omnidentix Inc. and Smiles Inc. have failed. One franchise, Dental Health Services is still operational. Forty-five dentist-franchisees along with the central franchisors of these three franchise organizations were interviewed and completed questionnaires. These three dental franchises, Omnidentix, Smiles, and Dental Health
Services are analyzed, in order to better understand whether their success and/or failure is primarily due to management or dentist autonomy issues.

Chapter two reviews pertinent literature in the social science of professional autonomy as well as in the management field of franchising to provide a solid basis for discussion of this multi-disciplinary study. General principles for successful franchising are also presented in order to be utilized as a basis for comparing franchise performance. The methods of research are detailed in chapter three.

Chapter four describes the entry of franchising into the dental care market. The advantages and disadvantages that franchising entails for both the franchisor and the franchisee are discussed, followed by a description of dental franchises and the industry's numbers and trends.

Chapter five presents case studies of the three dental franchises examined in depth. A description and analysis of management mistakes made by each of the dental franchisors continues in chapter six. Chapter seven discusses the impact that professional autonomy issues have upon the success or failure of the dental franchises. The relative success of the non-franchised dental care market as well as general financial issues of the dental franchises are detailed in chapter eight, in order to rule out an overall poor dental market as an explanation for dental franchise failure.
Dental franchising is theoretically structured around the concepts of management and profit as well as the provision of care to the patient. Yet, in a professional organization such as a dental franchise, the approach and type of management controls advocated by franchise and management experts lose reliability. The end products, the oral health of patients, are far from uniform. The process of treating different patients with different services is complicated by the biological variation of each patient. There is no single scientific formula for estimating costs, process or product in a dental office. Management control of both the complex production process and the autonomous dentist is difficult. Therefore, a modified approach to managing professionals is needed.

In summary, this paper is an attempt to bridge two overlapping but usually distinct subjects; the social science of professional autonomy and the management discipline of franchising. Franchising presents a system of planning and control which, if closely adhered to, leads to success. Professional autonomy theory predicts that physicians and dentists will resist outside control. These seemingly conflicting theories from each discipline are combined in a dental franchise. Dental franchising is thus a unique vehicle through which to explore both the nature of professional dominance and the impact of managing professionals on the success of a health care system.
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CHAPTER 2
LITERATURE REVIEW

I PROFESSIONAL AUTONOMY

General

Physicians constitute one of the most powerful groups in American society. Scholars have long tried to understand the scope of physician power, the reasons for it and the way that physicians employ it. (Lichtenstein 1988, Light and Levine 1988) Physicians and dentists in general, derive most of their traits and power from their position in society as professionals.

A profession can be defined as an occupation that has achieved autonomy or self-direction. (Vollmer and Mills, 1966). An exploration of the nature of physician autonomy will provide a better understanding of professional dominance in health care and dental franchise settings.

The first part of this chapter will review literature discussing the characteristics of physicians and the nature of physician autonomy. Conflicts arising due to professional dominance and physician-management relationships will also be explored to understand the importance of professional autonomy upon the success of a health care venture such as dental franchising. Although professional autonomy literature has primarily dealt with physicians and hospitals, research has demonstrated the
similarities in personality and attitudes between physicians and dentists. (McDaniel 1988, Manhold 1963, Rosenberg 1965) For the purposes of this discussion it is assumed that dentists and physicians, as fellow professionals involved in the delivery of health care, are similar with respect to aspects of professional autonomy.

**The Theory of Professional Dominance**

The prevailing concept of professional dominance suggests that health care providers place a high value on their autonomy. (Ku 1990, Linn 1985) The professional retains autonomy not only over his own work, but also over the work of others. (Stamps 1988) Autonomy is granted to professionals by the public both through explicit licensure laws, and by informal actions in the belief that professionals can be trusted to act in the public interest. (Wolinsky 1988, Anderson 1985)

Societal deference to professionals results from three characteristics which physicians and dentists, as members of a profession, are thought to possess. (Freidson 1970) The first characteristic of a profession is a long and specialized training period conferring knowledge and skills that the layman does not possess. Medical school also serves a socializing function, so that students graduate with the attitudes and belief structure necessary to conform to the role of the professional. (Freidson 1972, Stone 1980)
A second trait of professionals is their service orientation. Service orientation allows physicians to be trusted to provide the highest quality care without the need for outside supervision. (Vaughan 1989) The public credits health care providers with possessing a "cosmopolitan orientation" that is, "low on loyalty to the employing organization, high on commitment to specialized role skills and likely to use an outer reference group orientation." (Gouldner 1957 p.290) The more society values good health, the greater the dominance of the physician.

The final characteristic of a physician is dominance in the medical division of labor, and an assumption of risk. Only the physician has the knowledge and the power to diagnose and treat illness. The doctor is granted autonomy because of the pervasive belief that medicine and dentistry are complex and nonroutine. (Freidson 1972)

Not only does the physician assume authority in the sphere of his expertise but the physician's dominance extends to give him a "wedge into other zones of practice." (Freidson 1972 p.3) In this way, physicians have additional control over such non-clinical practices as facilities and management. (Equitable Life 1984)

Control of Physician Power

The autonomy of the physician leaves medicine a profession not easily controlled by others. (Murphy 1990, Okoronfor 1983) Physician desires to retain their
independence have largely shaped past methods of controlling physician actions. (Starr 1987, Stone 1980) As a result, traditional forms of clinician control including peer review, state boards and medical associations are ineffective. A brief discussion of these control mechanisms and their limitations allows a better understanding of the problems inherent in creating new controls for doctor behavior.

The most prominent form of control of physicians is peer review. Peer review doctors informally observe the performance of other physician's work and render suggestions for improvement. In order to function adequately as a control mechanism, peer review requires doctors to perform three actions; observe another doctor's work be willing to criticize another doctors' performance and, take sanctions against another doctor. These conditions are rarely met. (Freidson 1972) Even when physicians work together in group practices, each retains his autonomy. (Stone 1980)

More formal methods of clinician control such as professional associations and state boards of medical examiners also do not appear to be effective. Few state boards or medical associations have the legal right or the inclination to monitor the clinical performance of physicians. (Stone 1980 p.48)

In practice then, both informal and formal methods of professional control have been unsuccessful. Doctors place a high value on their autonomy and resist external control.
Physician Control in a Traditional Hospital Setting

Physician autonomy not only limits government constraints on physician behavior, but also restricts the control of physicians in a traditional hospital setting. Management has little power to punish inadequate work by clinicians and it has limited power to reward superlative efforts. (Gross 1961, Engel 1965) Economic controls such as salary have negative consequences for the professional due to constraints placed upon the medical professional's traditional freedoms. Instead, normative controls are more effective since they preserve physician autonomy. (Burns et al. 1990, Equitable Life 1984)

Physician resistance has also neutralized much of the authority of management. Doctors especially resist management actions that interfere with their clinical actions. (Carpenter 1989) Conflict between clinicians and managers is often explained by the different goals of the two groups. (Engel 1965, Scott 1965) The goal of management is to have the organization run efficiently and provide the maximum amount of quality care with the inputs at their disposal. The goal of the professional is to provide the best quality care to their individual patients regardless of cost. (Freidson 1970, 1972)

To minimize conflict when professional and management structure are combined in a traditional hospital setting, the issue of physician autonomy has resulted in two separate lines of authority. (Smith 1958, Harris 1977) Each group
acts independently while struggling for jurisdiction and control over the organization as a whole.

Alternative Theories of Professional Dominance

Despite the many changes in the delivery of health care in the past decade, the prevailing concept of professional dominance remains the basis for study of health care professionals. (Wolinsky 1988, Ku 1990, Schulz 1988) Although the autonomy of individual physicians may have been reduced, the autonomy of the profession remains intact. Even when individual physicians do not control their environment, they are managed by other physicians. Thus, physicians still dominate medicine, either individually or collectively. (Freidson 1984, 1985, 1986b)

The changes in health care have, however, led other academics to argue that there has been movement away from the autonomous model. (Shortell 1985, Scott 1982) Several alternate theories of the role of the professional have been proposed including deprofessionalization - emphasizing consumer revolt and corporatization - stressing corporate control of medicine.

Deprofessionalization argues that professional dominance is weakening and that medicine is losing its prestigious societal position. (Haug 1981) This shift is attributed to increasing medical and general knowledge by consumers and a resultant rising cynicism concerning professionals. (Haug 1973, Haug 1976 and Haug and Levin 1981)
The growing corporatization of medicine has resulted in a reduction in the self-employment and the autonomy of physicians. (McKinlay 1988) Professionals are increasingly subjected to corporate control such as utilization review, incentive programs, quality review, and restrictions on practice patterns and the organization of practice. (Burnham 1984, Stoeckle 1988, Scovern 1988) Corporatization predicts that professionals will retain control over the means of their work, but not over the end products. (Derber 1982, p169-87)

Summary

The professions of medicine and dentistry have undergone radical changes in the past twenty years. Professions once consisting solely of independent health care practitioners practicing in traditional fee-for-service systems have now expanded to include group practices, capitation plans and franchised health care. Nonetheless, professional autonomy literature suggests that physicians and dentists, as professionals, desire to be autonomous. (Wolinsky 1988, Light and Levine 1988)

The desire by professionals for autonomy and self-control has been studied by many academics. (Lichtenstein 1984, Scott 1982) Past attempts to control professional autonomy, especially in the clinical setting, have led to conflict within the organization. Physicians view themselves as being primarily concerned with quality of care
issues and management as being concerned with cost and efficiency issues. (Equitable Life 1984)

To minimize conflict, management and government have traditionally depended upon physicians to regulate themselves. Past attempts at government regulation of physicians have not been effective. (Stone 1980) There is also little evidence that management control strategies are effective in increasing physician satisfaction. (Burns 1990) The physician's autonomy is also preserved by having two separate lines of authority, one for management and one for providers.

The growth of alternative delivery systems may affect the traditional nature of the autonomy of the health care professional in the future. (Shortell 1985, Burns 1990) These organizations tend to rely more on management of health professionals than do more traditional modes of delivery. Alternative health care delivery systems, by emphasizing business and management techniques, may improve efficiency and profitability. At the same time, however, the greater scope of management allows it to increasingly influence clinical practice. By decreasing provider autonomy and contributing to physician dissatisfaction, these organizations may also be undermining their very existence. (Scovern 1988, Traska 1988)

The autonomy of doctors in all health care settings may also be challenged with the increase in information
networks. Even traditional hospital settings are increasingly encroaching on physician autonomy.

The continued dominance of the theory of physician dominance and the failure of government's currently existing methods for controlling physician behavior, lends doubt as to the ability of any system to overcome this force. (Lachine 1988) Ultimately, the long-run success of non-traditional health care systems, such as dental franchises, relies on its professionals. Without the support of the health care professional, success is not likely.

II MANAGEMENT PRINCIPLES OF FRANCHISING

Introduction

Franchising is one of the fastest growing segments of the US economy. A main component of its success is the small number of franchises which fail. (Isaacs 1986) The US Dept. of Commerce and the Small Business Administration report that after two years, 95 percent of franchises are still operating, while only 70 percent of independents are. (Battle 1986)

Management literature is replete with articles and books purporting to instruct the novice on how to establish and operate a successful franchise organization. (Seltz 1982, Tarbutton 1986) These guidelines, however, are confined to nonprofessional franchise organizations. Nonprofessional organizations appear to be more receptive to
the concept of franchising, than are professional organizations. (Levitt 1985)

Franchisors usually provide their franchisees with initial and continuing expertise and instruction. These services commonly include site selection, facility design, lease negotiation, zoning advice, financing, employee/management training, operating manuals, and management advice. Other ongoing services in a well operated franchise system, include discounts on purchases of equipment and supplies, quality inspection, field supervision, merchandising and promotional help, national advertising, and centralized purchasing. (Mendelsohn 1985 p3)

This section will analyze such critical areas in franchising as finance, marketing, franchisee training, franchisee selection, location, support, and control. Franchise experts believe that following these general guidelines will lead to successful franchising for all types of franchises including dentistry.

Finance

Financial management is a critical aspect of franchise organization. (Kreisman 1986, Padmanabhan 1986) An adequate financial plan, capital requirements, and financing are necessary for any type of franchise organization. (Oxenfeldt and Thompson 1968, Walker 1988)

Financial advantages exist in a franchise system. (Wright 1986, Caves and Murphy 1976) For example,
franchising allows for the rapid acquisition of large amounts of capital without diluting ownership in the venture, or creating high debt levels. (Oxenfeldt and Thompson 1968) Pooling the franchisor's and franchisee's resources decreases the cost of capital offered by lending institutions. (Diaz and Burnick 1969)

Despite these advantages in securing capital, financial undercapitalization is a key factor in franchise failure. (Nevin and Collins 1988, Tarbution 1986) Total franchisor capital requirements for prototype and package development, and for working capital and reserve requirements are substantial, and usually in the range of $100,000 to $500,000. (Seltz 1982) Adequate financial capital is infrequent in new franchises. (Walker and Cross 1988, Nevin and Collins 1988) Undercapitalization of franchisors also affects franchisees adversely, since franchisees do not obtain the support expected from their franchisors. (Ayling 1987)

Before expanding, the viability of the venture as an investment must be carefully evaluated to assure a reasonable payback period and rate of return. Too rapid an expansion can result in inadequate resources and failure of the franchise system. (Kreisman 1986)

**Revenues**

There are several forms of revenue sources available to the franchisor. These include franchise fees, both
initial and ongoing fees such as royalties, along with rental/sale of premises, equipment, supplies, raw materials, and sale of territorial rights. (Seltz 1982, Peterson et al. 1989)

In order to become successful, franchise fees and royalties must be structured, in order to facilitate the entry of qualified franchisees. (Woll 1968) The initial franchise fee is the fee which franchisees must pay to enter the franchised business. This fee can range from several thousand dollars to over $250,000 for a McDonald's franchise. The setting of the initial franchise fee has important implications for the success of the franchise. (Oxenfeldt 1968) A low franchise fee will facilitate entry by franchisees. A high franchise fee will limit entry of franchisees to those with substantial capital. (Calhoun 1975)

Ongoing fees should allow both the franchisee and franchisor to make a reasonable return on investment, to meet price competition, and to maintain quality. Franchise fees that include a royalty or commission based upon the gross sales typically average two to five percent. (Nevin 1988) The decision to charge royalties as a flat charge, or as a percentage of sales, reflects franchisor strategy. Fees based upon percentage of sales are a form of risk-sharing by the franchisor. With a flat fee, the risk is borne solely by the franchisee. (Oxenfeldt and Kelly 1968)
Marketing

Another critical aspect of successful franchising is marketing. Marketing includes both the analysis of marketing opportunities and the choice of marketing mix such as media, advertising, and promotion components. Advertising and promotional activity are important facets of the marketing program of most franchise organizations. (Kotler 1987, Tarbutton 1986)

Advertising allows for the establishment of the franchise name, thereby attracting consumers to a recognized name representing a high level of satisfaction. Franchises can also take advantage of economies of scale in advertising due to their size and purchasing power. (Kotler 1987) By locating many outlets within the advertising medium's effective radius or Areas of Dominant Influence (ADI's), significant savings can be realized. (Seltz 1982) ADI's enable the franchise chain to purchase advertising on a regional/national level at cost-minimizing prices. The degree to which these economies can be realized will increase with increasing size of the organization.

Despite its importance, research into marketing performance of franchises has suggested that franchisor marketing skills are often poor. (Davis 1985, Carson 1985, Pettit and Kirkwood 1986) In general, franchisees accept their franchisor's expertise in marketing and conform to franchisor marketing decisions. (Pettit 1988) However, a 1984 survey of 200 franchise organizations in the food and
hotels reported a wide degree of variability between and within franchising systems in marketing assistance. (Howden 1984) Another study of three leading franchise organizations, although acknowledging the importance of a recognized brand name and national advertising as major advantages of franchising, reveals that over 60 percent of the franchisees were dissatisfied with their marketing support. (Stamworth 1983)

Many franchisees prefer greater marketing resources to be spent on a local basis, and desire more active involvement and influence in the overall marketing decision-making of the franchise organization. Franchisees want increased marketing efforts in the areas of sales promotion, selling skills, market research and market planning. (Davis 1985)

**Selection and Training Of Franchisees**

The selection of franchisees is considered to be a critical element in the design of a successful franchise. Surveys have shown that the recruitment and selection of qualified candidates is the franchisor's single most pervasive operating problem. (Lewis and Hancock 1987 p80, International Franchising Association 1989)

Many studies have focused on the relationship between characteristics of a franchisee and success of a franchise center. (Mescon and Montanari 1981, Brockhaus 1982) Franchisee characteristics examined fall into three general
categories: knowledge/capabilities, personality and financial considerations. The personality of franchisees is considered by franchisors to be the most important characteristic of franchisees. (Olm and Eddy 1988) Credit and financial resources are also a high priority. (Tatham, Douglass and Bush 1972) Other important factors are industry, motivation, perseverance, attitude with others, general management, and energy. (Weinrauch 1986) The least important factors in franchisee selection are knowledge, health, marital status, celebrity status, resident two years in the area, and skills in merchandising and accounting. (Olm and Eddy 1988) These rankings express the belief that, despite previous experience, franchisee motivation and hard work will lead to high performance and success.

The training of franchisees is another important facet of successful franchising. The goal of franchising is to reproduce a successful business venture. As such, the efficient and accurate transfer of knowledge and skills is essential. (Padmanabhan 1986) The process of franchisee training therefore, is at the crux of any successful franchising program. (Weinrauch 1986, Wattel 1968)

Surveys reveal franchisee training to be a critical mechanism of assuring efficiency and quality standards in each franchised unit. (Levine 1985, Izreali 1972). Franchisees must be instructed in many diverse skills including management, advertising, promotion, and accounting. Training varies with the type of franchise
system and ranges from on-the-job training (such as in Baskin Robbins) to intensive schooling (such as 50 hours preregistration, 300 post registration and 11 day managerial training at McDonald's Hamburger University). (Hackett 1977)

Effective training is critical to the success of a franchised unit. (Holder 1985, Franklin 1985, Fenske 1984) Research indicates that franchisors provide most of the necessary start-up training to franchisees for both managerial (94 percent) and non-managerial (84 percent) functions. Less continuing training is provided (managerial 79 percent and non-managerial 74 percent).(LaVan, Latona and Coye 1988) Training devices most frequently employed included the training manual and company newsletters. Of all franchising services provided, franchisee training consistently receives the highest levels of satisfaction from franchisees. (Saubart and Saubart 1988)

Location

The importance of franchise location decisions is acknowledged by franchise experts. (Seltz 1982, Tarbutton 1985) Location decisions refer to market selection, area allotment of franchises or the number of franchises to locate in a given area, the actual site selection and outlet size and characteristics. (Zeller et al. 1980)

The actual process of location analysis is an important factor in the decision-making. Detailed discussions of location evaluation data and methods have been compiled.
When choosing a location most franchises adhere to guidelines established by the Small Business Administration (SBA). The most important community location criterion is population size and demographics, followed by availability of a good franchisee and a good site location. The two factors considered to be least important include the adequacy of the supply of labor and the degree of product competition. (Bush, Tatham and Hair 1984)

Location decisions are often a major source of conflict between franchisee and franchisor due to the different locational goals that each possesses. The individual franchisee is concerned with choosing the profit maximizing location for his outlet. The franchisor, on the other hand is concerned with maximizing profits from all outlets. (Zeller, Achabal and Brown 1980)

**Support and Control**

The success of a franchise depends to a large extent upon management, financing, marketing and location, especially during the initial period of operation. Thereafter, the ongoing support of the franchisor becomes critical as a means to sustain the success of the franchise unit, and to justify its franchise fees. (Peterson and Goddard 1986)

It is the ongoing management services that franchisors most often fail to provide. (Seltz 1982, Hunt 1972)
Federal Trade Commission summary of franchise complaints lists 'management services' as the primary area of complaints by franchisees. Franchisees are much less satisfied with franchisor ongoing services than franchisors believe. (Knight 1986, Saubart and Saubart 1988)

Management control devices are especially important in a franchise organization, since it is this uniformity of quality which secures the franchise reputation. (Saubart and Saubart 1988, Stephenson and House 1971) Control over franchisees is established through standardization of products and operating procedures. (Izreali 1977) In order to provide adequate management services to franchisees, constant supervision is necessary. This type of control should be constructive supervision, of which communication between franchisee and franchisor is the key. (Nevin 1988) Properly administered quality-control procedures, then, influence franchise success by assuring uniform quality throughout the franchise chain.

Despite their importance, however, franchisees may be averse to controls in a franchise organization especially when franchisors tend to move toward more control, and less autonomy for the franchisee. (Stamworth and Curran 1983, Crandall 1970) In the general equipment rental industry, several rental franchises lost many franchisees when they attempted to assert a high level of control over their networks. (Curry 1966) Although the high autonomy condition leads to greater franchisee satisfaction, the low autonomy,
high control condition has a greater probability of financial success. High standardization and centralized decision power provide an efficient means of resolving conflict. (Stern and Brown 1988, Pettit 1988) Therefore, franchisors must maintain a delicate balance between allowing franchisee independence and exercising sufficient control which would lead to a successful franchisor/franchisee relationship and a financially successful franchise. (Bernstein 1968)

The degree of autonomy allowed by franchisors not only is a function of operational control exercised in the franchise, but also influences the degree of branding of the franchise's product. (Stephenson and House 1971) The degree of branding reflects the amount of preference and awareness for the product by consumers. For example, McDonald's franchises have high branding since their customers have definite expectations with respect to McDonald's prices and products and from which it is difficult for individual franchises to deviate. As branding increases over time, a franchise system will move towards less franchisee autonomy and greater franchisor control. (Stephenson and House 1971, Stamworth 1988)

The degree of autonomy exercised by franchises appears to be cyclical in nature, and reflect the length of time as a franchise. Franchisees typically follow franchisor suggestions in the first year. During the second year, they rely more upon their own decisions, and thereafter they
adopt a middle pattern consistent with their past experience in the system. (Anand 1987)

The replication of a franchise depends to a large extent upon there being a limited offering based upon standardized products. (Izreali 1977) This strategy allows for easier establishment and greater control over a franchisee. In this way, management decisions are limited, and can be integrated into standard operating procedures. Control is simplified through standardization.

**IMPLICATIONS FOR FRANCHISE FAILURE**

Many authors have attempted to describe why some franchises fail. Most failures can be traced to the franchisor's failure to provide an adequate support system for franchisees along with inadequate management and a deficiency of capital. (Peterson 1988 p2, Kreisman 1986)

Experts agree on three essentials for franchise success;

1) a sound concept
2) adequate financing
3) and a good relationship with franchisees

(Rice 1985, Tarbutton 1987)

Before franchising, a franchisor must have a well-established business with no unsolved problems, sufficient financial resources for funding beyond the startup phase, management depth, be economically viable and able to provide a sufficient rate of return to both franchisee and
franchisor. (Kreisman 1986) Both the franchisee and franchisor must believe that what each receives from the relationship is greater than what each pays. When the franchisee especially, feels that he/she is giving more than he/she is receiving, the relationship is threatened. (Curry 1986)

Several factors reduce the value of the franchisors' contributions and increase the possibility of failure. These include a low value of the franchise name in attracting customers, difficulty in replicating operations, low cost savings (from financing/equipment) and strong entrepreneurial personalities by franchises.

Industry specific characteristics may also be contribute to franchise failure. Such a relationship has been shown in the general equipment rental industry (Peterson 1988) and the automobile repair market (Crandall 1970).
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Chapter 3
Methods

Study Design

Survey of Franchise Organizations

A preliminary survey of dental franchised organizations was conducted in 1987. Ten questionnaires were mailed to dental organizations appearing to fit the definition of franchise dentistry. These were identified through literature review, contacts with dental societies, and national franchise organizations. When possible, site visits and personal interviews were used to supplement the questionnaires. This initial questionnaire primarily dealt with management structure and the management control systems employed in each organization. (see Appendix A)

Seven replies were received out of the ten questionnaires mailed, representing a 70 percent response rate. Six out of these seven questionnaires were complete. Those dental franchises responding to the survey included Dwight Dental Care Inc., Jonathan Dental Care and Dental Health Services. Three other dental franchises, including DentaHealth Inc., Smiles Inc. and ConsumerHealth Inc. also completed questionnaires although each had or was currently reorganizing under Chapter 11 of the federal bankruptcy code. One organization, The Dental Store responded, but did not classify itself as a franchise organization. Two other
organizations, Amdent and Consumer Dental Network, declined to respond to the survey, stating that they no longer classified themselves as franchise organizations. The only dental franchise declining to participate was Nu-Dimension Dental Services.

**Personal Interviews of Franchisors**

A case study approach was then designed to study the dental franchise industry in greater depth. Two successful dental franchises were to be compared with two failed franchises. The failed franchises chosen to study were Smiles of New England Inc. and Omnidentix Systems Inc. Both franchises had been among the largest of the dental franchise organizations and had set the standards that other franchises followed. Both franchises were also in close geographical proximity. The choice of successful franchises was limited by a rapid decline in the number of dental franchises. By the time study design was finalized, only two franchises continued to exist. Of the two, only Dental Health Services agreed to cooperate in this study. (Jonathan Dental declined to participate.)

Key central organization employees from each franchise were interviewed extensively. Employees interviewed included the chief executive officer and usually the chief financial officer or vice-president of dentistry. Topics discussed included marketing efforts, franchisee selection and training, management structure and style, finances,
management philosophy, and relationship with franchisees. (See Appendix B for complete interview schedule)

Personal Interviews of Franchisees

Personal interviews of dentist-franchisees were then conducted. Each franchisee completed a written questionnaire detailing personal background, philosophy, and finances. Dentists also rated franchisors on services provided, such as communication levels, marketing efforts, autonomy, and franchise product. (See Appendix C for interview schedule)

Response Rate

A total of 45 dentists participated out of 55 (n=45) for a response rate of 82 percent. Response rates for individual franchises were as follows: 100 percent for Omnidentix Systems Inc. (3/3), 85 percent for Dental Health Services Inc. (11/13) and 79.5 percent for Smiles of New England Inc. (31/39).

Statistical Analysis

Statistical analysis was used to further support the discussion. Success of a dental franchise is modeled mathematically using logistic regression. Although the small sample size precludes statistically significant conclusions, logistic regression reveals the relationship between franchise success or failure and performance in the
areas of management, communication, marketing, and finance. Parameters (B's) are estimated from the data using maximum likelihood estimation. Alternative models were examined to determine which produced a suitable fit to the data.
CHAPTER 4

The Dental Franchise Industry

Definition of Dental Franchising

The American Dental Association defines dental franchising as "a system of marketing usually under a trade name, where permitted by state laws or regulations. In return for a financial investment or other consideration, participating dentists may also receive the benefits of media advertising, a national referral system, and financial and management consultation."(Council on Dental Practice 1983 p518)

The Dental Franchise Concept

The franchise concept is an integral part of any franchise organization and incorporates a specific business strategy and a unique franchise identity. In theory, each franchised center bears the same name, a common identity, and embodies the same franchise concept.

Most dental franchises incorporate a similar franchise concept. Dental franchises are designed so that patients are attracted by such benefits as convenience of location and hours, together with pleasant surroundings and posted fees. Locations of centers are professionally selected. All are accessible by car, and are usually located in retail
malls, although some franchisors are now finding malls to be too expensive, and are opening freestanding centers.

Some franchises, such as Family Dental Centers Service Co. of Cleveland, locate inside department stores like Sears Roebuck and Co. In this type of setup, the franchise builds upon the name and reputation of its host store. It is hoped that the patient will extend the reputation of the store to the dental clinic, even though the two are legally separate.

By locating in a mall, the franchise may also attract a new segment of the population who appreciate the convenience, parking, and extended hours of the mall. A mall location has the advantage of facilitating the formation of a dental PPO or HMO with companies located in the same mall. This type of financing arrangement provides dental care for members, and guarantees a minimum patient base for the franchise, thereby decreasing the franchise's risk of failure.

Patients can shop in the mall and carry beepers that notify them when the dentist is ready. Thus, waiting time is minimized. Since time spent waiting by the patient has an opportunity cost associated with it, the cost of service to the patient is also decreased. The facilities are usually open extended hours, usually 12-18 hours per day and six to seven days per week. Walk-in emergency service is advertised for added convenience.

Dental franchise centers usually conform to a recommended size that management considers to be optimally
efficient. Most Omnidentix centers have seven operatories and each Dental World center has nine operatories.

Most franchisors offer a full selection of both general and specialized dental services. A large range of dental care appeals to patients desiring to simplify their purchasing process by obtaining dental care at just one location. The franchise might sequence its entry by initially employing only generalists and then expanding to include specialties when the center reaches profitability. Most franchises offer liberal financing plans for payment by credit card or bank loan. Some franchises such as Dwight and Omnidentix even offer company credit cards.

In order to make dental visits more enjoyable, franchises design their waiting rooms and operatories to project comfort, in contrast to the sterile atmosphere present at many dental offices. Waiting rooms are equipped with such amenities as television and movies to make waiting time more pleasant.

Some dental franchises have adopted unique franchise concepts. In the case of Smiles Inc., its creator Dr. Gary Sloan originated a franchise concept based upon the promotion of oral hygiene and prevention of periodontal disease. He advocated frequent scalings performed by hygienists, so that the patients did not need to see a dentist at all if they did not so wish. The fear associated with dental visits was thus intended to be decreased.
Dental World was built on a concept of cosmetic dentistry and new bonding techniques that its founder originated.

One of the most controversial aspects of the dental franchise concept has been its use of business expertise. Most other industries utilize management to a much greater degree than does the solo practice of dentistry or medicine. Dental franchises maintain that the employment of management control systems will lead to a more efficient and profitable dental organization.

Dental franchises share the general advantages and disadvantages of franchises in other industries discussed previously. However, dental franchises may also possess certain unique qualities.

**Dental Franchise Advantages**

Dentistry is a service industry distinct from retail or manufacturing industries. In an industry such as dentistry, largely composed of small-scale independent practices, group practices may have significant advantages. Lipscomb and Douglass found that cost-efficiency increases with practice size, over the range from one to four-dentist practices. (Lipscomb and Douglass 1986) Although these authors were not able to determine the presence of scale economies for practices with five or more dentists, other authors have found evidence that larger practices are more efficient. (Nash and Wilson 1979, Kushman 1978)
Dental franchises as group practices might realize gains in productivity. Increases in productivity are attributed to both labor and nonlabor inputs. As practice size increases, auxiliary personnel can be utilized in greater numbers and more efficiently due to increased specialization and division of labor. Increases in productivity can also result from standardizing nonlabor inputs such as instrument storage procedures and scheduling of patients.

Along with technical economies of scale, there also exist pecuniary economies of scale. Pecuniary cost savings are realized from discounts attributable to bulk purchases of dental equipment and office supplies. Discounts in equipment may reach ten percent. The discount available in bulk supplies, however, is at most 0.5 percent. (Spang and Pyner, interviews) Additional cost savings may be realized from the sharing of overhead expenses such as space, laboratory fees, computing systems, auxiliaries, billing, repairs, and mortgage.

Capital cost is decreased further by utilizing facilities more effectively. For example, the staggering of work schedules allows sixteen hours' utilization of facilities rather than the traditional eight. In this way, the fixed cost of capital is decreased by being spread over a larger quantity of patients. Larger practices also facilitate the introduction of more efficient inventory systems with subsequent declines in inventory costs.
Cost savings can also be realized by hiring young dentists when a large supply exists, such as in an area saturated with dental schools. Starting salaries at dental franchises ranged from $25,000 in Chicago, where four dental schools are located to $60,000 in undersupplied locations. (Eagan 1984 p168, FTC 1982 p26-9) Contracting dentists are often paid on a commission basis, receiving a percentage of net revenue as salary.

All of these cost efficiencies can be realized in any large-scale dental operation and are not exclusive to franchise dentistry. The only economies solely associated with franchises are the marketing advantages inherent in advertising the generic name of the franchise. Franchises depend upon sophisticated marketing techniques to increase name awareness and build brand loyalty among consumers. Significant economies of scale exist in national and local marketing regions. Clustering of franchised dental offices allows for advantageous media rates. (Hankin 1987)

**Dental Franchise Disadvantages**

Dental franchises also have many disadvantages including franchise fees, government regulation, organized resistance, and image problems. Center improvements in a mall location such as plumbing and laboratory facilities are sunk costs that cannot be regained. Rent in a high traffic mall setting is expensive for franchisors, especially if the rent is based upon a percentage of gross income. Staff
costs tend to be higher in franchises due to the greater numbers of staff functioning in an administrative capacity. Total equipment and supply costs are also higher due to more operatories and patient volume. These increased costs lead to increased risk on the part of the franchisee.

The initial investment necessary to open a solo dental office is estimated by the American Dental Association to be approximately $100,000. (Ciao 1989) In contrast, the additional costs incurred in opening a franchise center as discussed above, require that the minimum investment for an Omnidentix or Dental Health Services franchise range from $350,000 to $500,000. (Sanger 1984)

Franchises also experienced difficulties with government regulators. DentalWorld was warned repeatedly by the New York Education Department's Office of Professional Discipline about misleading advertising, and profit-sharing plans with its staff. In June, 1986, the New York Attorney General's Office forced DentalWorld to change its prospectus for investors. (FTC 1983)

Organized dentistry has also attempted to regulate the dental franchise industry. Led by solo practice proponents, many state dental associations have resisted the entry of dental franchises. The California Dental Association unsuccessfully sought to outlaw the waiver of insurance copayments and deductibles by franchises. (FTC 1983 p63-5) In Maryland, dentists backed unsuccessful bills challenging trade names, and barring dentists from advertising on radio
or television. (Baltimore Sun 1982) In Florida and Massachusetts, the dental associations successfully sponsored a law prohibiting laymen from contracting with dentists to develop, lease or in any way maintain control over a dental office. (FTC 1983 p63) In September 1981, the Massachusetts Dental Board alleged that Omnidentix Inc. violated regulations prohibiting group dental practice under any name other than the names of the dentists. The notice of violation was subsequently withdrawn. (Omnidentix 1983 p15) As dental franchises have become less numerous, organized dentistry's campaign against dental franchises has diminished.

Private dentists have also retaliated against dental franchise entry by changing their mode of practice. Traditional dentists have increased their marketing efforts, both internal and external, and altered their practice procedures. By scheduling longer, more convenient office hours and providing patients with greater flexibility of treatment plans and payment for services, non franchised dentists can successfully compete with franchises.

Modern marketing approaches and retail settings may have caused franchises to be associated with lower quality care. Barbara Davenport, manager of a dental center in Rhode Island, states that "Although the franchise is owned by the dentist, it is a kind of absentee-ownership that is not so much patient-oriented as it is profit-oriented." (FTC
Turning dentistry into a for-profit business has thus made some professionals and patients skeptical.

Critics emphasize that franchises provide incentives for contracting dentists to lower the quality of care rendered and produce high volumes of treatment. In at least one dental franchise, if a contracting dentist does not generate enough volume, she/he is asked to leave. (Pyner interview) A California Dental Service study of retail dentistry (Illinois Dental Journal 1982, FTC 1983 p48) shows that for California Dental Service union/employee groups, the average dollar claim when matched procedure for procedure for retail dentists was 28.5% higher than that for non-retail dentists. When these claims patterns are analyzed further, retail dentists are found to be performing certain common procedures more frequently than other dentists treating insured patients from the same groups. This study suggests that retail centers may provide unnecessary services.

The apparent lack of long-term care from the same dentist is also contributing to a poor image for franchise dentistry. The turnover of contracting dentists at Omnidentix was very high and was estimated by management to be approximately 40 percent yearly. Also contributing to the poor image of franchises is the relative inexperience of some of the contracting dentists employed. The average age of contracting dentists at Omnidentix centers for example,
was 28 in its North Dartmouth location, 29 in Hyannis, and 30 in its Boston center. (Eagan 1984 p171)

Dental franchising, as with any type of franchising, may have one more disadvantage. A franchise is set up to raise capital quickly. As a corporation, a franchisor has limited corporate liability for failure; a possible inducement for franchisors to take greater risks. Thus, the very structure of franchising may stimulate reckless business decisions which might result in higher failure rates.

Industry Trends

The dental franchise industry has performed poorly. Dental franchising experienced a large growth spurt during the early 1980's. (see Figure 4-1) By the end of 1983, there were 12 franchises in the nation with at least two different centers bearing its name. (Council on Dental Practice 1983) By 1990, all but two of these franchises had either filed under Chapter 11 of the federal bankruptcy code or no longer classify themselves as franchises. Table 4-2 identifies each dental franchise along with its size and its current status. Currently only two dental franchises still exist; Jonathan Dental Inc. and Dental Health Services. The two remaining dental franchises appear to be continuing to expand but at a much slower pace.
Figure 4-1: Growth of Dental Franchises by Franchisee

- Total Franchises
- Omnidentix Inc.
- DHS Inc.
- Smiles of NE Inc.

Franchises 41 39 37 45 103 101 37 140

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### Table 4-2
DENTAL FRANCHISES
Number of Centers and Current Status

<table>
<thead>
<tr>
<th>Franchise</th>
<th>Based In</th>
<th># of Centers</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amdent Inc.</td>
<td>Garden City, NY</td>
<td>35</td>
<td>ceased franchising 1986</td>
</tr>
<tr>
<td>Americare Inc.</td>
<td>Phoenix, AZ</td>
<td>4</td>
<td>ceased franchising year unknown</td>
</tr>
<tr>
<td>DentaHealth Inc.</td>
<td>Phoenix, AZ</td>
<td>32</td>
<td>chapter 11/dissolved 1986</td>
</tr>
<tr>
<td>Dental World</td>
<td>Roosevelt, NY</td>
<td>16</td>
<td>chapter 11/dissolved 1986</td>
</tr>
<tr>
<td>DentCare Inc. (Dwight Dental)</td>
<td>White Plains, NY</td>
<td>26</td>
<td>chapter 11/reorganized as Dwight Dental Care 1986 chapter 11/dissolved 1988</td>
</tr>
<tr>
<td>Dental Health Services Inc.</td>
<td>Tampa, FL</td>
<td>20</td>
<td>currently operating</td>
</tr>
<tr>
<td>Dental Works Inc.</td>
<td>Allentown, PA</td>
<td>10</td>
<td>chapter 11/dissolved 1984</td>
</tr>
<tr>
<td>General Health Systems Inc.</td>
<td>Elk Grove, IL</td>
<td>4</td>
<td>chapter 11/dissolved year unknown</td>
</tr>
<tr>
<td>Nu-Dimensions Inc.</td>
<td>Englewood Cliffs, NJ</td>
<td>9</td>
<td>ceased operations year unknown</td>
</tr>
<tr>
<td>Omnidentix Systems Inc.</td>
<td>Dedham, MA</td>
<td>21</td>
<td>chapter 11/dissolved 1985</td>
</tr>
<tr>
<td>RDC Dental Inc. (Jonathan)</td>
<td>Minnetonka, MN</td>
<td>21</td>
<td>reorganized as Jonathan Dental 1985 currently operating</td>
</tr>
<tr>
<td>Smiles Inc.</td>
<td>Cambridge, MA</td>
<td>60</td>
<td>chapter 11/dissolved 1986</td>
</tr>
</tbody>
</table>
Location of Franchises

As of 1986, the majority of franchises (seven) had franchised centers located on the East Coast. The largest number of franchise centers are found in New York (3), Massachusetts (2), Arizona (2), and Pennsylvania (2). These areas (except for Arizona) coincide with the states producing the greatest number of dental graduates. (Council on Dental Education 1985) By locating in areas with a large supply of young dentists, the franchises, as hypothesized earlier, appear to be selecting locations, so as to decrease professional costs.

Although a few of the franchises expanded to 35 centers, none achieved national scope. Instead, most were clustered in a small geographic area with several centers in one or two states. Little direct competition between different chains existed since franchise territories rarely overlapped. DentaHealth was the exception since it located centers in four widely separated states on the West coast and in Mid-West areas.

Franchises usually locate along Arbitron lines to take advantage of the economies afforded by these advertising divisions. Arbitron subdivides the country into distinct media areas. Advertising rates are based according to the numbers of people reached by advertising in each Arbitron area.

Franchisors also base location upon other factors such as traffic flow. David Slater, the president of Omnidentix
believes that to be successful, a dental franchise must locate in a heavy traffic pattern area. Slater considers other factors, such as the existing supply of independent dental practitioners already in the area, to be unimportant.

The decision regarding where to locate a new center is also based heavily upon patient demographics. Results from this study indicate that the patient population primarily targeted by dental franchises was an urban, white, middle-income population with private insurance or a fee-for-service (FFS) mode of payment. This desired patient base is similar to that of independent private practitioners, whose patient base is FFS (45%), private insurance (50%), and public insurance (5%). (Bureau of Economic and Behavioral Research 1989) The ethnicity of the population appeared to matter less than did their payment structure. Many franchises including Omnidentix and DHS, refused to accept welfare payments, and areas with large welfare populations were avoided.

SUMMARY

During the past ten years, the dental franchise industry has performed poorly. Most dental franchises no longer exist and the two that remain have slowed their growth. Theoretically dental franchises may have advantages over solo practices but most of the advantages can also be realized by nonfranchised dental practices. Indeed, few franchises ever reached the critical mass necessary to
realize significant national marketing economies of scale. Despite the relatively few advantages in dental franchising, dental franchises still require dentist-franchisees to pay steep franchise fees. The next chapter will explore more closely the operations of the three dental franchises; Dental Health Services Inc., Omnidentix Systems Inc., and Smiles of New England Inc.
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CHAPTER 5

CASE STUDIES OF THREE DENTAL FRANCHISES

DENTAL HEALTH SERVICES INC.

History

Dental Health Services Inc. (DHS), a company in the business of franchising dental centers, was founded by two optometrists, Drs. George and Dennis Linsey in 1981. The Linsey brothers had previously been successful in franchising optometry centers. The older brother Dennis initially worked as an optician with Sterling Optical, a large chain of franchised optometry centers. With this franchising experience and an investment of $12,000, the Linseys began setting up discount optical shops in small towns in New York and Pennsylvania.

The Linseys offered the public one-hour service on eyeglasses, walk-in service, and a large variety of frames. Unlike competing optometry chains, the Linsey's company placed the optometrists fully in charge of the offices. Their philosophy was "to establish a doctor-patient relationship... other chains open stores, we open practices."

In its first year of operation, sales of the Linsey's Vision Care Associates were $500,000. By year two, sales reached $1 million and were expanding at 60 percent/year. Pre-tax margins were approximately 14 percent. Six years
later the Linseys sold their chain to Pearle Vision for more than seven million dollars. With a no-compete clause in the sales contract, the brothers decided to apply their strategy to dentistry and opened a string of retail dental centers that they called Dental Health Systems Inc. (DHS).

In 1981, the Linseys erected their first dental clinic near Philadelphia, Pennsylvania. The brothers admit that they knew nothing about dentistry at that time. Six months later, the Linseys opened their second center in Tampa, Florida. A third and fourth center opened shortly thereafter. The Linseys were operating at a deficit and on the verge of bankruptcy.

In order to avoid bankruptcy, the Linseys sold a nine and one-half percent interest in the company to their old business partner, Pearle Vision Inc. Involvement with Pearle brought advantages and disadvantages to DHS. With Pearle's financial backing, DHS was able to continue to expand in Florida and Pennsylvania. The relationship with Pearle also facilitated the leasing of prime mall locations for dental centers.

These benefits came at a cost. The management at Pearle was inflexible and generally unresponsive to changes that the Linsays desired, such as providing financing for dental franchisees. Pearle also demanded tight strategic and financial control over DHS that included quarterly financial reports and other expensive financial operating documents.
In addition, Pearle wanted to rename DHS as Pearle Dental Centers.

The demands placed upon DHS were compounded by an ever changing corporate ownership. Pearle Vision was first acquired by Monsanto Inc. and then by Britain's Grand Metropolitan Inc., a six billion dollar food, beverage and hotel conglomerate. Each company possessed different plans and expectations for DHS as well as different management styles. The constant changes in management produced frustration as well as inefficient and costly efforts on the part of DHS. Finally, the dental centers were sold back to the Linseys.

DHS currently has 15 centers operating in Florida and five centers in Pennsylvania. In 1989, the central organization generated approximately $600,000 and netted $300,000. (see Table 5-1)

TABLE 5-1
-----------------------------------
<table>
<thead>
<tr>
<th>SUMMARY SHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTAL HEALTH SERVICES INC.</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Number of Centers Open</td>
</tr>
<tr>
<td>Number of Centers Sold</td>
</tr>
<tr>
<td>Location of Centers</td>
</tr>
<tr>
<td>Number of Years in Existence</td>
</tr>
<tr>
<td>Name of CEOs</td>
</tr>
</tbody>
</table>

Page - 72
Total Gross Income (1988)  $1,786,732  
Net Income (1988)  ($168,070)  
Franchisee Mean Age  40 years old

Although the Company believes that it possesses great potential to expand, the possibility also exists that DHS may cease franchising altogether and sell its franchised centers to the dentist-franchisees. Thus, future growth of DHS appears to be questionable.

**Philosophy**

The Linseys apply the same formula, successful in retailing optometric services, to franchise dentistry. This philosophy is based upon the key principle of respecting the professionals' autonomy. DHS management does not interfere in the clinical delivery of dentistry. In this way, the Linseys view their non-dental background as an asset, since it prevents them from intervening in the dental aspects of the centers.

The Linsey's formulas for franchising optometry and dentistry are similar. The Linseys believe that the primary function of DHS is to increase the volume and efficiency of its affiliated dental practices. The volume of patients crossing the threshold is increased by locating in a mall setting, which makes the center available to more people.

DHS contributes management expertise to the centers, as well as marketing efforts, with a central advertising pool.
Management states that DHS provides a 35 percent discount in equipment purchases, and a small discount below typical industry costs, for dental supplies. The Linseys also give advice on leases and staff utilization. By providing these management and advertising services, management estimates that franchisees can save $3,000 to $5,000 annually through their affiliation with DHS.

Although introductory specials were commonly utilized, the price schedule reflects average dental fees. Welfare patients are not accepted at DHS centers.

As an additional service to its franchisees, DHS will sublet dental center space to independent orthodontists. Typically the orthodontists pay:

<table>
<thead>
<tr>
<th>% of Gross</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>17% to the franchisee</td>
</tr>
<tr>
<td>Advertising</td>
<td>6% to DHS</td>
</tr>
<tr>
<td>Royalty</td>
<td>6% to DHS</td>
</tr>
</tbody>
</table>

Under this rental agreement, formerly nonproductive hours and space in a dental center become additional income for the franchisee.

The Linsey brothers attribute much of their success to their complementary natures. George is the aggressive innovator who spots the business opportunities. Dennis is the conservative negotiator, who prevents Dennis from moving too fast. No project is pursued unless both brothers agree.
Franchisees

The mean age of the DHS franchisees is approximately 40 years old. Seventy-three percent are married. None had any previous management experience. Few of the DHS franchisees are recent graduates from dental school. The average length of time in practice is nine and one-half years.

According to management, franchisees were selected solely on the basis of personality and salesmanship. Dentist-franchisees would be chosen if Mr Linsey believed that, "this dentist could sell a three-unit bridge."

Many DHS franchisees had previously practiced privately in the Northeast and moved south for health or recreational reasons. Five of the eight Florida franchisees had relocated from the North. All but one of the franchisees had been residents of their current area less than ten years. These dentists purchased a franchise to minimize start-up time, when setting up their new dental practice. In order to become accustomed to the DHS system and ensure their compatibility, 64 percent of the current DHS franchisees worked in their franchise before buying it.

Financial

Start-up costs for a DHS franchise total approximately $225,000. Franchisees pay an initial fee of $65,000. An additional $160,000 is required to purchase the actual dental center. The company maintains that this figure is 20% less than it would cost an independent dentist to build
an equivalent center. Potential savings are attributed to the Company's experience. For example, DHS paid $210 per square foot to build the first office. Seven years later, DHS only pays $97 per square foot to build a new office. Savings are achieved by employing cost-saving devices such as designing an operatory with a single X-ray unit serving two chairs or using a floating nitrous tank instead of in-wall tubes. In order to facilitate the purchase of franchises, DHS provided financing for new franchisees at 1 1/2 percent over the prime rate.

Ongoing financial fees of owning a DHS franchise include the following:

<table>
<thead>
<tr>
<th>% of Gross</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookkeeping/Accounting = 2.1%</td>
</tr>
<tr>
<td>Advertising = 6.0%</td>
</tr>
<tr>
<td>Royalty = 6.0%</td>
</tr>
</tbody>
</table>

Mean annual revenues for DHS franchised dental centers in 1989 were $600,000. DHS estimates that new franchisees can expect to gross $60,000 to $75,000 during the first year of operation and $125,000 per year after the first year. DHS thus promises its franchisees that it will only take a year to increase a DHS center's revenues to income levels that would normally take a private dentist ten years to achieve.
Summary

DHS, one of two surviving dental franchises, was started by entrepreneurs with experience in optometry - another health care profession. Its franchisees in Florida are primarily older, more experienced dentists who have relocated from the Northeast.

The franchising philosophy of DHS incorporates a non-centralized management approach, once an affiliated center is generating a profit. The company is localized in two distinct areas of operation (and marketing ADIs) Pennsylvania and Florida, with a respected and knowledgeable area coordinator managing each region. Despite past success, franchisee complaints and the greater profitability available in optometry lends doubt as to the continued future of DHS.

OMNIDENTIX SYSTEMS CORPORATION

History

Omnidentix Systems Inc., a business administering a chain of dental franchises, began operations in 1980. The founder, David Slater, a lawyer-entrepreneur, has sometimes been referred to as "The Franchise King" due to his many successful franchising ventures. Mr. Slater has previously built the "Mister Donut of America, Inc." franchise into an international chain of more than 1000 stores. Mr. Slater has also successfully franchised automobile brake shops,
steak houses, and homes for the mentally disabled. The idea of applying franchise techniques to dentistry originated when Mr. Slater, looking for new opportunities in franchising, underwent root canal therapy performed by an endodontist, Dr. David Pyner.

For the Omnidentix management team, Mr. Slater hired Ronald Kopack, another experienced franchisor. Mr. Kopack is a former Mr Donut vice president whose most recent accomplishment had been the transformation of the Japanese restaurant chain of Benihana Inc. into a successful franchise. Dr. Pyner was hired as Chief of Dental Operations. To cover start-up costs, Mr. Slater and Dr. Pyner each invested $48,750 while Mr. Kopack invested $15,000 into the venture. Mr. Slater's subsidiary Mutual Enterprises also contributed $37,500 to open the first Omnidentix prototype center in Medford, MA. in 1980.

With the success of this first center, Omnidentix quickly expanded the number of its centers. By December 1982, Omnidentix had three dental centers operational and twelve centers as of October 1983.

In October 1981, Omnidentix had its first public stock offering in which 5,250,600 shares were sold at one dollar per share. Within a year the price of Omnidentix stock had increased to $6 per share. In fiscal year 1981, Omnidentix Inc. generated revenues of $160,906 and experienced a net loss of $57,668. By 1982, revenues had almost doubled to $301,740 but net losses had increased by more than six times.
to $369,813. By 1983, the stock price had stabilized at $3 per share.

Omnidentix continued to expand although the Company was experiencing difficulties in securing investors for its dental centers. One investor in three centers in Chicago failed to honor his commitment and forfeited his deposit. Lack of investor interest forced the Company to invest its own resources in the new centers.

By June, 1984 there were 24 Omnidentix centers open. Another eight centers were under construction. Of the eight uncompleted centers, only six had been sold to franchisees. The Company owned all the assets in ten of the 24 operating centers and a portion of the assets of three other centers. According to Omnidentix management, these later centers required a longer time than anticipated to reach break even, thus forcing the company to advance additional funds to meet their working capital needs. As a result, the company's cash needs were substantial.

Omnidentix's losses continued to mount throughout 1983 and 1984. By 1984, Omnidentix was generating an annual net loss of $4,209,665. In June 1984, the company obtained a revolving loan commitment from New World Bank for five million dollars. By the end of June, the company had already borrowed four million dollars from its line-of-credit. In late August Neworld Bank refused to extend additional credit to Omnidentix and plunged the company into an immediate liquidity crisis.
The company then instituted several measures to minimize expenses and raise additional capital through the issuance of a second stock offering that was expected to net five million dollars. A delay of nine months and a generally poor stock market contributed to the issuance only generating $3.25 million and netting only $1.75 million (after commissions and expenses). At this time, Neworld Bank, also experiencing financial difficulties, called in Omnidentix's loan. With such large financial problems, the price of Omnidentix stock fell drastically, making a third stock offering impractical.

In order to raise the capital needed to avoid bankruptcy, Omnidentix was offered for sale. There were few interested buyers. One potential buyer, Tridont Dental Centers, a Toronto-based dental franchisor of 64 dental centers throughout Canada, withdrew its offer after Omnidentix's finances were examined and found to be in extremely poor condition. (Gorov 1984) When efforts to secure capital from venture capital groups also failed, Omnidentix filed under Chapter 11 of the federal bankruptcy code on December 30, 1984. (see Table 5-2)
TABLE 5-2

SUMMARY SHEET

OMNIDENTIX SYSTEMS INC.
(as of September 1984)

Number of Centers Open 24 (+ 8 under construction)
Number of Centers Sold 15 (+ 6 under construction)
Location of Centers MA, NY, FL, RI, NJ, VA, IL
Number of Years in Existence 4
Name of CEOs David Slater-CEO
                               David Pyner DMD-VP Dentistry
Total Gross Income (9/84) $1,596,818
Total Net Income (9/84) ($1,553,358)
Franchisee Mean Age 42.0

Philosophy

Omnidentix sought to differentiate itself from other
dental franchises through the experience of its central
management personnel. The presence of Mr. Slater and Mr.
Kopack, with proven track records in franchising, made
Omnidentix appear less risky than other comparable ventures
to investors.

The Omnidentix philosophy was to provide dentistry like
donuts. "It's not that different from opening a donut shop"
"The ultimate business may be different," says Mr. Slater
"but I see it as a system not an industry. Each unit is a
replication, like using a cookie cutter." Mr. Slater
expected that the same marketing and management principles successful in other franchising ventures would also work with dentistry. Mr. Slater still believes that to franchise any type of business including health care, the first step is to find a need, define the customer, locate great sites, promote it, and monitor it closely. The result will be a success.

In return for their investment, the franchisee received a "turn-key" dental clinic, that is a clinic ready for immediate operation. Omnidentix provided its franchisees with a wide variety of services such as site selection, facility design, lease negotiation, zoning advice, financing, employee training and hiring, operating manuals and management advice. Other ongoing services included discounts on centralized purchases of equipment and supplies, quality inspection, field supervision, advertising, and promotional assistance.

Omnidentix centers are designed as freestanding store-front clinics, usually in a high traffic, mall setting. Clinics contain seven operatories to provide walk-in, high volume dental care. Other factors such as the existing supply of dentists already in the area was considered unimportant. Most Omnidentix centers are located in areas with greater than average number of dentists. (see Tables 5-3 and 5-4)
### Table 5-3
Omnidentix Locations in Massachusetts
Comparison of Local and National Population to Dentist Ratios

<table>
<thead>
<tr>
<th>TOWN</th>
<th>Population/Dentist</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hadley, MA</td>
<td>2,063:1</td>
<td></td>
</tr>
<tr>
<td>Boston, MA</td>
<td>958:1</td>
<td></td>
</tr>
<tr>
<td>Medford, MA</td>
<td>1,350:1</td>
<td>1,823:1</td>
</tr>
<tr>
<td>Dartmouth, MA</td>
<td>1,409:1</td>
<td></td>
</tr>
<tr>
<td>Hyannis, MA</td>
<td>unavailable</td>
<td></td>
</tr>
</tbody>
</table>

### Table 5-4
OMNIDENTIX LOCATIONS BY STATE
A Comparison of State and National Population to Dentist Ratios

<table>
<thead>
<tr>
<th>STATE</th>
<th>Population/Dentist</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>1,441:1</td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>1,366:1</td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>1,788:1</td>
<td>1,823:1</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1,797:1</td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td>1,909:1</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>2,135:1</td>
<td></td>
</tr>
</tbody>
</table>

Omnidentix's advertising strategy was to attract patients with promotional gimmicks such as a low priced
examination and prophylaxis. At that time patients would be given brochures on each dentist and the center. According to Mr. Slater, this type of nonfear introduction was successful. Most patients did, in fact, follow through with the proposed treatment plan. Fees for specific services were at first set below market levels but, within a short period of time, prices were raised to competitive rates. The target population for Omnidentix was the middle and upper-middle class family.

Omnidentix also initiated several unique but unsuccessful programs designed to increase profits, including Omnidentsave and Omnidentlease. The aim of the Omnidentsave program was to provide the employees of large, cooperating employers with discounted fees. The program did not, according to management, provide the large patient base expected.

The Omnidentlease program sold dental centers to corporate, non-dental investors desiring high yields and tax credits. These investors then leased the centers to dentists who wanted to open a franchise but did not have the necessary resources to do so. The practice was thus owned by the dentist, but the assets were owned by the investor.

**Franchisees**

The mean age for Omnidentix franchisees was 41 years old. According to Omnidentix management, the selection criteria for Omnidentix franchisees was strict. Mr. Slater
states that the most important characteristics for a successful franchisee are a desire to succeed, work hard, high standards, persistence, and an adequate capital base.

Potential dentist-franchisees were recruited through advertising in professional journals and at professional meetings. Direct mail brochures were sent to 100,000 dentists, as suggested by a Boston Consulting Group study commissioned by Omnidentix. This recruitment strategy elicited over 400 inquiries from dentists.

The franchisee selection process included character references, background checks, and personal interviews. At the time of their bankruptcy, Omnidentix was in the process of developing a personality test to discriminate among those dentists most likely to be incompatible with franchising.

According to Omnidentix management, Omnidentix had few difficulties attracting dentists in Boston, Chicago or Washington, probably due to the urban locations, the highly competitive market, and the large supply of recent dental graduates. In nonurban areas, however, recruiting dentists was more difficult, due to barriers created by dental societies and peer pressure. Salaries for contracting dentists in these areas were higher, and the quality of provider also suffered.

Initial training of franchisees was accomplished through several training seminars. Potential dentist-franchisees also worked for one month in another Omnidentix center to gain experience in the Omnidentix system. After
opening a new center, central Omnidentix staff stayed on for another month as a support team.

Continuing training did occur to a lesser degree. According to Omnidentix franchisees, this training usually included lectures on motivating employees. Other seminars dealt with practice management, and less often with current topics in clinical dentistry. The followup education lessened with time.

Financial

Start-up costs for an Omnidentix franchise were approximately $250,000. Franchisees paid an initial franchise fee of $85,000. Ongoing franchise fees included a flat annual franchise fee of $35,000 and $15,000 for advertising. (see Table 5-4)

SMILES OF NEW ENGLAND INC.

History

Smiles of New England Inc. was a business converting pre-existing dental centers into members of a franchise system. Smiles was the inspiration of a general dentist, Dr. Gary Sloan. Dr. Sloan opened the first prototype Smiles center in Cambridge, MA. in 1981. Within a few years, this center was grossing over one million dollars per year. Following the prototype's success, Dr. Sloan decided to
franchise his system. Dr. Sloan consequently sold the
Smiles franchise system to a group of investors previously
associated with Century 21 Real Estate. Dr. Sloan remained
as a consultant to Smiles Inc. for several years thereafter,
until sickness forced him to retire from the organization.
The Century 21 investors planned to expand Smiles into a
nationwide chain of dental franchises, much as Century 21
had previously done in real estate.

In order to raise the necessary capital to finance this
growth, the company sold 350,000 shares of stock during a
public offering in 1984. The stock price increased from
$2.25 in 1983 to $3.00 in 1984 and then dropped to $0.05 by
1985. The Company paid no cash dividends, and retained
earnings were reinvested back in the business. For fiscal
year 1984, the company experienced a net loss of $467,321 or
$.36 per share.

The goal of the Smiles company was to establish over
3,000 Smiles offices across the United States by 1990. To
accomplish this, Smiles utilized a marketing plan involving
simultaneous openings of five or more centers. On March 25,
1984, over 30 Smiles offices opened simultaneously in the
greater Boston market. These mass openings functioned to
blitz the market, and achieve quick, wide dissemination of
the Smiles' franchise concept.

By June, 1985 only 18 of the original group of 30
franchisees remained in the Smiles organization. However,
12 new dental offices signed up during the intervening time
period. By the time of its demise in 1985, the Company had 30 Smiles franchises operating in Massachusetts and another 30 sold in Florida.

Smiles also sold regional marketing territories to investors, who then possessed exclusive right to sell Smiles offices in the designated territory. Under the license agreements, the regional franchisee paid an initial fee of $65,000 as well as a continuing fee of 20 percent of gross revenues to the central corporation. By the end of 1984, although three territories were reserved, only one territory was sold - the New England Region. The purchaser of the New England region was a former marketing director and owner of Century 21 New England, Inc.

In 1984, Smiles entered into an agreement with University of Pennsylvania to fund several dental related research projects. Smiles also organized a subsidiary called Dentech to fund and monitor research involving new technologies such as oxygenated perfluorocarbons for the treatment of periodontal disease.

Throughout 1985, Smiles continued to expand quickly into Texas, Florida and Illinois. However, Smiles was never able to generate a profit. Smiles filed for protection from its creditors under Chapter 11 of the Federal Bankruptcy Code in December, 1985. (see Table 5-5)
Table 5-5
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SUMMARY SHEET

SMILES OF NEW ENGLAND INC.

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Centers Open</td>
<td>60</td>
</tr>
<tr>
<td>Number of Centers Sold</td>
<td>60</td>
</tr>
<tr>
<td>Location of Centers</td>
<td>MA, FL, TX, IL</td>
</tr>
<tr>
<td>Number of Years in Existence</td>
<td>3</td>
</tr>
<tr>
<td>Name of CEO</td>
<td>Donald Foscato</td>
</tr>
<tr>
<td>Total Gross Income (1984)</td>
<td>$12,226</td>
</tr>
<tr>
<td>Franchisee Mean Age</td>
<td>41.2</td>
</tr>
</tbody>
</table>

Philosophy

The Smiles' franchise concept was based upon the promotion of oral hygiene and the prevention of periodontal (gum) disease. Smiles Inc. advocated frequent cleanings three to four times a year for treatment of periodontal disease. Scalings were performed by hygienists so that patients did not need to see a dentist at all if they did not want to. The fear associated with dental visits was thus decreased. The patient would benefit since frequent professional teeth cleanings, along with a program of patient education and home care, reduces dental problems and gum disease. The dentist-franchisee benefits by attracting new patients as well as increasing the number of visits by
patients already in the practice. Patients were attracted to a Smiles office by advertised specials such as low priced cleanings.

Unlike Omnidentix or DHS, Smiles was designed as a conversion franchise. The franchise concept and system was applied to an already existing dental practice. Smiles provided only two services to its franchisees; a marketing program that included advertising, and the franchise name along with the preventive periodontal concept.

The hygiene program was later expanded to promote the utilization of periodontal procedures in the centers. Hygienists were trained to track the volume, services performed, and frequency of recalls of their periodontal patients. As a result of this intensive periodontal program, the mean monthly gross hygiene production of Smiles centers jumped 128% after becoming affiliated with Smiles, from $3123 to $7130 per month. (Source: Smiles-internal documents)

Smiles primarily used television, radio and print in its advertising efforts. The advertising campaign was designed by a large, experienced advertising firm, Doyle Dane and Bernbach. Television commercials boasted such celebrities as Carl Yastremski and Marvin Hagler. The company also supplied promotional and educational literature to the Smiles offices.

In addition, Smiles attempted other novel marketing techniques such as a program called `toothprints'. This
program placed microfilm containing a child's name and vital statistics into the sealant of a back tooth. In this way, missing and lost children could be easily traced.

Franchisees

The mean age of the Smiles franchisees was 41.3 years old. Fourteen percent of the dentists were single or divorced while 86 percent were married. Over half of the dentist-franchisees (63 percent) felt they possessed average or greater than average management experience while 37 percent felt they had significant management knowledge.

According to management, franchisees were selected primarily on their basis to pay the franchise fees. Nonetheless, the franchisees were probably a self-selected group. As franchisees with a new venture, 87 percent rated themselves as above average risk takers.

The company provided franchisees with training in the Smiles system. Initial and continuing training programs were established and delivered by company staff. These training programs included areas such as provider-patient relationships, management of dental practices, hygiene education, and motivational support.
Financial

Since Smiles was designed as a conversion franchise with an already existing dental office, its franchise fees were less than those for other dental franchises. Smiles' franchisees joining early in the program paid an initial franchise fee of $3,000 to become part of the Smiles program. This fee was raised to $4,500 once the franchise had reached a size of 30 centers. In addition, each office had to pay continuing service fees of $750 per month as well as an advertising fee of $500 per month.

Summary

Smiles of New England Inc. was based upon a system for the prevention of periodontal disease. Entrepreneurs, formerly affiliated with Century 21 real estate, sold franchisees the Smiles' name, logo, management services and hygiene system. As a conversion franchise, Smiles was a much less expensive type of franchise than Omnidentix Systems Inc. or Dental Health Services Inc. but it failed nonetheless.

The results from these case studies form the basis for discussion of important topics in the success and failure of dental franchises. The issues raised in the dental franchises studied appear to fall into three main categories; franchisor management, professional autonomy and financial issues. Each of these three topics will be examined in detail in the following chapters.
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CHAPTER 6
DISCUSSION: MANAGEMENT ISSUES

Introduction

It was initially hypothesized that dental franchises were failing due to poor franchise management. In every franchise studied, however, upper management possessed significant experience in the field of franchising. All had previously developed or worked in successful franchises. Smiles' franchisors had experience in Century 21 Real Estate. Omnidentix franchisors had been associated with Mister Donut franchises. DHS franchisors had experience in optometry franchises. When interviewed, all acknowledged employing most, if not all of the management devices suggested by general franchise literature, especially in the areas of productivity and cost control.

Despite franchising experience, franchisors acknowledge making key mistakes in violation of generally accepted franchising principles. Management mistakes led to financial problems and franchisee dissatisfaction.

Franchise management made key errors involving:

1) overexpansion/financing
2) franchisee selection
3) marketing efforts and
4) choice of chief dental officer.
These management mistakes will now be explored to determine their effect on franchise success.

I OVEREXPANSION / UNDERCAPITALIZATION

General

Overexpansion refers to the opening of more centers than prudent. Many incentives to overexpand exist in a franchise, especially in advertising. Advertising economies of scale increase with a greater number of affiliated centers. More centers also mean greater funds available to spend on advertising, thereby increasing advertising dollars even further. Incentives are stronger in a young franchise, due to its increased reliance on marketing methods, and need for public visibility and awareness.

All of the dental franchises studied experienced difficulties with overexpansion and undercapitalization. Despite the potential advantages of an expansionist strategy, in every case it caused severe financial problems for the franchise. As a result of opening too many centers too quickly, the franchises selected unqualified franchisees, poor locations and possessed inadequate capital reserves. Each of these problems presents a challenge to the longterm success of the franchise.
Omnidentix

The expansion of Omnidentix was dramatic. In 1980, Omnidentix had only one center open. In 1982 there were four Omnidentix centers. By 1984 22 centers were open. Omnidentix had planned to open another 34 new centers in 1984 and an additional 25 in 1985.

Omnidentix franchisees interviewed believed that the Company had overexpanded. Initially, the Company followed a conservative approach of selecting prime locations and franchisees. Centers were opened one at a time until each was generating a profit.

Locations of initial Omnidentix centers were selected by accepted methods utilized in other franchised industries. Although sophisticated models and criteria, such as a McDonald's, were not employed, the locational criteria were reasonable. 'High-powered' locations were chosen with visibility, high traffic, parking, square footage requirements and reasonably priced, long-term leases. Supply of dentists in the area was not a factor since it was felt that Omnidentix centers would create their own market for dentistry.

This conservative strategy towards growth was abandoned in 1983 when the desire to expand quickly led to the leasing of poor locations and money losing company-owned centers. Pyramid Malls, a mall developer, offered Omnidentix locations in three distant towns (Hadley MA., GlenFalls NY., and Ithaca NY.) at low cost. Rather than lose these lease
options, Omnidentix rented the centers without franchisees. With the Omnidentix system functioning well and centers generating profits within six months after opening, management was convinced that even if franchisees were not found immediately, the company could still reap profits from these corporate-owned centers.

The dental centers in these malls proved to be unsuccessful. Their operating losses and distant locations made it difficult to attract investors.

Early breakeven estimates for these centers proved to be optimistic. Lower profit margins resulted from lower revenues and the necessity of paying higher salaries to contracting dentists. In order to entice contracting dentists to these rural locations, Omnidentix was forced to pay a premium in both a minimum base salary of $40,000 and a 40 percent commission. In Boston, contracting dentists were only paid 35 percent of gross with no guaranteed minimum.

The distant locations also taxed management's ability to oversee these centers. Due to the lack of owner-operators, neither the center's managers nor dentists possessed incentive to operate the centers efficiently. This apathy was reflected in the care provided, and profits dropped even more. (It is interesting to note that during this period, Omnidentix hired as Director of Real Estate and Construction, the former Pyramid employee responsible for arranging Omnidentix's leases with Pyramid malls.)
The number of corporate-owned centers continued to increase, until Omnidentix had committed $1.1 million on rent on 22 sites with only $239,140 in sublease agreements. Company-owned centers became an enormous drain on company finances. Primarily because of these company-owned centers, revenues at Omnidentix rose from $160,000 to $301,000 to $1,024,000 from 1981 to 1983. However, losses from operations in these years increased more than proportionately from $(59,000) to $(445,000) to $(1,433,000). In retrospect, Omnidentix management considers its overexpansion an avoidable mistake, which they were aware of at the time but pursued nonetheless.

Dental Health Services Inc.

Dental Health Services (DHS) also experienced financial difficulties due to overexpansion. Following the opening of its fourth center, DHS was operating at a deficit and on the verge of bankruptcy. DHS management admits that "It was a classic case of overextending ourselves. We had built our offices too large, with too many chairs, with too many employees, with too much debt and too much rent and not enough patients." DHS was only able to solve its financial dilemma with a large infusion of capital by Pearle Health Services.

Like Omnidentix, DHS had earlier followed a conservative strategy and chosen successful locations. A desire to expand quickly, however, led the company to ignore
general principles for choosing locations. Poor locations often resulted from tradeoffs with mall developers. In order to lease a prime location in one mall, a second, less desirable location also had to be rented. As in Omnidentix, these poor locations proved to be costly mistakes for DHS.

To prevent such management mistakes from recurring, DHS has returned to its initial conservative strategy for growth. Locations are no longer traded off with developers. Each location is judged on its own merits and is selected on only that criteria.

Smiles Inc.

Expansion of Smiles franchises also occurred at a fast pace. The Smiles' managers that were interviewed felt that overexpansion was a significant problem in the Smiles organization. When growth of the franchise slowed, the national Smiles organization exerted pressure on local organizations to expand quickly. New regions in Texas, Florida and Chicago were rapidly created in order to gain access to these large capital markets. Instead, with many new, unsold and geographically isolated centers needing large amounts of resources, Smiles became even more leveraged with a weaker capital base. By not following a structured, conservative plan for growth, Smiles experienced financial difficulties.
Conclusions

Overexpansion is a common cause for failure in nondental franchising. Despite the experience of the dental franchisors, all three of the dental franchises experienced financial difficulties due to overexpansion. Management's desire to expand quickly, without adequate capital reserves, led to the selection of poor locations and unsold franchise centers in DHS, Omnidentix and Smiles. The franchise's tendency to overexpand also resulted in the selection of unqualified dentist-franchisees.

II CHOICE OF DENTIST-FRANCHISEES

General

The selection of franchisee is a critical management decision in any franchise. Possibly in an effort to expand quickly and possibly because the characteristics of a successful dental franchisee are not known, all of the dental franchises made mistakes in this area. The franchisors' previous experience in franchising did not prevent them from choosing poor franchisees. Miscalculations in the choice of dentist-franchisees contributed to franchise failure.

Upon comparing the choice of franchisees with franchising literature, it appears that mistakes involving franchisee selection are of three main types. The first common error is the choice of franchisees with psychological
problems. A second mistake is the selection of non owner-operators. A third problem involves selection of dentist-franchisees who are unwilling to compromise their professional autonomy and to follow the franchise system. The effect of professional autonomy upon franchise success will be discussed in the next chapter.

A. Poor Franchisee Choices

The franchisee selection process in the three franchises studied closely conforms to the franchisee selection criteria described in franchise literature. The selection process usually includes references, background checks, and interviews with perspective franchisees. Omnidentix management notes that personal interviews are the best predictor of franchisee success. As a result, personal interviews at Omnidentix gradually became more extensive.

This type of conservative selection process may not be closely adhered to in practice. A Smiles manager claims that in reality, the franchisee selection process was based upon financial means. Franchises may also have selected franchisees unlikely to adapt well to franchising, in order to expand.

Out of 12 DHS franchisees, only one dentist was an obviously poor choice because of psychological difficulties. Following a religious rebirth, this dentist was unwilling to charge patients or to pay franchise fees. The dentist
eventually went bankrupt. To prevent such problems from recurring, DHS has since instituted tighter financial controls in the franchise contract.

Omnidentix sold two franchise centers to a dentist-franchisee, described by management as psychologically unbalanced. A third center was purchased by a dentist who, unknown to management, had been a former patient in a mental health institution. These centers were later reclaimed by the central organization, but only after costly financial problems.

Smiles did not appear to select any psychologically troubled franchisees. Out of the almost 50 dentist-franchisees chosen, only three (six percent) have been poor choices. Thus, poor franchisee selection does not appear to be a major reason for failure of the industry.

B. Lack of Owner-Operator

Franchised dental centers are also unsuccessful, due to the lack of an owner-operator. Owner-operators are believed to be critical to success in any type of franchise, since an owner-operator is more likely to devote long hours and hard work to the enterprise than is a non-owner.

In retrospect, DHS management attributes the poor performance of the first DHS center in Pennsylvania to the dentist-franchisee owning more than one practice. The same center, when sold to an owner-operator quickly became profitable. Despite this failure, the company continued to
sell to non owner-operators. A Florida DHS center was sold to an Indiana dentist. Another dentist bought two DHS dental franchises in Florida, which were one and one-half hours apart. Neither of these dentists was successful in the attempt to run two distant centers alone. A fourth center was bought by a distant group of three specialists. Internal squabbling prevented the center from reaching its potential.

DHS has since repurchased each of these centers. With these failures, DHS now sees the presence of an owner-operator as a critical part of a successful franchise. As a result, DHS now only sells franchises to owner-operators.

Omnidentix management, in marked contrast to this policy, consistently encouraged sales of its centers to non-owner operators. Of its six franchisees, four owned more than one center and two owned more than two centers. Another franchisee's plan to buy a second franchise ended only when the franchise failed. When interviewed, only one Omnidentix franchisee thought that being an owner-operator was an important factor for success. Neither Omnidentix management, nor the other Omnidentix dentists saw multiple ownership as a problem. As one dentist who owned two centers stated, "I can see myself owning and running up to five centers but that's my maximum. One for each day of the week." The dentist did feel he may have made a mistake by buying centers located two hours apart. Ownership of
multiple centers has a much greater chance for success if the centers are located close together.

In Smiles, the subject of owner-operated centers was never an issue, since each dentist already owned his own dental practice. Despite the beliefs of Omnidentix affiliates, the difficulties generated by multiple ownership of any type of franchise center are formidable. The problems in multiple ownership are multiplied in a service industry, like dentistry, in which patients desire to receive a consistent service from the same provider. Lack of an owner-operator increases the possibility of failure of the individual center, as well as the dental franchise.

The choice of franchisees has broader implications for the franchisor than just the immediate success of that individual center. Since a franchise is built upon the principle of consistent quality in each affiliate, each franchisee is affected by the performance of other franchisees in the organization. The selection of psychologically troubled or unqualified dentist-franchisees reflects badly upon all affiliated franchisees. In Smiles especially, a sizable minority (32 percent) of the Smile franchisees were dissatisfied with the qualifications of their peers, especially those entering late in the franchise's life cycle.
III ADVERTISING

Marketing Strategies

A third critical management area in which mistakes were made is advertising. Like the selection of franchisees or site location, the advertising methods used by the franchises appear to have been consistent with those proposed in franchising and management literature.

Each of the franchises interviewed depended heavily upon traditional franchising marketing methods. All of the franchises used outside marketing agencies to develop their marketing strategies. All three of the franchise chains employed large, prestigious advertising agencies on the East Coast.

The target groups of the dental franchises were middle to upper-middle income white families and individuals 20-45 years old. Each franchise used many different types of external marketing in their organizations such as newspaper and magazine advertisements, television and radio, direct mail coupons, and large yellow page ads.

The franchises' marketing strategies focused primarily upon external marketing efforts. Advertisements were intermittently timed rather than continuous. Special blitz advertising programs were utilized to celebrate a new center's opening.

Initially, each of the three franchises employed advertising that was primarily price oriented with
discounted fees. Increasing franchisee dissatisfaction with this type of advertising, however, led to its being discontinued in favor of an informational approach stressing such factors as convenience and quality.

Marketing Mistakes

When interviewed, the franchisors all believed that their advertising programs were successful. Their advertising efforts had attracted patients and had increased patient flow into affiliated centers. As Mr. Slater asserts, "Patient flow could be turned on and off by advertising."

The franchisors realize that many of their franchisees were unhappy with their marketing efforts. Yet they do not understand the reasons for this franchisee dissatisfaction. Franchisors attribute this discontent to the belief that marketing is an anathema to dentists, and seen as unprofessional.

The dentists, however, believe that advertising is very important. Eighty-three percent of Smiles franchisees thought that advertising was very important to the success of their franchise while only 13 percent thought it was of little consequence. In DHS, over 90 percent of the franchisees thought advertising very important while in Omnidentix, 100 percent of the franchisees thought so. Thus, although some of the dentists interviewed believed it unprofessional to advertise, most accepted advertising as an
integral part of a successful franchise. For many, being able to benefit from the presence of professional advertising, was a major reason for joining a franchise.

Most dentists viewed their franchisor's marketing efforts as unprofessional, and of poor quality. The advertising did not attract the necessary quantity or quality of desirable patients to affiliated centers. This same dissatisfaction was evident in all of the franchises studied. In DHS, 70% of the franchisees questioned felt that their franchisor's ability to advertise was poor and only 30% rated it as good. In Smiles, only 10% thought it was good and 67% rated their advertising as poor. However, in Omnidentix, 67% of the franchisees rated their advertising as good and only one franchisee thought it very poor. An analysis of some specific examples of marketing errors made by franchisors illustrates their importance in determining franchise success.

A basic marketing philosophy behind DHS is that a dentist - patient relationship begins with an emergency situation and evolves into a continual relationship. That is, patients are first attracted to DHS centers for an emergency visit. If treatment is rendered satisfactorily, the patients will follow through on the rest of the treatment plan.

In fact, several of the DHS dentists estimate that 80 percent of their new patients come for emergency treatment. These dentists believe that the vast majority of emergencies
are referred via the Phone Book. Yet because of increasing
cost, two years ago DHS management decreased the size of
their advertisement in the Phone Book and moved it to a
corporate listing separate from the regular dentist
advertisements. As a result of these marketing changes,
several DHS dentists experienced a noticeable drop in the
number of new patients. These dentists were then forced to
place their own advertisements in the Phone Book. Finally a
year later, the company restored the original advertisement
in the Yellow Pages.

The Linseys have also substituted advertising on
television, radio, and in the TV Guide in place of the more
traditional forms of print advertising. Responses from DHS
dentists are unanimous in their opposition to these ideas.
This type of advertising is viewed as expensive and not
cost-effective. The dentists, for the most part, have a
more conservative marketing approach than the franchise
management. These differing philosophies must be recognized
and respected, since otherwise dissension will arise.

Franchisees in all three of the franchises also believe
that hiring a prestigious advertising firm was a
disadvantage. Although dentists were initially impressed by
the size and experience of the advertising firms associated
with their firms, this faith was replaced with discontent
over time. Six dentists interviewed specifically remarked
that, as a small account in a very large firm, they did not
receive the amount of effort that they would have in a small

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firm. More conservative and less high-tech advertising techniques would have better suited their purposes.

There also seemed to be a lot of resentment among franchised dentists concerning equity issues of the advertising dollar. Suburban franchisees felt that they were subsidizing the advertising of urban and company owned centers. Several suburban Smiles' dentists refused to pay the advertising fee, since they believed their benefits were minimal. They cite as proof, for example, that most of their patients did not read the large urban newspaper. These dentists found it more effective to place their own advertising in local newspapers.

Equity issues in advertising also caused conflict when franchises attempted to direct more advertising dollars to those franchise centers that were performing poorly. Many non-benefiting franchisees became increasingly alienated from the organization. In 1988, DHS orthodontists, convinced that they were not getting their equal share of the company's advertisements, sued the company and won. Still, the one DHS franchisee who was doing poorly does not believe that the company has in fact directed more money his way.

Marketing mistakes by the franchisors also seem to have produced franchisee dissatisfaction by attracting undesirable patients. Franchisees were unhappy because of the few patients attracted from the advertising efforts of the franchise, fewer still were desirable patients.
Franchisees complained that the marketing efforts attracted patients from undesirable demographics to their practices. For example, DHS's Florida unit marketed towards the abundant elderly population in the immediate area. Although theoretically, this would appear to be a good idea due to the numbers and amounts of unmet dental needs among the geriatric population, the dentists are unhappy. As one DHS franchisee put it "The DHS keeps advertising to the older retirees and all they look for is price. So they're attracting the wrong patients."

Smiles franchisees also complained about the undesirability of patients attracted to their practices. Most of these were enticed by introductory, low-priced cleaning specials. As one would expect from such a marketing effort, the patients attracted were price conscious and short-term oriented; traits which the dentists found undesirable. Although the advertising later shifted away from price and more towards informational advertising, the stigma remained, and cost-conscious patients continued to be the majority of patients attracted. Other patients were frightened away by the image of a clinic.

Advertising Effectiveness

Advertising in the franchises was designed to have two primary functions: 1) attract new patients

2) achieve brand name recognition
Only about one-half of all franchisees believe that their franchise name carried any weight in attracting new patients. In DHS, 50 percent of the franchisees feel that their franchise has established its name in the public mind very well and 50 percent do not feel that they have established it at all. In Omnidentix, two-thirds felt that the Omnidentix name was well established in the public mind and one-third felt that it was not. In contrast, only 23 percent of the Smiles franchisees felt that the Smiles name was well established and over 75 percent thought that it was not. Since branding is a critical precept in franchising, this lack of name recognition in the dental franchises may have been an important factor in their failure.

The dentist-franchisees, however, appeared to value the branding function of advertising much less than the number of new patients that it attracted. Whether or not the advertising attracted new patients is difficult to evaluate. Although the advertising did not appear to be effective at all in the Smiles organization, in both Omnidentix and DHS, the advertising did appear to attract many new patients. Almost all of the DHS and Omnidentix dentists questioned agreed that they were busy from day one. Several DHS dentists estimate having 130-140 new patients per month. These figures are much higher than for the average nonfranchising dentist.

The dentists did not, however, credit their busyness to corporate marketing efforts. One-third of all the
franchisees ascribe new patients to their location. The other two-thirds attribute their busyness to word-of-mouth referrals and, as one dentist stated, 'about one percent to advertising.'

These results seem to parallel franchisee opinions on their franchisor's advertising efforts. Both DHS and Omnidentix had fairly successful advertising campaigns which resulted in a certain amount of branding and name recognition.

Smiles, however, achieved little success marketing to new patients or achieving name recognition. The majority of Smiles dentists felt that the marketing efforts by the company attracted few if any new patients to their office. Over 95 percent of the Smiles franchisees estimated that advertising attracted less than five new patients a week and over 70 percent estimated that they had less than one new patient per week.

Other marketing efforts that Smiles attempted also failed to generate business for their franchisees. The 'toothprints' program, in which identification of children was placed in their teeth, was expected to attract new patients, and to generate goodwill and recognition in the community. Although this program was heavily promoted by the company, it was a failure.

Another marketing effort by Smiles to acquire new patients by sending letters/coupons to new residents of the area was also a failure. Unfortunately, the lists of new
residents was usually laced with errors and out of date. Several dentists, although discouraged with the Smiles product, still thought the idea a good one. They signed up for a new resident list from a private company whose lists were more timely, and contained many fewer duplications and errors than the ones compiled by the Smiles management program.

Summary

In contrast to franchisor expectations, most of the dentists believed advertising to be an important component of a successful franchise, and did not view advertising as an unprofessional action. Most franchisees were dissatisfied, however, with the quality of the marketing efforts.

The marketing efforts at Smiles were ineffective and failed to attract new patients or achieve name recognition. Although DHS and Omnidentix management believed that their advertising was successful, and indeed it did appear to attract many new patients to their affiliated centers, the franchisees attributed new patients to either their location or word-of-mouth. Franchisor marketing efforts were rarely given credit for high patient volumes. Almost all of the franchisees felt that the advertising was attracting undesirable patients.

Many of these mistakes could have been avoided by more input from the dentist-franchisees. A DHS dentist on his
franchise's advertising committee, describes the committee as having little influence on the company's advertising strategy or budget.

Even though some of these franchisor mistakes have been rectified, dentists remain bitter about past marketing mistakes. Franchisees also believe that the dental franchises place too much emphasis upon external marketing techniques and underemphasize internal marketing efforts, which are viewed as more professional and successful.

IV CHIEF OF DENTAL OPERATIONS

General

The choice of chief of dental operations is an important decision which none of the three franchises made in conformity with traditional franchise theory. Franchise literature suggests that this person be a well respected dentist possessing both clinical and management experience. Although top management in the franchises studied had excellent qualifications, the chief of dental services did not. This lack of an effective spokesperson and dental manager led to much dissatisfaction among the franchisees.

Ninety-three percent of dentist-franchisees surveyed felt that the presence of dentists in upper franchise management was integral in running a dental franchise. One-on-one contact is an important method for diffusing conflict between franchisee and franchisor, before it becomes a
significant problem. Thus, the dentist-franchisees consider it vital to have at least one dentist with knowledge, experience, and the power to change the franchise system, and with whom they can directly communicate problems and suggestions.

Omnidentix

At Omnidentix, the choice for the chief of dental operations was Dr. David Pyner. Other than being Mr Slater's endodontist, Dr Pyner had few qualifications for the position. As a specialist, he had a different perspective on the dental operations of the Omnidentix centers than did the franchisees who were all generalists. As a result of a lack of management expertise and personality problems, Dr Pyner commanded little respect from either dentists or managers. Dentists did not have an effective presence in the central organization to represent their interests, and to whom they could turn with problems or suggestions.

Dr. Pyner later left the organization but, Omnidentix failed to select a replacement for Dr. Pyner. The absence of a Chief Dental Officer only perpetuated the dissatisfaction that the lack of an effective dental leader created.

Franchisee confidence and unhappiness in Omnidentix's central management team was further undermined by the hiring of David Slater's son Jonathan, age 24, as treasurer and Mr
Slater's niece as vice-president of marketing, both of whom had little, if any, experience in these fields. Mr. Slater's wife contributed to the interior design of the centers.

Smiles

A similar pattern occurred in the Smiles organization. The Chief of Dental Affairs at Smiles was originally Dr. Gary Sloan, a charismatic, practicing dentist. Many of the Smiles dentists joined primarily because of his presence. When he became ill and left the organization, his replacements were less qualified and respected and the position experienced a high turnover rate.

As a result of the loss of Dr. Sloan and the high turnover rate, the chiefs of dental affairs were not viewed as having any power to effect change within the organization. Thus, although the initial choice of Dental Adviser was a good one at Smiles, subsequent choices were not, causing dissatisfaction among the franchisees, who felt uneasy and unhappy about dealing directly with a corporate entity.

DHS

DHS approached the problem of dental chief in a different way. DHS incorporated a close, one-to-one, communication between franchisees and franchisor. Although DHS does not have a Chief Dental Officer, frequent contact
with the CEO is easily accessible to those franchisees desiring it. The distant Pennsylvania region, an area where close contact is not possible, has its own Dental Advisor. This advisor is a general dentist who was the first DHS franchisee and is well respected and knowledgeable about both dentistry and the DHS franchise.

The arrangement found in Pennsylvania appears to be an effective arrangement that is satisfactory to the dentists in that region. In contrast, the absence of a real dental advisor for those franchises near the central Florida region is noted by about one-third of the DHS franchisees who believe that a Chief Dental Officer is an integral ingredient for a successful franchise.

SUMMARY

Data from the dental franchises studied indicates the importance of selecting respected, qualified dentists for central management positions. None of the franchises studied employed a qualified, respected dentist in its central organization for long. Omnidentix made an injudicious choice for its Chief of Dental Operations. Nonetheless, it was generally felt that neither Dr. Pyner nor Dr. Sloan had any real power in their respective organizations. Both dentists had progressively less of a role in the decision-making of their companies as time passed. Both were bought out and left their franchises early on, leaving their franchises without a dental
representative. This absence caused an intensification of
dentist franchisee uneasiness. More judicious choices of head of
dental operations would probably have greatly benefited the
organizations.

The dental franchises did, however, appear to be
resolving this problem by promoting dentists within their
organization to management levels. In Omnidentix, one of
the franchisees and in Smiles, two of the dentists had been
promised a position in their central organizations. DHS has
already placed one of their franchisees in such a position.
This type of promotion from within appears to satisfy the
desires for representation by the dentist-franchisees. This
strategy also has the advantage of satisfying those dentists
with management aspirations.

Despite the initial hypothesis that dental franchises
were failing due to poor management decisions, data from
dental franchises indicates that management mistakes only
account for a small percentage of the dental failures.
Failure seems primarily due to professional autonomy issues
to be discussed in the next chapter.
CHAPTER 7
DENTIST FRANCHISEE AUTONOMY

Overview

Study of dental franchises suggests that the alternative hypothesis presented earlier appears to be valid, that is, that dental franchises are failing due to the presence of special difficulties in managing health care professionals. Health care professionals expect a far larger degree of autonomy than most other types of employees and do not accept the rigid control necessary for successful franchising. Current management techniques are not adequate to deal with this special type of professional employee.

Although bound by contracts, the dentist-franchisee remains an independent businessman who is free to make business decisions. This independence is a natural extension of the autonomy of the dental professional. Dentists, by virtue of their professional status and training, desire independence and control over their environment. It appears as if the most critical factor determining the success of a dental franchise is the dentist-franchisee.

Desire for autonomy makes dentistry more difficult to franchise than non-health care industries. Dentists are less willing to adapt to a franchise system or to listen to franchisor advice than other franchisees, unless they have great confidence in its merit. Even when the system does
seem to have merit, dentist-franchisees have difficulty molding their individualistic styles to conform to a set system.

The following section will examine the difficulties imposed on franchising, due to the nature of dentists and the impact of managing health care professionals upon success of an organization. Dentist-franchisee autonomy will be discussed as it relates to management control of dentists, professional resistance to control, and the resulting conflict between franchisee and franchisor.

I MANAGEMENT CONTROL OF DENTISTS

The task of influencing the behavior of employees to achieve organizational objectives is recognized in the management literature as an issue of central importance. (Anthony and Herzlinger 1980 p6) In order to influence the behavior of employees, business organizations like franchises, utilize a variety of mechanisms, including personal supervision, productivity analysis, and incentive compensation systems. These mechanisms, as a whole, comprise what the management field refers to as management control systems. Theoretically, control systems are of critical importance in a franchise organization, since they are the primary mechanisms by which a franchise can monitor productivity, and achieve product standardization, quality control and cost control.
The implementation of control systems was previously hypothesized to be a key factor in the success of dental franchises. The attempt by dental franchises to implement management control systems has important implications for managers, dentists and the patient. Control systems allow organizations to better compete in the increasingly competitive dental environment as well as to deliver higher quality care to patients.

The data in this section was collected from seven franchises, two of which are still in operation. All of the franchises report using monitoring systems to some degree. (Yavner 1989) All employ productivity reports, personal supervision, performance appraisal, and record audits as part of their management control system. Other control systems such as variance analysis or standard costing analysis, pre- and post-market surveys, new patient controls, and inventory controls were used less frequently. (see Table #7-1)

Although control systems may serve many important roles in a dental franchise system, these same control systems, if overutilized or overenforced by managers, may alienate the dentist-franchisee. This section will examine three of the most important controls; incentive compensation packages, productivity reports, and personnel supervision to study how the degree of management control and its impact upon the autonomy of the dentist-franchisees may influence the ultimate success of the franchise.
### TABLE 7-1
**CONTROL SYSTEMS IN DENTAL FRANCHISES**
**BY FRANCHISE**

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<th></th>
<th>Jonathan Dental</th>
<th>Dental Consumer Store</th>
<th>DHS Store Health</th>
<th>Dwight Dental</th>
<th>Smiles Dental</th>
<th>Health</th>
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<td>Inventory Control</td>
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<td>Marketing Analysis</td>
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<td>Service Mix</td>
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1. Incentive Compensation Packages

One of the most commonly employed types of control systems is a pay-for-performance or incentive compensation package. Incentive packages are also called 'results control' rewards since they reward employees for realizing particular results or outcomes. (Anthony and Herzlinger 1980 p18) Results controls are used at middle and upper management levels in most large organizations. They allow for decentralization and autonomy, and yet are a means by which effective control can be exercised over middle and upper management. (Merchant 1985 p48)

As part of their control systems, the majority of dental franchises report using some form of incentive compensation package to provide incentives to dentists, dental auxiliaries and managers based upon selected criteria. The franchises do not actually provide the compensation but only assist the franchisee.

The types of incentives employed for employees differ by franchise. All of the franchises use cash bonuses the most. Both successful franchises, Jonathan and DHS, also employ vacation time. Jonathan Dental Inc. also uses stock options as employee incentives.

Unsuccessful franchises employ a greater number of incentives. All but one uses commissions and nonmonetary rewards. This category includes such varied items as an office microwave and flowers, as well as more customary rewards such as dinners and trips. The one unsuccessful
franchise that was publically traded, also allowed bonuses to be converted into equity.

A. **Incentives for Dentists**

Incentive packages are not applied equally, nor are they based upon the same criteria for all employees of a dental franchise. Neither of the successful franchises use incentive packages for dentists. They do not promote their use or advise it.

In sharp contrast, all of the unsuccessful franchises recommend some form of incentives for contracting dentists. On average, they utilize five different criteria to base compensation incentives for dentists. The most frequently used is gross revenues of the dentist, followed by units of service performed by the dentist, and gross revenues of the center. Rarely used criteria include net profits of each dentist, educational qualifications, and number of new patients seen.

B. **Incentives for Managers**

All of the franchises, both successful and unsuccessful, employ incentives for their managers. Both DHS and Jonathan base managerial incentives on gross revenues of the center and the increase in profits of the center over the previous year. Of the unsuccessful franchises, half base managerial incentives upon gross income, and the other half upon net income of the center.
Length of time employed and percentage of collection are also rarely used to determine management's compensation.

C. Incentives for Auxiliaries

Incentives for dental auxiliaries are employed by both successful franchises but only by half of the unsuccessful franchises. DHS and Jonathan base the incentive system for dental auxiliaries upon length of time employed and educational qualifications of the auxiliary. Unsuccessful franchises employing incentives for their auxiliaries base the incentives solely upon gross revenues of the center.

Discussion

There appears to be a difference between the use of incentive packages in successful versus unsuccessful dental franchises. All franchises utilize results controls for auxiliaries and managers. However, in contrast to unsuccessful franchises, the successful franchises do not recommend and have not designed an incentive package for contracting dentists. By not exercising this type of control over the dentists, there is less intrusion upon the dentist's autonomy and less conflict in the organization.

The unsuccessful franchises use results controls more for the relatively autonomous contracting dentists, than for managers or dental auxiliaries. This strategy may be counterproductive since many nondental corporations have found that liberal performance-related bonuses create high
productivity among even the lowest organizational employees. (Haimann T, Scott W and Connor P 1978 p350) In a dental center too, lower level staff such as dental auxiliaries or receptionists, have a significant impact upon the profits of the center, and when motivated by reward, can be expected to perform maximally, and probably to a greater extent than would a dentist-employee. (Merchant 1985 p18)

Design of Incentive Systems

In order to best coordinate results with goals, franchises should, like any business, define its goals in terms of clear and objective results that can be measured. (Anthony and Herzlinger 1980 p227) The incentive system should be based upon these criteria.

Results controls can be used to accomplish many goals of the firm. If it is difficult to recruit specialists, incentive programs might be structured to attract specialists to the organization or to encourage general practitioners to gain additional specialty training. To increase profits of the firm, an incentive, such as collections per individual dentist, might be used. By basing incentive programs on key variables that achieve corporate goals, employees will be motivated to perform in the company's best interests.

Management experts also advise that variables measured should coordinate corporate goals and employee results to achieve 'goal congruence'. (Anthony and Herzlinger 1980 p18)
For example, if dental assistant turnover is a problem in the organization, rewards for these employees might be based upon length of time employed in order to encourage employees to stay. In this way, Jonathan Dental and DHS base rewards for front desk personnel upon the percentage of recall appointments made, in order to achieve a high recall rate.

In fact, most dental franchise organizations do not coordinate center goals and employee results. For example, three of the unsuccessful dental franchises studied; DentaHealth, Omnidentix and Consumer Health base their compensation system for dentists, dental auxiliaries and managers upon gross revenues of the center. Five more unsuccessful franchises reward their dentists based upon their individual gross revenues. Basing incentives on gross profits acts to encourage dentists to provide services to patients who might not be able or willing to pay for them. This practice may lead to an increase in revenues earned but also a corresponding increase in corporate accounts receivable. The goals of the franchise organization and the actions encouraged by the incentive program might be made more congruous by basing rewards on collections of each dentist.

Using gross revenues of the center as an incentive also produces a nonoptimal result, since it encourages what is commonly known in economics as "the free rider syndrome". That is, an individual employee might fail to perform optimally upon realizing that rewards are based upon the
efforts of the entire group, regardless of individual effort. The larger the organization, the greater this effect. This type of reward, often referred to as a group-based reward since it is based on the entire group's achievements is most useful when the link between individual effort and results is weak. (Merchant 1985 p42) A dental franchise however, is an intimate, service-oriented business. The link between individual effort and results is direct. Hence, group-based incentives will not alter outcomes maximally in dental franchise organizations.

2. **Direct Personnel Controls**

   Direct personnel controls refer to a system of direct supervision by management of employees and their work. Direct personnel controls are another form of management control system employed to some degree in all dental franchises. Direct personnel controls are simpler to implement and less costly than results controls. (Haimann, Scott and Connor 1978 p447)

   Ideally, personnel controls monitor key variables of employee performance affecting the firm's success. The primary determinant of the return of a patient to a dental center is patient satisfaction. Patient satisfaction depends to a large degree upon two major factors; price and quality of care received. (Kress et al. 1984 p3) Instead of judging quality of care directly, patients look at indirect factors. One of the most important factors is the
employees. Therefore, many different characteristics of the employee are also monitored by dental franchises including efficiency, appearance, productivity, and quality of care rendered.

The simplest type of personnel monitor occurs during the hiring process. (Anthony and Herzlinger 1980 p10) Only those individuals possessing traits which the organization desires are hired. Thus, the hiring process can be used to complement the personnel monitors in the organization.

Discussion

All of the dental franchises primarily monitor contracting dentists and hygienists through the use of productivity and quality control systems. Dental auxiliaries are not monitored by most of the franchises. There is no significant difference in the use of personnel monitors between successful and unsuccessful franchises.

All of the franchises utilize personnel controls more frequently for dentist employees than for either hygienists or dental auxiliaries. The franchises responding to the survey use on average six different personnel monitors for dentists. All of the respondents except Smiles Inc., monitor productivity, organization, personal appearance, patient rapport, patient satisfaction, and quality of services rendered for each employed dentist. Two franchises also monitor dentists on time spent per service.
Dental franchises use an average of five different personnel controls for hygienists. Patient rapport with hygienists is measured in five franchises while productivity is measured in four franchise organizations. Personal appearance, patient satisfaction, quality of service rendered, time spent per unit of service, and neatness of hygienists is supervised in three franchises.

Dental auxiliaries are monitored the least by dental franchises. Only four franchises supervise dental auxiliaries for their neatness, personal appearance and rapport with patients. One franchise also measures the organization of the auxiliary.

Therefore, only one-quarter of the franchises monitor its dental auxiliaries and other support staff. Many experts feel that this lack of monitorization may be a mistake. (Merchant 1985) Nonproviders in the dental organization determine a much larger share of patient satisfaction than is commonly attributed to them. Dental assistants and front-desk personnel especially, are critical ingredients to patient satisfaction, and yet their performance is rarely analyzed.

In the franchises surveyed, most of the personnel supervision was directed at maximizing the patient/provider rapport. An important factor affecting satisfaction of dental patients is cleanliness and personal appearance of the employees in a dental office. (Kress et al. 1985 p29)
Thus, it is not surprising that all but one of the franchises closely monitors these features of its employees.

Six of the franchises measure patient rapport and satisfaction with its employees, notably the dentist and hygienist. Dentists and hygienists are of primary importance in determining patient satisfaction, since they have direct patient interactions as providers.

**Design of Monitoring Systems**

Management control specialists (Anthony and Herzlinger 1980, Merchant 1985) advocate an objective and formal system of monitoring employees. Having central management rather than the dentist/owner perform evaluations will tend to give a more accurate representation of employee performance. Half of the dental franchises employ a formal system of monitorization by the Dental Director while half utilize an informal evaluation system performed by the dentist-franchisee and which, by the very informality of its nature is biased.

One franchise states that it employs both formal supervision by central management and subjective, informal monitorization by the dentist/owner. This type of dual checks and balances combines the advantages of each system and serves to maximize the efficiency of the monitoring system.

Management experts suggest that the timing of personal evaluations be periodic and regular. (Anthony and Herzlinger
It must not, however, be so frequent as to interfere with operations of the organization. Monitorization was performed at various intervals. One franchise organization reviews its employees twice annually and another every three to six months depending upon the length of employment in the corporation. Two more franchises perform reviews in an ongoing manner as needed.

The timing thus varies greatly among the franchises ranging from two weeks to once annually. Although the timing varies in each organization, both the two and 52 week evaluation appear to be extreme, and imply the existence of excessive and underefficient management controls. A reasonable approach adopted by one franchise was to 'visit each office every 60 days or as needed based on monthly monitors.'

3. **Productivity**

Business organizations of all kinds measure productivity in the organization. Productivity refers to output per units of input. In service-oriented organizations like dental franchises where the primary input is labor, productivity refers to output per man-hour. Franchises use different key variables to measure the productivity of its providers. The quantity of key variables and the key variables themselves chosen as monitors are integral in determining its usefulness to management. (Merchant 1985 p25)
No significant difference exists between the successful and unsuccessful franchises' use of productivity measures. All franchises measure such productivity variables as number of patients seen and gross revenue for each contracting dentist. Half of the franchises measure net revenue per contracting dentist. For the most part however, the dental franchises concentrate on measuring productivity for entire dental centers rather than for individual dentists. Data for the center as a whole provides management with a general overview of the center's operations as well as being simpler to understand and less time consuming to calculate than measurements made for each individual dentist. All but one of the unsuccessful franchises routinely measure gross and net revenues per dental center and the number of patients seen per center.

The timing of variable review as stated previously, is another important ingredient in the effectiveness of any monitoring system. Productivity variables are measured more frequently in the unsuccessful than the successful dental franchises. Every unsuccessful franchise measures results daily and two franchises even measure results hourly.

In contrast, at DHS and Jonathan, the results are measured monthly. By measuring productivity less frequently DHS and Jonathan intrude less upon the franchisee's autonomy and thereby cause less conflict in the organization. Management experts point out that it is important not to
monitor too many variables since the critical ones may be lost in the shuffle. (Merchant p48) Instead, an organization should only focus on key variables that are important indicators of the quality and quantity of performance rendered. This appears to be done to a greater extent in the successful franchises.

Feedback

A formal system for the provision of feedback to the centers is used by both of the successful franchises DHS and Jonathan Dental. However, only two-thirds of the unsuccessful franchises use such a formal feedback system. The others use an informal system.

An important theoretical advantage of the dental franchise system is that continuous feedback is provided to the franchisees by central management. The pattern of feedback flow was different in the two groups. In successful franchises, feedback flowed from the financial manager of the central organization directly to the owner/dentist. In the unsuccessful group, however, feedback flowed either to the owner/dentist or the business manager in the office.

Presenting feedback directly to the dentist-franchisee as opposed to the center's business manager more effectively precipitates positive changes in the organization. Feedback directly to the franchisee also fulfills another
important role of reassuring the dentists that the franchisors are earning their franchise fees.

Discussion

The design and implementation of management control systems are important in the success of non-dental franchises and were initially hypothesized to be an important factor in the success of dental franchises as well. This does not, however, appear to be the case. In fact, the successful dental franchises Jonathan and DHS actually appear to employ fewer control devices than did the unsuccessful franchises.

The reasons for this are complex, and reflect dentists' desire for autonomy. Dental franchises are unique in that although there is a managerial element in both the central and local centers, management power is incomplete. The central franchisor does not have complete control over the dentist-franchisees nor do the franchisees have complete power over contracting dentists. By their very nature, professionals are motivated by competing standards; those of the organization promoting efficiency and profit and those of their profession stressing personal integrity and quality of care. The degree to which both groups attempt to establish control, however, is integral to the success of the dental franchise.

Incentive compensation systems were hypothesized to be an important factor in the success of a dental franchise.
Every dental franchise employs compensation systems to reward performance by managers and dental auxiliaries. Only the unsuccessful franchisors also reward dentists, while the successful franchises DHS and Jonathan do not. Perhaps by excluding dentists from the reward system and by not exercising control over their actions in this manner, these franchises encouraged dentist autonomy and ultimately a greater amount of dentist satisfaction within the organization. Successful franchises also better coordinate their goals within the incentive system for their non-dentists employees, thereby increasing their effectiveness.

Personnel monitors are simple, relatively inexpensive to implement, and serve to complement the results controls. Direct personnel controls were used in most dental franchises. There does not, however, seem to be any real difference between the personnel monitors employed by successful and unsuccessful dental franchises. Both primarily monitor the personal appearance and neatness of dentist-employees. Although management literature advocates monitoring employees on a regular basis, the timing of the review was inefficient in many franchises, ranging between two and 52 weeks.

Unsuccessful franchises tend to monitor variables more frequently than do the successful franchises and thus interfere with the firm's operations. Both Jonathan and DHS monitor fewer variables less frequently. In this way the successful franchises appear to exert less control over its
dentist-employees and dentist-franchisees than do the unsuccessful franchises. This type of decreased central control appears to be a factor in the success of the dental franchises.

Control systems are credited with having increased productivity and efficiency in the nondental organization. In a dental franchise, however, where the level of autonomy of individual dentists is quite high, a control system is only as beneficial as the franchisee's willingness to modify their behavior based upon management's suggestions. If a franchisee is unwilling to cooperate, any control system is useless and as this evidence suggests, forcing management control upon dentists may act only to alienate them from the organization.

II PROFESSIONAL RESISTANCE TO CONTROL

By entering into a franchise agreement, the dentist-franchisee surrenders a measure of independence to the franchisor. The survival of the typical franchise requires constant supervision of franchisees by franchisors in order to ensure that exacting standards of performance are met. The need for a minimum level of quality is imperative, since any new franchise depends upon the public perception of already existing centers.

Despite initial expectations for tight control in dental franchises, this type of control was rarely realized,
due to unique characteristics of the dentist-franchisee. The peculiar nature of dentists as professionals was frequently expressed in the dentist's reaction to franchisor management.

In every franchise studied, albeit to differing degrees, the franchisees resisted the intrusion of franchisor management upon their center, sometimes to the point of ignoring management advice altogether. The lack of adherence to franchisor advice and management and the associated conflicts resultant from this professional autonomy often caused an obstacle which dental franchising is unlikely to overcome. Thus, the dentist-franchisee did not, for the most part, ever relinquish his/her traditional professional independence.

A major problem associated with management in the franchises may be the lack of implementation of these franchise systems by the dentist-franchisees. All of the franchisors, although having a defined franchise system, were unwilling to force the dentists to utilize it. They reasoned that their function as non-dentists was to advise the dentists about the business aspects of the practice, and allow the dentists to tend to the clinical side of the practice.

Past research on dentists has indicated that dentist cooperation might be a problem. Kress and Silversin found that only a minority (38 percent) of dentists surveyed actually made or said that they were likely to make changes
in their offices in response to feedback from these researchers. (Kress and Silversin 1985) This low figure is actually probably much lower since it only reflects the dentists who said that they would make changes and not those who actually did. The same pattern of non-obeyance found by Kress and Silversin appears to be found in dental franchises.

The franchisors did offer suggestions on how to operate the centers. However, it appears that for a sizable minority, these suggestions were largely ignored. In the Smiles organization, almost 25 percent of the dentist-franchisees did not do most of the things suggested by the franchise management team. Even simple protocol such as answering the phone in the advised way with the correct introduction, franchise name, and tone was not closely followed. Three of the Smiles dentists never even put up a sign to show that they were affiliated with the franchise. As one dentist put it, "A sign like that just wouldn't go over well in this town." Another dentist doubted that the prescribed sign would conform to his local ordinances with respect to size and shape.

With such a high percentage of dentists not following the simplest suggestions offered by franchisors, some of the difficulties inherent in franchising dentists start to become apparent. Since one of the mainstays of the franchise philosophy is to perpetuate a system, and if fully
25 percent of its members do not subscribe, success of the system will not be easy.

The reasons for this lack of action appear not only to be due to attitudes of the dentists but also due to the attitudes of hygienists, staff, and patients. Not only the dentists but other office staff had difficulty accepting the new franchise system. Of the Smiles dentists, 25 percent noted difficulty getting their staff to accept the Smiles way. Three-quarters of the problems were due to hygienists who did not want to complete the extra paperwork or follow the prescribed steps in patient care. A small part of the dissension came from the front desk support staff who also resented the extra work involved. This conflict was usually resolved by the unhappy staff member leaving the practice. The amount of long run discontent, however, did seem to depend upon the dentist. If the dentist seemed committed to following the Smiles principles, the staff did as well. For dentists who were unsure or negative, their feelings may just have been reflected by the attitudes of the staff.

Timing of Resistance

This type of initial resistance to the franchise system is not normally encountered in nondental franchises. (Lillis 1976) However, a second type of resistance to franchisor advice that occurred in the dental franchises is common in all franchises. This secondary resistance tends to occur after the franchisee has been in the system for one to two
years. After this time, the franchisee begins to feel that he knows the system well, and that he no longer needs the aid of the franchisor. (Lillis, Narayana and Gilman 1976)

Almost all of the dentist-franchisees interviewed in all of the franchises expressed this opinion. In Omnidentix, DHS and Smiles, nearly one-third of the dentists in the franchise for more than one year felt that they no longer needed franchisor advice on a regular basis. One-third more felt that they did not need franchisor advice at all.

As discussed previously, this is a problem in all types of franchises, and not just dental franchises. As such, it is one of the most difficult time periods for any franchise. Unless the franchise can continue to change and improve its system and service, unhappy franchisees will continue to leave the program. Previous contracts, agreements or services rendered do not seem to sustain the franchisees' faith in the company. As one franchisor put it, "the only thing that seems to be important to the dentists is what we've done for them today."

The dental franchises surveyed did not appear to make the appropriate changes before the second wave of discontent spread and dentists started to leave the franchise. This failure contributed to the franchise failures.

It appears as if the less the management and the less control exerted, the more successful the franchise. This may be due to the dentists' feelings of independence and dislike of control. Some dentists resent any exercise of
control by the franchisors. One dentist describes the franchisor's team as being 'too pushy'. Other dentists felt that the franchise team wasn't aggressive enough. Another dentist interviewed felt that the franchise representatives were 'intimidated by dealing with professionals'. Most of the existing dental franchises offer their franchise product and managerial services as a voluntary aid to the owner/dentist. Dental franchises do not mandate compliance as closely as other types of franchises do.

In exercising control over the dentist-franchisee, the franchisor must walk a tight line. The franchisor must exercise enough control over the dentists to establish a certain degree of uniformity in procedures and quality, and yet not enough to harm the franchisee-franchisor relationship.

**Franchisor Control**

Franchisor control can be divided into three distinct segments. The first type of control deals with external control of the franchise and includes control of the development phase of the franchise. This would include the location, building and setup of the franchise center. The second type of control deals primarily with the management operations of the center. The third type of control is over the dental operations of a dental franchise.

Each of the different franchises appear to have approached the issue of control differently. DHS spent most
of its time and effort only during the initial stages of a center's development. DHS management dealt primarily with location, construction, and setup of the centers. Their CEO does not believe in exerting any control over the internal workings of the centers unless requested to.

Smiles appears to have exerted less control in the initial stages of the centers and more in the dental procedures of the practices. Since the centers already existed when they converted to Smiles centers, the franchise obviously had little influence over their location or setup. Nonetheless, the dentists joined Smiles to participate and to incorporate a philosophy of periodontics into the practice. It is surprising that so many of the dentists involved in it did so little to work within the system.

Omnidentix appears to have exercised most of its control in the first and second spheres of control rather than in the dental operations. Most of the dentists interviewed did not want the franchisors involved except in a superficial way in the workings of the franchise centers.

Franchisor Management Mistakes

When one examines the management tools employed by Omnidentix and Smiles, the two franchises active in the ongoing management of their centers, they appear to be very similar to those used in nondental franchises. Only the labels appear to have been changed to incorporate dental terminology.
The implementation of management systems designed for nondental franchises appears to have caused problems within these franchises. Most of these systems were thoughtful and effective. However, a memorable minority proved to be ineffective when applied to dental practices and were the source of much dissatisfaction among its dentist-franchisees. Some specific examples from each of the franchises will illustrate this management problem.

OMNIDENTIX SYSTEMS INC.

An examination of Omnidentix's control sheets reveal a well thought-out program of management for costs, productivity, and income. Unfortunately, by not realizing the difference between dental franchises and other nondental franchises, some mistakes were made. According to one franchisee, the vice-president who developed these systems 'treated patient flow like fast food and seemingly lost perspective.' This vice-president even created a system to exactly calculate dentist production to the second.

As another example, Omnidentix initially tried to implement a time schedule for every contracting dentist that was service dependent. Under this system, a prophylaxis would require 30 minutes. Although in theory, this appears to be an efficient way to organize a management system for dentists, in practice, it did not work. With this system, dentists were so pressured to get the patients in and out
that there was no time for conversation, and the dentists, staff and patients were unhappy.

From a management perspective, it also failed. Although initially, the system proved to be very productive, in the long run, multiple remakes lowered profits. Omnidentix tried this system for about one year before giving up on it. By the time it was abandoned, however, franchisee and dentist support had ebbed. New dental franchises are allowed few mistakes before losing franchisee support.

Another example of a management control system which failed was the short-lived policy of having the patient treated by the first available dentist. This policy has the advantage of decreasing patient waiting time, and increasing the objectivity of the encounter. This may also improve the quality of the care delivered since the dentist will have colleagues evaluating the quality of work rendered. It might also encourage fee uniformity since with less knowledge of the patient, the dentist is less likely to price discriminate. Despite all of these advantages, this policy failed. Both dentists and patients, it seems, want a longterm relationship and feel that better treatment is realized as a result.

SMILES OF NEW ENGLAND INC.

Smiles also made many of the same types of mistakes that Omnidentix management made. The Smiles hygiene manual
is an impressive step-by-step manual for practicing dental hygiene. Included in the hygiene system, however, are some impractical methods. For example, Smiles required their franchisees to buy a costly microscope that would allow their patients to see periodontal bacteria, and thereby increase their motivation. Not only did most of the dentist-franchisees ignore this advice but the advice was erroneous. A recent article in JADA reported that microscopes were ineffective as a patient motivational aid.

Smiles also instructed its dentists to culture periodontal bacteria, in order to effectively treat periodontal disease. Such a technique may optimally treat periodontal disease. However, this method is impractical, and was rarely if ever performed by the dentists.

In both the Smiles and Omnidentix franchises, it appears as if the monitoring forms were rarely filled out by the dentists. When they were, most of the dentists were unhappy with the feedback received. In Omnidentix, two-thirds of the dentists felt that the feedback was poor, and rarely helpful. In Smiles 55 percent of the franchisees felt this way. This number increased as time went on and the franchises began to worry about their very existence.

Another contributing factor to the poor management may have been lack of time to improve the management system. Both Omnidentix and Smiles appeared to have been in the process of amending their management system when their financial position soured, and the efforts were abandoned.
The hygiene coordinator at Smiles describes how she had almost completed perfecting her system when the company began failing and upper level support diminished. Her final system was never implemented.

It is important to note, however, that franchise systems need to be refined in the early stages of franchising, specifically, in the model franchise. Obviously, all problems cannot be anticipated, but, at least theoretically, the system should be functioning well before it is franchised. DHS averted this whole potential problem by simply not involving itself in center management services at all.

Conflict Between Franchisee and Franchisor

Previously, when discussing conflict, it was hypothesized that in any franchise organization, the amount of conflict is inversely proportional to the success of the organization over the long run. That is, the more conflict, the less likely it is that the organization will survive.

The same relationship between conflict and success was hypothesized to exist in dental franchises. The control of conflict in an organization was hypothesized to be a critical key to success. Although several different kinds of conflict were initially hypothesized to exist, conflict within the dental center between management and dentists and conflict between the franchisor and franchisee, only the
latter conflict and franchisors causes a significant problem.

This section will first describe the amount of conflict that exists in the dental franchises, and then discuss the reasons for this conflict. Finally, the reasons why some organizations have more or less conflict will be explored as it relates to communication, organizational structure, and amount and type of franchise intrusion.

Amount of Conflict

The levels of conflict, not surprisingly, were high at the unsuccessful dental franchises yet they were also high at the successful dental franchise. Importantly, the conflict levels increased with time. (See Table 7-2)

<table>
<thead>
<tr>
<th>TABLE 7-2</th>
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<tbody>
<tr>
<td>CONFLICT LEVELS BY YEAR BY FRANCHISE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SMILES OF NEW ENGLAND INC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None/Low</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Year One</td>
</tr>
<tr>
<td>Year Two</td>
</tr>
<tr>
<td>Year Three +</td>
</tr>
</tbody>
</table>
## OMNIDENTIX SYSTEMS INC.

<table>
<thead>
<tr>
<th>Year</th>
<th>None/Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td>3 (100%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Year Two</td>
<td>2 (67%)</td>
<td>1 (33%)</td>
<td>-</td>
</tr>
<tr>
<td>Year Three +</td>
<td>-</td>
<td>-</td>
<td>2 (100%)</td>
</tr>
</tbody>
</table>

## DENTAL HEALTH SERVICES INC.

<table>
<thead>
<tr>
<th>Year</th>
<th>None/Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td>9 (77%)</td>
<td>3 (23%)</td>
<td>-</td>
</tr>
<tr>
<td>Year Two</td>
<td>5 (45%)</td>
<td>5 (45%)</td>
<td>1 (10%)</td>
</tr>
<tr>
<td>Year Three +</td>
<td>4 (35%)</td>
<td>5 (45%)</td>
<td>2 (20%)</td>
</tr>
</tbody>
</table>

**OMNIDENTIX SYSTEMS INC.**

During the first year of Omnidentix operation, there was little conflict between the dentist-franchisees and the franchisor. In year two, conflict started to appear, although Omnidentix franchisees still rated it as low. By year three, the conflict was rated as high by the franchisees.

The reasons behind this conflict are due primarily to advertising, management, and in one instance, the proximity of another franchise to an already existing franchise. (See Table 7-3) In general, two-thirds of the Omnidentix franchisees feel that they had little control over the franchise.
Table 7-3

Reasons for Franchisor/Franchisee Conflict By Franchise

<table>
<thead>
<tr>
<th>REASON</th>
<th>FRANCHISES (percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Smiles</td>
</tr>
<tr>
<td>Advertising/Marketing</td>
<td>43</td>
</tr>
<tr>
<td>Not Getting Money's Worth/Program Not Working</td>
<td>33</td>
</tr>
<tr>
<td>Ongoing Provision of Services/Management</td>
<td>30</td>
</tr>
<tr>
<td>Control/Lease Control/Orthodontists</td>
<td>3</td>
</tr>
<tr>
<td>Location/Proximity of Other Centers</td>
<td>3</td>
</tr>
<tr>
<td>Dental Procedures/Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>Problem Solving/Leadership</td>
<td>7</td>
</tr>
<tr>
<td>Franchisee Dissension</td>
<td>7</td>
</tr>
<tr>
<td>NONE/MINIMAL</td>
<td>17</td>
</tr>
</tbody>
</table>

SMILES OF NEW ENGLAND INC.

During the first year of franchising, 65 percent of the dentists report low conflict with their franchisor. (see Table 7-2) However, even at this early period, almost one-quarter report medium amounts of conflict, while an additional 16 percent report high levels of conflict. By year two, only 33 percent report low amounts of conflict; 23 percent have medium levels of conflict and 26 percent report high levels of conflict. In year three, the conflict
increases even more. Twenty-six percent of the franchisees report low levels of conflict, six percent had medium and almost one-third of the dentists report high levels of conflict with their franchisor. These results are probably low since other dentist-franchisees unhappy with the franchise had already dropped out.

The major reasons for conflict among the franchisees (see Table 7-3) were advertising (39 percent), the program did not work or did not deliver what was promised (29 percent) and poor management (23 percent). Other less commonly cited reasons were the cost (6 percent), dissension among the group (6 percent), proximity of another location (3 percent), and none (6 percent). Only one dentist complained of clinical conflicts.

DENTAL HEALTH SERVICES INC.

The successful franchise, DHS has somewhat lower levels of conflict than do the other two franchises studied. (See Table 7-2) In year one, 82 percent of the franchisees rate their conflict as low with the other 18 percent rating it as moderate. In year two, 55 percent rate it as low and an additional 45 percent rate it as medium. By year three, only 27 percent of the dentists rate the conflict levels as low, while 55 percent rate it moderate and 18 percent rate it as high.

The largest source of conflict among DHS is advertising (73 percent). A distant second is control over the
orthodontic specialists (18 percent). (See Table 7-3) Other areas, cited by only one dentist, are; the program not working, lack of busyness, location, and clinical dentistry. Two of the DHS dentist-franchisees report no conflicts at all with franchise management.

Resolution of Conflict

At Omnidentix, when conflict was present, it was usually resolved by verbal discussion and resolution of the problem. This was satisfactory at the beginning for the franchisees. With time, as the franchise grew larger, this type of resolution became less and less satisfactory.

At Smiles, the dentists are evenly divided among those who feel that conflicts are resolved by discussion and open meetings with the franchisor or their district manager, and those who feel that conflicts are never resolved. These dentists feel that their franchisor utilized persuasion or promises to pacify them, but despite their dissatisfaction, franchisor policy did not change.

When conflict arises in DHS, it is usually resolved through discussion and meetings. Only one dentist reports that conflict is usually not resolved at all. Conflict is also resolved in more drastic methods by many of the franchisees, namely by terminating their franchise agreement early, or by initiating a lawsuit against the franchisor.

Although none of the DHS franchisees have as yet terminated their contract, almost 50 percent of the dentists
have considered or have taken legal action against the franchise. These legal actions have been due to unresolved conflicts dealing with franchise advertising and lease renewals.

In Smiles, 30 percent of the franchisees ended their franchise affiliation early. Of these, half bought out their contract with Smiles and the other half simply stopped paying their franchise payments. Thirteen percent of these unsatisfied dentists had taken or had considered bringing suit against Smiles for nonfulfillment of their franchise agreement. In Omnidentix, although none of the franchisees terminated their agreement early, one did consider taking legal action against the franchisor.

Minimizing Conflict Through Communication

According to franchising experts, communication is the key to minimizing conflict in any organization. (Haimann et al 1978, Butaney 1989) In general, although communication does not seem to be emphasized in the dental franchises, the franchisees do not seem to desire closer contact.

OMNIDENTIX SYSTEMS INC.

At Omnidentix, during its first two years, two out of the three franchisees rate their communication as excellent and only one rates it as fair. The two dentists, who believe it to be excellent, report that they communicate with their franchisor twice a week, either on the telephone
or via site visits. One dentist thought this to be the right amount, and one dentist wanted it to be more often. The third dentist has site visits once per week, and communicates with the franchisor only once per week. Although he rates this communication as only fair, he does not want to communicate more frequently with the franchisor.

DENTAL HEALTH SERVICES INC.

The majority of DHS franchisees rate communication between themselves and their franchisor as either excellent or very good (64 percent). Another 27 percent rate it as fair, and only one dentist rates it as poor. Communication consists mainly of office visits and telephone conversations which occur one to two times per month, for 80 percent of the franchisees. The remaining franchisees communicate with the franchisor rarely (one or two times per year). Despite this infrequent communication, only two of the DHS dentists desire it to occur more often.

Although all but one of the DHS franchisees believe that the lines of communication are open, possibly, a problem arises because more than half of the dentists feel that they do not speak the same language as their franchisor. The franchisees are concerned about the quality of their dentistry, their professionalism, and the success of their own dental centers. The franchisor is perceived as caring too much about the business side of the franchise including money and expansion. The existence of such a
communication gap might explain the unenthusiastic desire for greater communication levels with the franchisor.

**SMILES OF NEW ENGLAND INC.**

In Smiles, the communication appears to be low. Sixty-one percent of the Smiles franchisees rate their communication with their franchisor as excellent or good. Almost 40 percent rate it as fair or poor. Communication for the vast majority of franchisees includes site visits or verbal communication, once or twice per month. Only two Smiles franchisees rarely communicate with their franchisor.

In contrast with the DHS franchisees, most of the Smiles franchisees desire greater contact with their franchisor. Sixty-five percent of the Smiles dentists desire more site visits and more verbal communication between themselves and their franchisor. Twenty-six percent want the same amount and only ten percent desire less contact.

By far the majority of Smiles dentists believe that communication channels are open (61 percent). While a small minority believe them to be closed (7 percent). When asked if they feel they speak the same language as their franchisor, nearly 50 percent feel that they do while nearly 35 percent feel that they do not. This trend is similar to those of the other franchises studied.

It appears as if communication in the dental franchises is mediocre by industry standards. (Merchant 1985 p60) The
franchisors conduct site visits or communicate by telephone to the franchisees usually only once per month and sometimes even less often. This appears to have been sufficient communication for the successful DHS franchisees. For DHS and especially for Smiles, however, the majority of franchisees desire greater contact with their franchisor. Most Smiles dentists feel that lines of communication between themselves and the franchisor are open.

SUMMARY
In summary then, it appears as if the management of the failed franchises, by applying management approaches from non-dental franchising to dental franchises, and some plainly erroneous management systems to their dental franchises, may have compromised the effectiveness of their management approach. The one surviving franchise may remain viable simply by distancing itself from the clinical management of its franchise centers. Although absence of management contributes to franchisee satisfaction, this same lack of management may also be contributing to the recent poor financial performance of DHS. Therefore, in order to manage health care professionals, rather than ignore the issues like DHS, management must alter traditional management styles and strategies, and incorporate a unique management strategy to deal with this special group of clinicians.
Conflict plays a large role in the success of the franchises. Conflict levels are quite high in all three of the franchises, although it was less in the successful franchise. As hypothesized, the conflict grew larger as time went on, but the amount of conflict was much greater and occurred much sooner than in nonprofessional franchises. Even in DHS where there was less conflict overall, the trends paralleled those of the other franchises.

The areas of conflict also are the same in all three franchises. The greatest area of conflict is poor advertising, poor management and complaints that the program did not work. In contrast to nondental franchises, the dentist-franchisees are, in general, more prone to early termination of their franchise affiliation by either breaking their contract or bringing a lawsuit against their franchisor if dissatisfied.

In order to be successful franchising dental practices, it is necessary not only for the franchisor to keep the lines of communication open by visiting and communicating regularly, but also to ensure that they are speaking the same language as their franchisees. By concentrating too much on the short-term business side of the franchise, the franchisor may alienate its franchisees.

Dental franchising does appear to have a continuing niche in the dental care market, but maybe less of one than previously thought. Franchising seems to better serve an introductory role in a dental practice, rather than a
continuing one. Dental franchises are successful in their choice of a new dental center's location, marketing program, and setup, enabling the center to attain profitability much quicker than a private practice. Dental franchising encounters difficulties when it goes beyond these startup functions. Franchise management of ongoing dental center operations or its continuing role in any clinical area of the dental centers seems to generate discontent among the dentist-franchisees and is seen as interference on the part of the franchisor.
REFERENCES


CHAPTER 8
STATISTICAL ANALYSIS

Methods

Statistical examination of data collected from the survey of dental franchises also confirms the relationship between franchise success or failure and performance in the areas of management, communication, marketing and finance. The success of a dental franchise is modeled mathematically using logistic regression. This technique assumes a relationship between quality of service provided by a franchise and franchise success. Alternative models were examined to determine which produced a suitable fit to the data.

The logistic model states that the probability of franchise success depends on a set of variables \( x_1, x_2, \ldots, x_p \) such that:

\[
P_X = \frac{1}{1 + e^{(-B_0 + B_1 x_1 + \ldots + B_p x_p)}}
\]

The variables \( x_1, \ldots, x_p \) represent potential factors influencing the dependent variable. The B's are parameters representing the effects of the x's on the probability of success, adjusting for the presence of other variables in the model.

The logistic betas are interpreted in terms of odds and odds ratios. The relative odds of success for a franchise with variable value \( x^* = (x^*_1, x^*_2, \ldots, x^*_p) \) as compared with a franchise with the value \( x = (x_1, x_2, \ldots, x_p) \) is given by the
odds ratio = e( B_i (x* - x_i) ). Parameters (B's) are estimated from the data using maximum likelihood estimation. Standard errors, confidence intervals and significance tests are also calculated for model coefficients.

Results

Out of 213 variables, ranging from advertising to training manuals to management systems initially analyzed, seven were found to be significant with respect to franchise success. These seven variables include overall franchisor management performance, the franchise manual, location of the center and age of dentist-franchisee. The other three significant variables: level of autonomy, conflict and characteristics of the franchisee-dentist were determined as a combination of several related variables.

Statistical calculations (See Table 8-1) illustrate that for management performance, beta coefficients were 3.8 and 2.2 at level one (low) and level two (high) respectively. The corresponding odds ratios were 44.6 and 8.9. When the management variable is broken down into specific types of management for example, management of staff or costs, none of these subvariables prove to be significant.

The other statistically significant variable is characteristics of the individual dentist. This variable is a combination of dentist characteristics including dental and management experience, risk-taking, financial security
and desire for autonomy. Analysis indicates that the beta coefficient for this variable is 9.6 and the odds ratio is 2.5. Thus, franchises whose franchisees possess financial security, dental and management knowledge and a high desire for autonomy are two times more likely to succeed than not.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>Beta</th>
<th>Pr &gt; Chi-Square</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$x_0$ intercept</td>
<td>$B_0$</td>
<td>-9.2857</td>
<td>.1890</td>
<td></td>
</tr>
<tr>
<td>$x_1$ management (low)</td>
<td>$B_1$</td>
<td>3.7971</td>
<td>.1160</td>
<td>44.572</td>
</tr>
<tr>
<td>$x_1$ management (high)</td>
<td>$B_2$</td>
<td>2.1837</td>
<td>.3153</td>
<td>8.879</td>
</tr>
<tr>
<td>$x_2$ manual (low)</td>
<td>$B_3$</td>
<td>-0.0492</td>
<td>.9806</td>
<td>0.952</td>
</tr>
<tr>
<td>$x_2$ manual (high)</td>
<td>$B_4$</td>
<td>2.16</td>
<td>.2942</td>
<td>8.671</td>
</tr>
<tr>
<td>$x_5$ location (low)</td>
<td>$B_5$</td>
<td>-1.2554</td>
<td>.5257</td>
<td>0.285</td>
</tr>
<tr>
<td>$x_6$ location (high)</td>
<td>$B_6$</td>
<td>-0.3805</td>
<td>.8780</td>
<td>0.684</td>
</tr>
<tr>
<td>$x_7$ individual DMD</td>
<td>$B_7$</td>
<td>9.559</td>
<td>.1088</td>
<td>2.452</td>
</tr>
<tr>
<td>$x_8$ autonomy</td>
<td>$B_8$</td>
<td>-0.0962</td>
<td>.6185</td>
<td>0.908</td>
</tr>
<tr>
<td>$x_9$ conflict</td>
<td>$B_9$</td>
<td>-0.0510</td>
<td>.8459</td>
<td>0.950</td>
</tr>
<tr>
<td>$x_{10}$ age</td>
<td>$B_{10}$</td>
<td>-0.0765</td>
<td>.5091</td>
<td>0.926</td>
</tr>
</tbody>
</table>

Using the estimates of the logistic parameters in Table 8-1, a model of franchise success is given by:

$$P_x = \frac{1}{1 + e^{(-9.29 + 3.79(x_1) + 2.18(x_2) - 0.05(x_3) + 2.16(x_4) - 1.26(x_5) - 0.38(x_6) + 9.56(x_7) - 0.09(x_8) - 0.05(x_9) - 0.08(x_{10}))}}$$
The model's goodness of fit is assessed using sensitivity analysis comparing the actual values of variables with their predicted values. Table 8-2 indicates that the sensitivity of the model (% correctly classified) is approximately 85 percent. Another test for model fit, the -2 log L row equals 14.78, indicating that the combined effects of the independent variables are significant with p=.14. The sample size is small so that the high p values in Table 8-1 should not be taken to be accurate.

Table 8-2

<table>
<thead>
<tr>
<th></th>
<th>EVENT</th>
<th>NO EVENT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted</td>
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<td>15</td>
<td>3</td>
</tr>
<tr>
<td>EVENT</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Observed</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>NO EVENT</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>5</td>
<td>26</td>
</tr>
</tbody>
</table>

Sensitivity = 83.3%  Specificity = 25.0%
Correct = 65.4%  False Positive Rate = 28.6%
False Negative Rate = 60.0%

Discussion

These statistical results show that professional autonomy is a critical factor in franchise success. Although management style plays an important role, the ultimate success of an individual dental center depends upon the individual dentist.
The high odds ratio for the management variable is explained by discussing the two outcomes present in the analysis. In the first case, the franchise provides quality management but fails. This scenario may be explained by an overly structured franchise management system. This strategy stresses technical management systems rather than emphasizing more critical areas as dentist performance. Such a system may result in inefficiencies due for example, to excess paperwork or overreliance on computer applications that individual dentists may not understand or use effectively.

In the second case, the franchise management is perceived to be inadequate but the franchise is successful. Greater control of daily operations may provide greater incentives for the professional to make the practice a success. Most dental centers succeed despite the effectiveness of management.

The variable reflecting characteristics of the dentist-franchisee also plays an important role in predicting franchise success. Management experience of the individual dentist and not the franchisor, contributes to greater success of the franchise. Greater risk-taking ability, financial security and desire for autonomy by the dentist correlate with success. More successful dentists are more entrepreneurial and prefer to do things themselves. Greater professional autonomy granted to dentists in DHS Inc. contributes to lower conflict levels and greater success for
the franchise. When autonomy is analyzed as a separate variable, however, it proves to be roughly a linear variable and not a significantly predictive variable for success. The analysis on hand further indicates that lower conflict levels correlate with greater franchise success, although less significantly than previous results.

The statistical analysis predicts franchise success moderately well. The model provides a suitable framework for predicting success of a new franchise. This model also serves as a basis for study of franchising in other professions. Additional data collection will further refine the model and improve its predictive value.

**Summary**

Structured management systems are not the critical factors hypothesized in dental franchise success. The provision of high quality service on a personal basis is more important than management. Efficient management will contribute to greater profits but will not impact the typical center success. Professionals lack motivation to relinquish control to outside management under these conditions. Therefore, professional dominance and not structural management plays the critical role in the success of dental franchise organizations.
CHAPTER 9
FINANCIAL ANALYSIS

In order to explain the poor performance of the dental franchise industry, a necessary final step is to analyze the financial condition of the three dental franchises; Omnidentix Systems Inc., Smiles Of New England Inc. and Dental Health Services. Such a financial analysis must analyze two critical factors; (Platt 1985)

1) Industry conditions and
2) Financial condition of the individual companies

The overall dental care market will be examined in the first part of this chapter to determine the health of the overall dental care market during the time when dental franchises were failing. The second part of this chapter will analyze the financial condition of the three dental franchises utilizing financial statements and accounting ratios.

Examination of the overall dental industry reveals that while dental franchises were failing, the nonfranchised dental market was thriving, thereby eliminating a sluggish dental economy as a factor in dental franchise failure. Analysis of Smile's and Omnidentix's financial statements disclose the precarious financial positions of both franchises from the outset. Financial documents also indicate that even the performance of the surviving
franchise, DHS, is questionable and foreshadows future problems in this dental franchise as well.

I SUCCESS OF THE OVERALL DENTAL CARE MARKET

In order to evaluate the success or failure of dental franchises, the health of the overall dental care market during the relevant time period of dental franchise operation and failure must be considered. It is important to distinguish the extent to which changes in the overall dental care market influenced or failed to influence success or failure of the dental franchises. The economic record of the nonfranchised dental care market during 1980-1984, the time period when most dental franchises failed, will be determined by an analysis of net income figures for private dentists as well as through a comparison of the overall expenditures for dentistry, medicine and the US economy as a whole.

Dentist Income

One method of identifying the relative success of the non-franchised dental care market is to examine gross income figures for private dentists. Several studies examining general dentist gross income have concluded that, with the exception of a few years (such as 1978-81), dentists' gross incomes between 1965 and 1985 have fared favorably when compared to physician income and that of the population as a
The average gross income of dentists increased from $29,200 to $212,700 between 1965 and 1985, a growth of 7.28 times during this period. (Beazoglou 1989)

Another indicator of the general success of non-franchised dentists is net income. Net income is defined as the difference between the gross receipts of the dental practice and the expenses of operating the practice before the payment of income taxes.

Dentists' net incomes have risen steadily over the past ten years. (See Table 9-1)

**TABLE 9-1**

Regional Mean Net Incomes of All Dentists, 1981-1987  
(in $000s)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New England</td>
<td>49.5</td>
<td>57.3</td>
<td>55.2</td>
<td>62.0</td>
<td>57.8</td>
<td>76.7</td>
<td>80.1</td>
</tr>
<tr>
<td>Mid Atlantic</td>
<td>51.3</td>
<td>58.5</td>
<td>57.6</td>
<td>62.5</td>
<td>62.2</td>
<td>80.8</td>
<td>72.0</td>
</tr>
<tr>
<td>East N. Central</td>
<td>57.8</td>
<td>61.6</td>
<td>59.6</td>
<td>62.1</td>
<td>67.6</td>
<td>72.5</td>
<td>71.2</td>
</tr>
<tr>
<td>West N. Central</td>
<td>51.9</td>
<td>53.8</td>
<td>50.0</td>
<td>60.2</td>
<td>57.0</td>
<td>67.5</td>
<td>62.5</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>56.9</td>
<td>61.3</td>
<td>59.0</td>
<td>67.0</td>
<td>71.6</td>
<td>81.2</td>
<td>88.0</td>
</tr>
<tr>
<td>East S. Central</td>
<td>54.2</td>
<td>55.2</td>
<td>60.3</td>
<td>63.5</td>
<td>64.4</td>
<td>78.7</td>
<td>80.4</td>
</tr>
<tr>
<td>West S. Central</td>
<td>57.6</td>
<td>75.4</td>
<td>65.8</td>
<td>64.9</td>
<td>73.9</td>
<td>73.1</td>
<td>82.8</td>
</tr>
<tr>
<td>Mountain</td>
<td>53.5</td>
<td>50.7</td>
<td>61.1</td>
<td>63.3</td>
<td>62.8</td>
<td>76.7</td>
<td>80.0</td>
</tr>
<tr>
<td>Pacific</td>
<td>57.4</td>
<td>67.1</td>
<td>65.8</td>
<td>65.5</td>
<td>72.1</td>
<td>76.1</td>
<td>85.4</td>
</tr>
<tr>
<td>OVERALL</td>
<td>56.4</td>
<td>61.2</td>
<td>62.7</td>
<td>66.9</td>
<td>72.1</td>
<td>76.1</td>
<td>84.2</td>
</tr>
<tr>
<td>USA</td>
<td>18.9</td>
<td>19.0</td>
<td>19.3</td>
<td>19.7</td>
<td>25.3</td>
<td>26.4</td>
<td>27.4</td>
</tr>
</tbody>
</table>

On average, general dentists' net incomes have risen from $56,400 in 1981 to $84,200 in 1987, an almost 50 percent increase as contrasted to only a 44 percent increase for the US population. During the critical period of 1981-1984 when most dental franchises were failing, the rise was especially great. The mean net incomes from general dentists rose 18.7 percent versus only an increase of 4.2 percent in the mean net income of the general public. (See Table 9-2) Thus, both dentist gross and net income figures indicate a strong dental care market.

### TABLE 9-2

Regional Percentage Increases in Mean Net Incomes of All Dentists, 1981-1987

<table>
<thead>
<tr>
<th>Region</th>
<th>1981-1984</th>
<th>1984-7</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England</td>
<td>25.3%</td>
<td>29.2%</td>
<td>61.8%</td>
</tr>
<tr>
<td>Mid Atlantic</td>
<td>21.8%</td>
<td>15.2%</td>
<td>40.4%</td>
</tr>
<tr>
<td>East N. Central</td>
<td>7.4%</td>
<td>14.7%</td>
<td>23.1%</td>
</tr>
<tr>
<td>West N. Central</td>
<td>16.0%</td>
<td>3.8%</td>
<td>20.4%</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>17.8%</td>
<td>31.3%</td>
<td>54.7%</td>
</tr>
<tr>
<td>East S. Central</td>
<td>17.2%</td>
<td>26.6%</td>
<td>48.3%</td>
</tr>
</tbody>
</table>
West S. Central 12.7% 27.6% 43.8%
Mountain 18.3% 26.4% 49.5%
Pacific 14.1% 30.4% 48.8%
Overall 18.7% 25.9% 49.3%
USA 4.2% 39.1% 45.0%


When determining the health of the non-franchised dental market, it is also important to consider regional variation as an explanation of franchise failure. It is possible that dental franchises failed because of poor economic conditions in their areas. As a result, the corresponding income figures for the New England region, where both Omnidentix and Smiles were located, must be analyzed individually.

Tables 9-1 and 9-2 provide the regional growth rates in mean net incomes of private dentists. During the time period when Omnidentix and Smiles were failing, other New England dentists were prospering. The New England dentists experienced greater than a 25 percent increase during 1981-1984, the largest increase of any region in the country. The New England region also saw a 62 percent increase in mean dentist income from 1981-87. The South Atlantic region, where DHS is located, experienced the second largest increase in net income (54.7 percent). The same regional
trends are seen when mean gross incomes are examined. (Beazoglou 1989)

Growth of Non-Franchised Dental Care

The same positive trends evident in personal income figures for non-franchised general dentists are seen in the overall economic record of dentistry when contrasted with the medical profession and the general economy. Table 9-3 compares the growth rate of the GNP for the entire US economy with the growth rates of dental and medical expenditures.

**TABLE 9-3**

Total Dental and Medical Expenditures and Gross National Product in the US (nominal dollars) 1980-7

<table>
<thead>
<tr>
<th>Year</th>
<th>ADE ($B)</th>
<th>MCE ($B)</th>
<th>GNP ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>$15.4</td>
<td>248.1</td>
<td>2732.0</td>
</tr>
<tr>
<td>1981</td>
<td>17.3</td>
<td>287.0</td>
<td>3052.6</td>
</tr>
<tr>
<td>1982</td>
<td>19.5</td>
<td>323.6</td>
<td>3166.0</td>
</tr>
<tr>
<td>1983</td>
<td>21.8</td>
<td>357.2</td>
<td>3405.7</td>
</tr>
<tr>
<td>1984</td>
<td>25.1</td>
<td>388.5</td>
<td>3772.2</td>
</tr>
<tr>
<td>1985</td>
<td>27.1</td>
<td>419.0</td>
<td>4010.3</td>
</tr>
<tr>
<td>1986</td>
<td>29.6</td>
<td>455.7</td>
<td>4486.2</td>
</tr>
<tr>
<td>1987</td>
<td>32.8</td>
<td>500.3</td>
<td>4880.6</td>
</tr>
</tbody>
</table>

ADE=Aggregate Dental Expenditures
MCE=Aggregate Medical Expenditures
GNP=Gross National Product
During the period of 1980-1984, the aggregate dental expenditures (ADE) increased from $15.4 billion to $25.1 billion, a 63 percent increase. In contrast to the dental care market, both medical care expenditures (MCE) and the US economy (GNP) grew more slowly at 57 percent and 38 percent respectively.

When these figures are adjusted by the appropriate price indices (See Table 9-4) to arrive at real growth figures, the same trend is evident.

**TABLE 9-4**

<table>
<thead>
<tr>
<th>Year</th>
<th>DFI</th>
<th>MCPI</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>78.9</td>
<td>74.9</td>
<td>1.136</td>
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<tr>
<td>1981</td>
<td>86.5</td>
<td>83.7</td>
<td>1.041</td>
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<tr>
<td>1982</td>
<td>93.1</td>
<td>92.3</td>
<td>1.000</td>
</tr>
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<td>1983</td>
<td>99.4</td>
<td>100.2</td>
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<td>1984</td>
<td>107.5</td>
<td>107.5</td>
<td>.964</td>
</tr>
<tr>
<td>1985</td>
<td>114.2</td>
<td>115.2</td>
<td>.955</td>
</tr>
<tr>
<td>1986</td>
<td>120.6</td>
<td>122.8</td>
<td>.969</td>
</tr>
<tr>
<td>1987</td>
<td>128.8</td>
<td>131.0</td>
<td>.949</td>
</tr>
<tr>
<td>1988</td>
<td>137.5</td>
<td>139.9</td>
<td>.926</td>
</tr>
</tbody>
</table>
DFI=Dental Fee Index  
CPI=Consumer Price Index  
MCPI=Medical Care Price Index


Tables 9-5 and 9-6 reveal that real dental expenditures grew from $19.5 billion in 1980 to $23.3 billion in 1984, an almost 20 percent increase.

**TABLE 9-5**

Real GNP and Real Dental and Medical Expenditures in the United States, 1981-1987 (1982 dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Real ADE ($B)</th>
<th>Real MCE ($B)</th>
<th>Real GNP ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>19.5</td>
<td>331.2</td>
<td>3103.6</td>
</tr>
<tr>
<td>1981</td>
<td>20.0</td>
<td>342.9</td>
<td>3177.1</td>
</tr>
<tr>
<td>1982</td>
<td>20.9</td>
<td>350.6</td>
<td>3166.0</td>
</tr>
<tr>
<td>1983</td>
<td>21.9</td>
<td>356.5</td>
<td>3351.2</td>
</tr>
<tr>
<td>1984</td>
<td>23.3</td>
<td>361.4</td>
<td>3636.4</td>
</tr>
<tr>
<td>1985</td>
<td>23.7</td>
<td>363.7</td>
<td>3829.6</td>
</tr>
<tr>
<td>1986</td>
<td>24.5</td>
<td>371.1</td>
<td>4347.1</td>
</tr>
<tr>
<td>1987</td>
<td>23.9</td>
<td>381.9</td>
<td>4518.9</td>
</tr>
</tbody>
</table>

ADE=Aggregate Dental Expenditures  
MCE=Medical Care Expenditures  
GNP=Gross National Product

### TABLE 9-6

**Real Growth of Dental and Medical Expenditures and Real GNP, 1980-1987 (1982-4=100.0)**

<table>
<thead>
<tr>
<th>Year</th>
<th>ADE</th>
<th>MCE</th>
<th>GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>2.5%</td>
<td>3.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>1982</td>
<td>4.5%</td>
<td>2.2%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>1983</td>
<td>4.8%</td>
<td>1.7%</td>
<td>5.8%</td>
</tr>
<tr>
<td>1984</td>
<td>6.4%</td>
<td>1.4%</td>
<td>8.5%</td>
</tr>
<tr>
<td>1985</td>
<td>1.7%</td>
<td>0.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>1986</td>
<td>3.4%</td>
<td>2.0%</td>
<td>13.5%</td>
</tr>
<tr>
<td>1987</td>
<td>-2.4%</td>
<td>2.9%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>22.6%</td>
<td>15.3%</td>
<td>45.6%</td>
</tr>
<tr>
<td>1980-1984</td>
<td>19.5%</td>
<td>17.2%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

ADE=Aggregate Dental Expenditures  
MCE=Medical Care Expenditures  
GNP=Gross National Product


During the same time period, real medical care expenditures expanded from $331.2 billion to $361.4, an increase of 17.2 percent. Real gross national product grew even more slowly from $3103 to $3636 billion, an increase of only 9.1 percent, far less than the 20 percent growth rate in the private dental care market.
Summary

These data indicate that during the same time period that most dental franchises were failing, the private dental care market was successful. Private general dentists experienced greater increases in personal gross and net income than did the population as a whole. Real expenditures on dentistry also increased at a greater rate than that for medicine and more than double the rate of the overall US economy.

These factors arguing towards a healthy dental industry during most of the 1980s are reinforced by studies of industry specific financial success records. Dental offices were the third highest ranking category of start-up businesses most likely to succeed, according to an Inc. survey of 1.5 million companies as reported in the January 1988 issue. (Birch 1988) The study covered new business ventures started between 1978 and 1987 in 236 categories. Thus, the high failure rate of dental franchises during the 1980's does not extend to non-franchised dental offices. Failures of dental franchises thus cannot be explained by poor performance of the overall dental care market, but rather by poor performances of the individual dental franchises.
II  FINANCIAL ANALYSIS OF THREE DENTAL FRANCHISES

Overview

This section will analyze the finances of the three dental franchises; Omnidentix Systems Inc., Smiles of New England Inc. and Dental Health Services Inc. to determine why failure or success occurred. A firm's success or poor performance leading to bankruptcy can be predicted by analysis of the financial statements using financial ratios.

From a financial standpoint, bankruptcy usually results from any of the following:

1) Cash flow cycles - The relationship between when revenues are collected and when expenses are paid.

2) Operating leverage - A firm's fixed cost (eg. rent) with respect to profits earned from sales.

3) Financial leverage - The impact of net income upon the firm's choice of financing debt. (Debt vs Equity)

4) The borrowing of money in the short-run or long-run. (Casey and Bartczak 1984)

Key indicators of financial viability such as debt to equity ratios, cash flow and liquidity ratios are discussed to better assess the profitability of these dental franchises. Table 9-7 displays the financial ratios of the three dental franchises. Although industry averages are not available for comparison, trend analysis as well as general estimates can be used to indicate financial condition and possibility of failure. An appendix defining financial
terms is also included for the reader's convenience. (see Appendix D)

**TABLE 9-7**

**FINANCIAL RATIOS FOR DENTAL FRANCHISES**

<table>
<thead>
<tr>
<th></th>
<th>Omnidentix Inc.</th>
<th>Smiles Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Ratio</strong></td>
<td>0.30</td>
<td>9.42</td>
</tr>
<tr>
<td><strong>Quick Ratio</strong></td>
<td>0.23</td>
<td>9.14</td>
</tr>
<tr>
<td><strong>Profit/Sales</strong></td>
<td>-0.36</td>
<td>-1.23</td>
</tr>
<tr>
<td><strong>Cash Flow/Debt</strong></td>
<td>-2.54</td>
<td>- -2.01</td>
</tr>
<tr>
<td><strong>Cash Flow</strong></td>
<td>-42709</td>
<td>-369253</td>
</tr>
<tr>
<td><strong>Earnings Per Share</strong></td>
<td>-0.02</td>
<td>-0.08</td>
</tr>
<tr>
<td><strong>Share Price</strong></td>
<td>1.31</td>
<td>2.25</td>
</tr>
<tr>
<td><strong>Return on Assets</strong></td>
<td>0.45</td>
<td>0.26</td>
</tr>
<tr>
<td><strong>Return on Equity</strong></td>
<td>-1.65</td>
<td>-7.04</td>
</tr>
<tr>
<td><strong>Market/Book</strong></td>
<td>1.85</td>
<td>11.00</td>
</tr>
<tr>
<td><strong>Book Value/Share</strong></td>
<td>0.01</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Debt Ratio</strong></td>
<td>0.90</td>
<td>0.09</td>
</tr>
<tr>
<td><strong>Times Interest Earned</strong></td>
<td>1.19</td>
<td>-</td>
</tr>
<tr>
<td><strong>Z-ratio</strong></td>
<td>0.52</td>
<td>0.92</td>
</tr>
</tbody>
</table>
TABLE 9-7 (continued)

FINANCIAL RATIOS FOR DENTAL FRANCHISES

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Dental Health Services Inc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Ratio</td>
<td>5.52</td>
<td>4.48</td>
<td>1.88</td>
<td>1.48</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>4.81</td>
<td>4.14</td>
<td>1.83</td>
<td>1.46</td>
</tr>
<tr>
<td>Profit/Sales</td>
<td>8.33%</td>
<td>19.19%</td>
<td>9.23%</td>
<td>-9.41%</td>
</tr>
<tr>
<td>Cash Flow/Debt</td>
<td>0.41</td>
<td>1.15</td>
<td>0.29</td>
<td>-0.22</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>258919</td>
<td>698497</td>
<td>225377</td>
<td>-147655</td>
</tr>
<tr>
<td>Price Earnings Ratio</td>
<td>4.0</td>
<td>2.0</td>
<td>6.0</td>
<td>-6.0</td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>7.21</td>
<td>28.0</td>
<td>9.0</td>
<td>-8.0</td>
</tr>
<tr>
<td>Share Price</td>
<td>32.0</td>
<td>59.70</td>
<td>55.91</td>
<td>48.26</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>10.90%</td>
<td>26.77%</td>
<td>8.52%</td>
<td>-7.61%</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>22.42%</td>
<td>46.65%</td>
<td>16.37%</td>
<td>-15.84%</td>
</tr>
<tr>
<td>Market/Book</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Equity not traded</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book Value/Share</td>
<td>32.0</td>
<td>59.70</td>
<td>55.91</td>
<td>48.26</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>0.51</td>
<td>0.37</td>
<td>0.37</td>
<td>0.40</td>
</tr>
<tr>
<td>Times Interest Earned</td>
<td>0.68</td>
<td>7.54</td>
<td>2.91</td>
<td>-2.66</td>
</tr>
<tr>
<td>Z-Ratio</td>
<td>2.90</td>
<td>4.81</td>
<td>2.81</td>
<td>1.49</td>
</tr>
</tbody>
</table>
FINANCIAL RATIOS

A. CASH FLOW

Cash flow (CF) is the primary financial predictor of bankruptcy or success. (Argenti 1976) Cash flow refers to the time elapsing between manufacture of a good or service and when cash is received for its sale. The timing of cash flow is critical in any company's success. Suppliers may serve as a source of funds by lengthening their payment period. More importantly, managerial actions may influence this time factor by extending credit, trade discounts or changing the nature of the production process. If more lenient credit is allowed, this will increase the time factor and increase sales but also increase bad debt. If more trade discounts are taken (i.e. bills are paid faster) this will also increase the time factor and increase profits as long as the trade discount is worth more than the cost of finance.

Cash flow (CF) figures for Omnidentix show that the funds provided by operations are not only negative but are tripling each year. It is extremely unlikely that such a firm will soon become profitable.

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</thead>
<tbody>
<tr>
<td>Cash Flow</td>
<td>($57,650)</td>
<td>(368,440)</td>
<td>(1,314,000)</td>
<td>(3,946,000)</td>
</tr>
</tbody>
</table>
A second indicator of future failure or success is operating cash flow (OCF). (Argenti 1976) Operating cash flow for Omnidentix reveals the same negative cash flow figures.

<table>
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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OCF</td>
<td>$41,980</td>
<td>(171,275)</td>
<td>(1,152,936)</td>
<td>(3,935,886)</td>
</tr>
</tbody>
</table>

Although Operating Cash Flow is slightly less negative than Cash Flow figures, the Operating Cash Flow for Omnidentix still shows a significantly negative cash flow that has been steadily increasing.

The Cash Flow for Smiles Inc. was also a significant negative number ($459,277) for 1984 indicating a poor cash flow position.

The Cash Flow for DHS also indicates a negative trend.

<table>
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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow=</td>
<td>$258,919</td>
<td>698,497</td>
<td>225,377</td>
<td>(147,655)</td>
</tr>
</tbody>
</table>

Cash Flow for DHS is within acceptable limits for the years 1985 and 1986. In 1987, however, the Cash Flow begins to fall and by 1988 it is negative. This worsening of Cash Flow reflects a decreasing net income and might foreshadow troubles ahead for the franchise.
B. LIQUIDITY

Liquidity ratios indicate a company's ability to pay its current debts and so are useful in the prediction of company success. The current ratio (CR) of Omnidentix increases from 0.3 in its first year to a healthy 9.4 in 1982 reflecting the cash proceeds of the Company's first public stock offering. Current ratio then drops precipitously and ends at a low 0.32 in 1984. A general standard for comparison is 2:1 or better for a successful company. (Granof 1983 p215) All of Omnidentix's ratios in 1983 and 1984 are low enough to cause considerable concern over the company's readiness to meet its short-term debts. The low figures and downward trend for both current ratio and quick ratio (QR) are indicative of an impending cash crunch and financial failure.

Examination of the liquidity of Smiles Inc., shows similarities to that of Omnidentix. Smiles' current ratio and quick ratio both decreased dramatically from 86, following its public stock offering, to 2.2 in just one year. The current ratio of 86 in 1983 is too high and probably indicates inefficient cash management. Nonetheless the downward trend indicates potential problems and the current ratio and quick ratio of 2.2 in 1984 is marginally acceptable.

Trends in the current and quick ratios for DHS are similar to the other two dental franchises. The Current ratio decreases from 5.52 in 1985 to 4.48 to 1.88 and 1.48
in 1988. The initial decrease in current ratio can be viewed as a positive sign since the company's position is too liquid. However, the rapid decline between 1986 and 1989 are signs of an impending liquidity crisis for DHS.

C. PROFITABILITY

Profitability ratios indicate the combined effects of liquidity, asset management and debt management on operating results. Omnidentix's profit margin in 1981 was a negative -0.36 and continued to decrease until it reached -2.18 in 1984. These figures show that Omnidentix will experience even greater losses should an economic recession occur and an increase in costs or a decrease in prices. The decreasing trend points to an ever increasing disparity between income and sales, so that increasing sales leads to greater losses for the Company.

The Return on Assets (ROA), measuring the return after interest and taxes on total assets for the dental franchises, parallel other negative profitability measures. Return on assets for Omnidentix is (-0.2) in 1981 and steadily decreases to (-42.0) in 1984. Since this is not the result of Omnidentix's use of high levels of debt, it is probably due to low sales prices or high costs or both. As a general standard for comparison, the average dentist's ROA is about 28 percent according to a 1987 ADA survey.

Profitability ratios for Smiles Inc., are also extremely poor at (-38.22). Again, the annual net losses
for Smiles account for this ratio. Smiles had a similarly poor profitability ratio profile. In 1984, its only financial performance recorded, Return on Assets was (-0.93) and Return on Equity was (-0.3) indicating significant problems achieving corporate profitability at any time in the future.

The profitability ratios for DHS are excellent for its first three years. DHS' profit margin initially was 8.3 percent, 19.2 percent in 1986 and 9.2 percent in 1987. By 1988 it had decreased to (-9.4 percent) which may just may reflect an off year for the firm.

The return on assets and return on equity for DHS parallel its profit margin. Return on assets decreases from its high of 27 percent in 1986 to 8.5 percent to (-7.6 percent) in 1988. Return on equity also decreases from an impressive 47 percent in 1986 to 16 percent in 1987 to (-16 percent) in 1988. The first three years indicate a very healthy firm with high profit potential although the return on assets and equity fall off dramatically in 1988.

D. MARKET VALUE RATIOS

The ominous profitability ratios predicting Omnidentix's failure are echoed in the stock market's opinion of the company's future as evidenced by its price-earnings (P/E), earnings per share (EPS) and market to book ratios. Both Omnidentix's P/E and EPS ratios are negative and increasing over time suggesting that investors regarded
growth prospects for Omnidentix as being poor with a high risk attached. These figures indicate that Omnidentix is realizing less income from its assets than the average nonfranchised dental firm. This along with the increasingly negative trends indicate a high possibility of future failure.

The same negative trends are apparent when the market ratios for Smiles are analyzed. Both the P/E and EPS ratios are negative in 1984, indicating Smiles to be risky for investors with poor growth prospects. However, since the ratios only exist for one year it is difficult to form any firm conclusions.

The market viewed DHS as an excellent investment during the period from 1985-1987 as shown by the EPS and the P/E ratios. Yet the P/E and EPS drop significantly in 1988 to (-6) and (-8) respectively indicating new doubt in the minds of investors about the long-term viability of the firm.

E. DEBT MANAGEMENT

Both Omnidentix and Smiles used equity and not long-term debt financing as a primary source of funding until financial problems had already developed. However, even when the short-term debt assumed by the franchises is analyzed, financial problems are evident.

Omnidentix had a high percentage of total funds provided by creditors as evidenced by its Debt Ratio. After incurring small amounts of short-run debt at the outset and
a debt ratio of 90 percent in 1981, the company quickly decreased its debt in 1982 with a stock offering to just 9 percent. When equity ceased to be a profitable option, Omnidentix management began to use debt which quickly ballooned to 84 percent by 1984. For comparison, the Debt to Asset ratio for the average US firm is 0.33. (Granof 1983 p335)

Such a high ratio indicates that creditors have supplied most of Omnidentix's total financing. Omnidentix would then find it difficult to borrow additional funds at a reasonable cost as creditors would be reluctant to lend to such a firm. Additional borrowing would only increase the company's risk of bankruptcy. This aids in understanding why NewWorld bank cancelled Omnidentix's revolving credit loan, an action which, according to Omnidentix management, directly led to the company's bankruptcy.

Omnidentix's times interest earned (TIE) at (-1 times) in 1981 and (-24 times) in 1984 also indicates that the firm would be hard pressed to cover its interest charges and merits a poor financial rating.

Smiles Inc. had a debt ratio of 40 percent indicating that the debt position of Smiles was under control. Although slightly high, Smiles could still borrow additional funds if necessary.

The Debt position of DHS has remained within reasonable limits during its operation. The Debt ratio although high in 1985 at 51 percent was reduced by 1986 to a relatively
constant 37-40 percent over the next three years. This indicates that DHS management has managed its debt well and has not resorted to heavy borrowing to remain financially viable. The times interest earned (TIE), however, has shown the same pattern that many of DHS' other financial ratios have shown. The TIE for DHS was 0.68 in 1985, 7.54 in 1986 and then decreases from 2.9 in 1987 to (-2.66) in 1988. By 1988 then, DHS was having difficulty covering its interest charges, signifying the possibility of a poor financial position.

F. Z-SCORE

A final method to analyze the financial performance of the dental franchises is through the use of Altman's z-score, a multiple discriminant analysis technique. (Altman 1988) Z-scores have been used with much success by credit analysts to quantify ratio analysis and establish default probabilities for companies. The Z-scores for Omnidentix as shown in Table 9-7, were well below Altman's threshold for success at 2.99. Omnidentix's z-scores never rose above 1.0 and after reaching a high of 0.92 in 1982, continued to fall to 0.49 in 1984. The z-score for Smiles was also well below 1.0, indicating a high probability of failure within the next two years.

The z-score for DHS followed the same downward trend as its financial ratios. The z-score was 2.9 in 1985, 4.81 in 1986 and 2.81 in 1987. These early scores indicate that
there is only a small chance that the firm will fail. By 1988, however, the z-score had fallen to 1.49, forecasting possible failure for DHS within the next two years.

DISCUSSION

Analysis of the financial documents of Omnidentix shows that it was in severe financial difficulties from its inception. Although revenues were increasing, costs were increasing at an even greater pace and as a result, the company experienced an increasing net operating loss every year. Liquidity problems experienced by Omnidentix can be explained by problems with management, recruiting new investors, and debt. Poor management decisions led to overexpansion and large operating deficits.

Along with greater than expected working capital costs for its corporate-owned dental centers, Omnidentix was also experiencing an increase in receivables from its licensing, advertising, management and other fees. These doubtful receivables were steadily increasing from $0.2 million in 1982 to $0.4 in 1983 to $1.9 in 1984. As a result, cash flow became a problem and as debt levels increased, new investors were discouraged from investing in Omnidentix.

Analysis of the financial statements of Smiles Inc. shows a similar pattern to that of Omnidentix. Like Omnidentix, Smiles had difficulties making a profit from the very beginning. Smiles' first year of operations resulted in a net loss of $251,292 or $.18 per share. This type of
early loss is not unique since program development costs and licensing efforts are a necessary cost for any franchise startup. Earnings continued to slide as dentist-franchisees, unhappy with the franchise, stopped paying their franchise fees. New franchisees could no longer be found.

In order to pay off its debt, Smiles sold over $400,000 shares of stock. This type of successful public stock offering in what was then a bullish market, helped contribute to short term profits for both Omnidentix and Smiles. Shortly thereafter, Smiles, like Omnidentix, had to resort to debt to keep financially viable.

In contrast to these unsuccessful franchises, DHS's financial picture looks much healthier. All of the financial ratios for DHS appear positive during its first three years of operation. In contrast to the other franchises, DHS did not offer public securities and instead sold private equity. Although DHS did acquire large amounts of debt at the beginning, management reduced the debt to a manageable level where it would not impede the firm's success.

By 1988, however, financial ratios indicate severe problems within the organization. The net loss experienced by DHS appears to be the result of a steadily diminishing revenue performance. Fees for management services decreased as did lease income. Franchise fees remained flat as new franchise sales ceased.
In order to consolidate its assets, DHS sold its dental laboratory at a loss so that income was further reduced by the loss of laboratory income. The z-scores also reflect this downward trend and cast doubt about the ability of DHS to survive.

CONCLUSIONS

An analysis of the financial statements of the three dental franchises, Omnidentix, Smiles and DHS allow a better understanding of the financial conditions that led to failure for Omnidentix and Smiles. Both failing franchises had severe cash flow problems that were worsening over time. The financial ratios of these franchises reflect these losses and are very low with a downward trend.

Although in almost every instance the franchises' performances and trends are quite poor with respect to general industry expectations, definitive statements concerning the cause of failure are difficult to make. Few industry standards exist with which to compare performance. Breakeven for dental franchises may involve a much greater time period than other industries making interindustry predictions unreliable.

Nonetheless, the dramatically poor financial performance as evidenced by the financial ratios and their downward trend would have made forecasting of the future bankruptcy of these franchises a very likely possibility and as it turned out a reality.
In contrast, DHS appears to be, if not extremely profitable, a viable firm. During its first three years, most of its financial ratios reflect a profitable company. In 1988, however, the company experienced problems for the first time as revenues dropped, the number of new franchises sold decreased and expenses increased. DHS' poor performance in 1988 may signal its future failure but it is too early to draw any definite conclusions. Nonetheless, despite the excellent past financial performance of DHS, the failures of Omnidentix and Smiles suggest that DHS may have some significant financial problems to deal with if it intends to be successful in dental franchising.

The negative numbers demonstrated by the dental franchises in this financial analysis are overwhelmingly poor. As a result, they appear to contradict franchisor contentions that the poor performances of their companies were the result of poor timing or bad luck. Instead, these financial analyses testify to the enormous problems inherent in the dental franchise industry.
REFERENCES


CHAPTER 10

IMPLICATIONS AND CONCLUSIONS

PARALLELS TO AMBULATORY MEDICAL CLINICS

The preceding chapters have shown how dental franchises have failed as a result of overexpansion and doctor dissatisfactions concerning their autonomy. Ambulatory medical centers have shown a similar pattern of development and similar difficulties.

Walk-in ambulatory clinics correspond to dental franchises in design and management-orientation. Ambulatory clinics are marketed as centers for routine health care and treatment of minor emergencies without appointment. Many centers contract with HMOs and private corporations to provide health care for their members. (Berliner 1987)

The first ambulatory center opened in 1973. As with dental franchises, predictions for future growth of ambulatory medical clinics were optimistic. (Milne 1987) By 1986 ambulatory clinics were experiencing the largest growth of any alternative delivery system. (Anderson HJ 1986)

The ambulatory medical clinic industry continued to expand until 1989, when the number of freestanding clinics declined. The 13 independent companies operated only 180 centers in 1989 as opposed to 192 in 1988. (Lutz 1990) The only franchisor in the field of ambulatory clinics, Medical Networks, Inc. of Houston, Texas (Hotch 1986) ceased
franchising in 1989. The company states that franchised operations were suspended "due to differences in goals between ourselves and our franchisees." (Friske 1990)

The Case of Health Stop Inc.

Expansion

A study of the largest of the independent chains, Health Stop Medical Management Inc., highlights parallels between ambulatory medical clinics and dental franchises. The failure of Health Stop reflects the same pattern of overexpansion and physician dissatisfaction as found in the dental franchises.

From 1983 to 1989, Health Stop expanded rapidly from a single center to over 100 clinics in nine states. (Lutz 1989). A former Health Stop CEO states "Part of our strategy was to get larger quicker than other people and to establish market share." Health Stop grew primarily by acquisition. Following the 1988 purchase of 34 Chicago area MedFirst clinics from Humana Inc, (which will not comment on its own inability to make MedFirst profitable,) Health Stop began to experience financial difficulties.

Company losses have steadily increased despite annual gross revenues exceeding 50 million dollars. Pretax losses have grown from -$1.6 million in 1986 to -$1.9 million in 1987 to -$4.5 million in 1988. (Biddle 1989) By 1989, in order to avoid bankruptcy, three million dollars of venture
capital was infused into Health Stop in exchange for a majority interest in the firm. Efforts to reorganize and achieve profitability have included the replacement of two chief executive officers and two medical directors in the past two years. Health Stop is also attempting to sell unprofitable centers to physician employees. (Biddle 1989)

**Professional Autonomy**

Health Stop physicians rate autonomy as the most important component of job satisfaction. (Cashman in press) Moreover, study of a Texas-based ambulatory clinic also notes that a primary concern of physicians is autonomy. (Yunker 1986) Nonetheless, Health Stop utilized management control of physician behavior in an attempt to achieve efficiency and profitability. (Health Stop 1987)

Excessive control of physician work practices contributed to Health Stop's unprofitability and physician dissatisfaction. Several aspects of the tight control particularly angered physicians. Doctors asserted that Health Stop routinely pressured them to order unnecessary medical tests and radiographs. Clinicians criticized having their performance evaluations based upon patient billings. (Bock 1988, Kuritzkes 1988) Management focus on productivity and other types of control devices also resulted in physician dissatisfaction and turnover. (Biddle 1989)
To achieve profitability, Health Stop has now abandoned its past strategy of strict physician control. Health Stop has discontinued its use of pressure on clinicians to order more tests, monthly memos, rankings of centers and physicians and other control devices which have angered clinicians. Health Stop's current approach to management of physicians by decreasing central administrative control, appears to be successful. A recent study of Health Stop physicians indicates that decreases in central control have greatly increased physician satisfaction. (Cashman in press) It is likely that a key factor in the success of Health Stop is the return to the traditional approach of allowing high levels of professional autonomy in clinical care. "More and more walk-in clinics ... being operated by private physicians who have moved in behind failed clinics and are really just operating old-fashioned general practices with a new sign outside." (Biddle 1989 p39) In summary, exercising a relatively low degree of centralized control is an important factor in the success of dental franchises and ambulatory care clinics.

IMPLICATIONS FOR MANAGED DENTAL CARE

Overview

Professional autonomy issues have great relevance for the rapidly expanding sector of managed health care.

Managed care refers to financing and delivery programs
ranging from health maintenance organizations (HMOs) to modified fee-for-service programs. Often closed panel, these programs provide for close examination of physician behavior through utilization review and case management. Although managed care programs are not yet a powerful force in dentistry, they are likely to proliferate due to encouragement by insurance companies.

The design of an optimal health care system must provide for the efficient management of operations, staff and supplies. Research from dental franchising demonstrates that efficient management requires decentralization of control. Dentists are most cooperative and content when allowed to practice, as if in solo practices. Therefore, managed dental care programs are most likely to gain professional compliance and be successful when the system encompasses a high degree of professional autonomy. Management should concentrate on strategic levels such as administration where professionals accept outside control rather than on operational levels such as clinical dentistry.

**Strategies For Managing Autonomy**

In addition to avoiding excessive central control, medical care management needs to establish clear organizational guidelines and consistently enforce them. (Rohrer 1989) Franchise managers blame their failure to enforce rules and regulations on even such simple facets
of a prescribed franchise system as installing a franchise sign, on being intimidated by the dentists. Yet when a consistent approach is delineated at the outset, enforcement will not only increase professional compliance but decrease professional frustration. (Burns et al. 1990)

An example of an inconsistent strategy in dental franchises which led to professional dissatisfaction is chart audits. Expecting dentists to view chart audits as an intrusion upon their autonomy, franchises did not follow through on chart audit policies. In fact, many dentists (42%) expected the audits, and were unhappy that chart audits did not occur. The inconsistency of dental franchises in adhering to management protocol, undermines the system, and provokes dissatisfaction among dentists.

Organizational rules must be enforced in a direct and consistent fashion. When franchise dentists complain about management guidelines, instead of ensuring compliance, the franchises invariably relent. A sizable minority (38%) of franchise dentists are frustrated by the inconsistent messages, and prefer franchisors to employ tighter controls. Dentists, previously committed to their franchise, decrease their own compliance upon discovering management's lack of response to uncooperative dentists. Twenty-six percent of Smiles' franchisees ceased paying franchise fees, despite contractual obligations, upon discovering that the organization was not prosecuting non-payors.
Control systems in managed dental systems should be simple. Forms to be completed must be short and concise. Dentists must receive adequate orientation, so that they understand how the system operates. Many Smiles' dentists are unwilling to comply with such protocol as the presentation of treatment plans or the completion of control forms. Forty-four percent of the dentists ascribe their noncompliance to the vast amounts of paperwork involved and its perceived irrelevance. A Smiles' manager states, however, that when a system is demonstrated to clearly benefit quality of care or practice profitability, dentist compliance increases.

Implementing Change in Areas of Physician Autonomy

In order to effect change in operational spheres such as clinical practice, the managed care organization must manage the process of care, and not the individual provider. To change the professional's actions, training and positive reinforcement should be employed rather than criticism. Legitimacy for a new concept or technique can be achieved through training conducted by an outside, respected clinician or manager. Educational sessions conducted at Omnidentix and Smiles were perceived as more beneficial when presented by outside speakers, than when given by employees of the organization.

Training seminars play an important role in altering dental practice without creating dissension. Managed care
systems might employ training to alter the professional bias of providing more rather than less care. This philosophy is advantageous in a fee-for-service practice, but not in a managed care system. For example, managed care systems can control costs by eliminating unnecessary third molar removals through educational sessions detailing its indications and contraindications. Ninety-three percent of the franchise dentists questioned enjoyed seminars given by their franchisor and felt them worthwhile.

Seminars are particularly valuable when instructing or reinforcing organizational protocol or clinical techniques. Seventy-three percent of dentist-franchisees report using at least some of the management techniques discussed in an earlier chapter and 63 percent incorporate new clinical techniques presented at seminars. Dentists are more comfortable and willing to use a technique the more they understand it and believe it to be beneficial. Quality circles will also contribute to provider acquiescence.

Research in both industrial and health settings has found that participation in management decisions increases satisfaction and perceived autonomy. Participating physicians are more likely to perceive that organizational change is being made to achieve high quality care. (Schulz and Schulz 1988, Barr and Steinberg 1983). Therefore, the more that dentists participate in management decisions affecting their clinical environment, the greater their cooperation in other areas. For example, allowing dentists
In managed care systems control over their operatory setup, assistant, and materials will increase provider satisfaction.

In contrast, centralizing power to effect change, is ineffective in health care systems. Employing management techniques such as productivity analysis and time allotments is consistently unproductive in dental franchises. Correction or punishment of an individual provider only serves to increase professional dissatisfaction as demonstrated by the public display of anger by ex-Health Stop physicians. In order for change to be effected, the emphasis must be placed on altering the process through which a problem occurs, and not by criticism of individual providers.

Incentives For Change

Data from dental franchises indicate that management does not necessarily use the most efficacious incentives to change provider work practices. Given that most dentists are financially secure, money is a weaker incentive for change than is the clinican's desire to provide improved quality of care and to increase patient satisfaction. (Burns 1990)

Smiles Inc. was successful in using quality of care as an impetus for change. Smiles Inc. associated preventive periodontal concepts and quality of care, and thereby induced dentists to join the organization. Seventy percent
of Smiles' dentists joined Smiles because they believed it would increase the quality of care they provided to patients. Ninety-three percent of Smiles' dentists accepted and incorporated most of the preventive periodontal system into their practices. Most dentists believe that both their practices and their patients benefited from involvement in the Smiles system. Complaints concerning the system of periodontal treatment revolve primarily around the appropriateness and amount of paperwork involved. Harvard Community Health Plan utilizes a similar quality of care strategy to induce its physicians to accept greater monitoring and control.

Infection control provides a further example of franchise dentists conceding autonomy in clinical areas when it relates to quality of care and patient satisfaction. Dental Health Services Inc. employed several information seminars to increase compliance with OSHA's new infection control recommendations. This type of educational approach is not only perceived as valuable but is also effective. Prior to the training programs, 34 percent of the dentists adhered to OSHA guidelines while 65 percent complied after the sessions.

**Choice of Provider**

Just as the choice of dental franchisee plays an important role in the success of dental franchises, so does the choice of dental provider in a managed dental program.
Dental franchises realize the importance of selecting providers who can adapt to their system. Prospective dentists should be screened before being hired to determine their ability to function in a managed environment.

The presence of a senior dentist also contributes to success of managed programs. A successful element of DHS' Pennsylvania region is the presence of a senior dentist, knowledgeable in both dental and management techniques. Young dentists benefit from such mentors introducing them to the system and its rules and regulations. Dentists appear to learn best from other dentists.

The tremendous dissatisfaction with dental directors in franchises also shows the importance of having at least one dentist in the upper levels of the organization. Such a chief dentist should be respected as a clinician and as a manager. Chief dentists must emulate the ideals of the organization and have frequent contact with clinicians. As the dentist's representative in the organization, he or she must also have power to change things in the organization. Leaders must strike a delicate balance between allowing dentists autonomy and holding them accountable for their actions.

Older dentists must be employed sparingly in a managed care setting. Older dentists in dental franchises appear to be less adaptable to change. Age is a determinant of acceptance of management control devices. When asked if specific franchise techniques are employed in their centers,
82 percent of dentists said yes. When classified by age group, 87 percent of dentists under 40 and 84 percent of dentists between 40 and 50 years of age said yes. In contrast, only 45 percent of dentists over 50 years old agreed.

Summary

The study of dental franchising illuminates factors for success in a managed dental care system. Just as in a dental franchise setting, difficulties will arise from the incongruence between a managed care environment and professional ideals of autonomy possessed by clinical providers. An approach to managing clinicians which recognizes that autonomy is rooted in professional tradition, is critical for the success of a managed dental care system.

Managed care should carefully define its boundaries. Managers should not intrude into operational areas such as clinical dentistry, where dentists desire to retain autonomy. Intrusion of this type through for example, productivity or case mix analysis of the performance of an individual clinician, will lead to provider dissatisfaction. Instead, managed care organizations should exercise control in strategic areas such as administration, where autonomy is less critical. Dentists are more willing to adhere to this type of organizational guideline including for example, the completion of pretreatment estimates, or acceptance of an
insurance company's classification of reimbursable clinical procedures.

Change in dentist behavior is best achieved through education, positive feedback, and participation in management decisions, and not by punishment or correction of an individual provider. The choice of providers and chief dental officer is also critical to the success of a managed care system.

IMPLICATIONS FOR HEALTH POLICY

Data from the study of dental franchises have important consequences for health care policy. The shift in health care from small-scale solo practice to large-scale bureaucratic organizations may be an irreversible process. Driven by forces of cost control, efficiency and profits, alternative delivery systems have experienced tremendous growth. Some believe that a concurrent loss of physician control is occurring. (Navarro 1988, Haug 1988)

Today's physicians require sophisticated medical technology to treat illness. By increasingly relying upon expensive medical technology and the health organizations which provide it, clinicians further reduce their autonomy. At the same time, the health organizations are increasingly employing devices to control the work practices of their physicians, such as computerized systems that compare medical practices and identify deviant practitioners. A paradox emerges of physicians' increasing reliance on
organizations for employment and services while at the same time realizing that these same institutions are increasingly intruding upon their autonomy. Therefore, changes in the organization, delivery and financing of health care threaten the ability of doctors to maintain their professional status as autonomous providers of health care.

Data from dental franchises and ambulatory clinics suggest, however, that professionals will not surrender their autonomy. Professional autonomy has been a guiding principle for the development of the health care system, and it remains a dominant force shaping the nature of health care in the US today.

In order to create an effective health care system, management must respect the autonomous nature of the professional. This is accomplished through management of global restraints that do not intrude upon professional realms such as clinical care. Disregard for professional autonomy can jeopardize the success of a health care organization.

One can conceptualize a continuum of autonomy along which organizations are structured. At one end of the continuum is physician autonomy which has expanded to include control over more than just clinical procedures. At the other end is bureaucratic management control. With the growth of managed medical systems, the continuum appears to be moving towards greater control of professionals.
Professional resistance has slowed the rate of change but not prevented it.

In dentistry, however, traditional emphasis upon autonomy and independence persists. Starr suggests that the development of a health care system appears to progress only when it is a preferable alternative to other plans. (Starr 1987) Traditional dentistry is still financially lucrative. Thus, dentists generally do not alter their mode of practice in reaction to market or societal stimuli. Instead, dentists react to external threats like dental franchising, by adapting their individual practices in nonoperational ways, such as expanding hours of practice, changing locations or using marketing services. (Cashman working paper) In this way, although dental franchises failed, many of its concepts have been incorporated into the fee-for-service phase of dental care. These types of competitive reactions decrease further the likelihood that change in dentistry will occur, since a competitive advantage of a new health organization, vanishes quickly. Dentists thus have little incentive to compromise or become affiliated with organizations emphasizing management and control of professionals.

Management's financial mistakes can be averted with knowledge and patience. Difficulties arising from professional autonomy issues, however, are more difficult to approach and solve. Recognizing that professional autonomy and resistance to control are critical factors in dental
franchise and ambulatory clinic industries allow them to be successfully incorporated into new types of alternative delivery systems.

Additional research should be conducted to examine ways in which the medical and dental professions are affected by changes in health care delivery. Longitudinal studies could be designed to determine the impact of alternative delivery and financing systems on the management of professionals. Further studies are needed to elucidate those areas in which professionals desire autonomy and those in which they will relinquish control to managers. In this way, Freidson's theory of professional autonomy can be modified to incorporate the current complexities of modern health care.
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Appendix A

MANAGEMENT SYSTEM SURVEY

For each of the following questions, please check the appropriate response(s) for your organization or supply the information requested.

1) Type of organization
   ___ group ___ franchise ___ HMO ___ PPO ___ Other (specify)

2) Number of Centers ___ Number Sold ___ Number Open ___
   With locations in (list city and state)_____________________

3) Number of years organization has been in existence ____

4) Ownership status
   ___ private ___ public

5) Demographically, your centers primarily serve
   (Please circle all that apply)
   - urban / rural areas
   - white / black / Hispanic population
   - low / middle / upper class
   - Medicaid / fee for service / insurance / HMO

6) Total Gross Income in 1985 of your organization:
   ___ $<0.5 m ___ $0.5-1 m ___ $1-2 m ___ $2-5 m ___ $>5 m

7) Types of monitoring systems currently used in the organization. Please check all that apply:
   ___ budgets
   ___ compensation packages
   ___ personal supervision
   ___ productivity analysis
   ___ variance analysis
   ___ standard analysis
   ___ record audits
   ___ other (please specify) ____________________________
   ____________________________________________
9) **Productivity Reports**

If productivity reports are used, what key variables are measured routinely? Check all that apply:

- Number of patients seen
  - per dentist
  - per center
  
  per hour / day / week / month / year (circle all that apply)

- Number of services performed
  - per dentist
  - per center
  
  per hour / day / week / month / year

- Gross revenue
  - per dentist
  - per center
  
  per hour / day / week / month / year

- Net revenue
  - per dentist
  - per center
  
  per hour / day / week / month / year

B) Types of services performed:

Are services provided broken down into broad categories of services for example: % preventive services, % operative services?  yes / no

If yes, please check all categories that you use.

- diagnostic
- preventive
- endodontics
- periodontics
- operative
- crown and bridge
- removable
- oral surgery
- orthodontics
- other (specify) ____________________________

To whom are these applied? individual dentist / center/ both
10) **Incentive Compensation Packages**

A) If incentive compensation packages are used to reward employees, what are they based upon? Please check all that apply:

For Dentists:

- Gross revenue of each dentist
- Net profits of each dentist
- Units of services performed by each dentist
- Number of new patients seen by each dentist
- Gross revenues of the center employing the dentist
- Net income of the center employing the dentist
- Net income of the entire organization
- Length of time employed
- Educational qualifications
- Other (please specify)__________________________

For Managers:

- Gross revenues of the center employing the manager
- Net income of the center employing the manager
- Net income of the entire organization
- Increase in center profits from previous year
- Length of time employed
- Other (specify) ____________________________

For Dental Auxiliaries:

- Gross revenue of the center employing auxiliary
- Net income of the center employing the auxiliary
- Net income of the entire organization
- Length of time employed
- Number of new patients seen
- Units of services produced for each auxiliary
- Educational qualifications
- Other (specify) ____________________________

B) What forms of incentive packages are utilized in the organization? Please check all that apply:

- Cash bonus
- Base salary plus commission
- Stock options
- Vacation time
- Nonmonetary rewards (describe) _______________________
- Other (describe) ____________________________
11) **Direct Personal Supervision**

A) If direct personal supervision is used in the organization, what specifically is supervised and measured? Please check all that apply and circle the employee type for which it applies.

- Productivity per dentist / hygienist / auxiliary
- Time spent per service per dentist/hygienist/auxiliary
- Organization of dentist / hygienist / auxiliary
- Neatness of dentist / hygienist / auxiliary
- Personal appearance of dentist / hygienist / auxiliary
- Patient rapport with dentist / hygienist /auxiliary
- Patient satisfaction with dentist/hygienist/auxiliary
- Quality of service rendered by dentist/hygienist/auxiliary

How is quality of service measured? ________________

- Other (specify) ______________________________________

B) Who in the organization performs the personal supervision described above? ____________________________________________

C) How frequently are personal evaluations performed? ______

12) **Variance analysis**

A) If variance analysis, or any form of analysis of deviations of actual results from expected results, is used in the organization, what key variables are measured? Please check all that apply:

- Material variance
- Labor variance
  - Please describe how the labor efficiency standards are set and by whom ________________
- Setup time
- Operation time/unit
- Standard costs
  - Please describe briefly how these are determined.__________________________________________

B) If variance analysis is used, at what point are discrepancies investigated? ________________________________

C) If variance analysis is used, how is responsibility assigned? ________________________________
13) **Record Audit**

A) If a record audit procedure is used in your practice setting, what variables are measured? Check all that apply.

- Proper medical alerts
- Proper medical history
- Blood pressure in adults
- Proper dental history
- Complete initial charting
- Proper treatment planning
- Patient signature on treatment plan
- Proper progress notes
- Medications used and prescribed
- Description of procedures
- Complete financial information
- Diagnostic quality of radiographs
- Proper referrals
- Proper notes of specialist consults
- Proper medical and dental updates
- Other (specify) ___________________________

B) Who in the organization performs the record audits? ___

C) How often are they performed? _______________________

D) How are they performed?

- Hand tabulation
- Computer

14) **Budget**

A) If a budget is utilized, what type is employed?

- Line-item budget
- Flexible budget (A master budget that is adjusted for changes in volume)
- Program budget (Linking plans and programs to budget)

If yes, what programs are used?

- hygiene services
- dental services
- management services
- other (specify) ___________________________
B) Does your organization have cost centers within the organization?  Yes / No (please circle)
   If yes, what are these cost centers? _____________________________
   How many cost centers are there in the organization?

C) What key variables are included in your financial management system?
   - Sales forecasts
   - Direct material usage
   - Direct material purchases
   - Direct labor costs
     Specifically, labor costs of which employee group?
     Please check all that apply:
     - dentists
     - dental hygienists
     - dental auxiliaries
     - management
     - other (specify) _____________________________
   - Center overhead costs
     Specifically, which overhead costs are included in your overhead calculations? Please check all that apply:
     - supplies
     - indirect labor
     - maintenance
     - depreciation
     - property taxes
     - property insurance
     - other (specify) _____________________________
   - Selling and Administrative Expenses
     Specifically, which selling and administrative expenses are measured? Please check all that apply
     - advertising costs
     - executive salaries
     - selling expenses
     - other (specify) _____________________________

15) Is feedback from the information gathered routinely reported in the organization? Please circle:  Yes / No

If your answer is yes, please answer the following questions

Is this feedback system formal / informal (circle)

How often is such feedback given? _____________________________
What is the average length of time for returning feedback?

From whom to whom is feedback given (eg from center manager to dentist)?

What is the average length of time for returning feedback?

Give examples of the kinds of changes that are made as a result of the feedback?

16) Describe any changes that have been made as a result of the monitoring systems employed in the organization. For example, what changes have been made or have occurred.
   - in the performance of dentists
   - in the performance of the center
   - in levels of compensation
   - in the structure of the monitoring systems themselves
   - in the goals/objectives of the organization
   - in the standards used.

17) Does the organization plan to be adapting any additional types of monitoring systems in the near future? Yes / No
   If yes, please describe them.

18) Do you feel that the monitoring systems used in your organization are worth the time and administrative effort that they require?
Appendix B

FRANCHISOR QUESTIONNAIRE

For each of the following questions, please check the appropriate response(s) for your organization or supply the information requested.

1) GENERAL:

Number of Centers Open ___ Number of Centers Sold ___

Please list locations of all centers (city and state)

____________________________________________________________________

____________________________________________________________________

Number of years organization is in existence ________

Name/Background of CEO _________________________________

Name/Background of CFO _________________________________

Name/Background of Chief Dental Officer ________________

Ownership Status
___ public If so, Why? _________________________________
___ private If so, Why? _________________________________

Total Gross Income (last operating year) of your organization:
___ $250-500K ___ $.5-1 m ___ $1-2 m ___ $2-5 m ___ $>5 m

How did you develop your franchise concept? __________

____________________________________________________________________

____________________________________________________________________

How did you test your franchise concept? __________

____________________________________________________________________

____________________________________________________________________

2) FRANCHISEE SELECTION / TRAINING / RELATIONS

Please describe the franchisee selection process. ______

____________________________________________________________________

____________________________________________________________________

Estimated cost for recruitment per new franchisee? _____

List any factors which you believe are essential for franchisee success. _________________________________

____________________________________________________________________

Preferred background for franchisees (in order of perceived importance) eg. business experience, finances
1. _________________________________
2. _________________________________
3. _________________________________
4. How is training of franchisees performed? 

How long does this training take? 

Please describe - Program content

Program methods

Program staffing

Evaluation of Results

Basis for Training Evaluation: Participation
- Knowledge Test
- Performance appraisal
- Other (describe)

Is followup education provided? Yes / No

If so, please check all types that apply:
- video
- newsletter
- personal meetings
- other (describe)

Please rank the content in order of concentration
- dentistry/ new materials/procedures
- practice management
- staff / auxiliaries
- other (describe)

How would you describe your relations with your franchisees? business only business and friend

Have you noticed any differences in dealing with franchisees over time? (eg resistance to change)? Explain

Is it difficult to convince franchisees of the need for change? (eg dental techniques, operations, redecoration) Explain
3) MANAGEMENT

Initially, how would you rate your:

- Capital reserves: 1 2 3
- Management expertise: 1 2 3
- Financial expertise: 1 2 3
- Idea: 1 2 3
- Plans for franchise: 1 2 3
- Training manual: 1 2 3
- Operations manual: 1 2 3

At the end, how would you rate your:

- Capital reserves: 1 2 3
- Management reserves: 1 2 3
- Financial reserves: 1 2 3
- Idea: 1 2 3
- Plans for franchise: 1 2 3
- Training manual: 1 2 3
- Operations manual: 1 2 3

Please describe your central organization's structure including personnel titles, and numbers (at the beginning and end). Please attach corporate diagrams if possible.

4) FINANCIAL

Type of Initial financing: Debt — Term loan
— Bonds
— Other (describe)

Equity — Preferred stock
— Common stock
— Other (describe)

Franchise fees charged:

- Initial fee: $_____ / month
- Marketing fee: $_____ / month
- Management fee: $_____ / month
- Service fee: $_____ / month
- Royalties: $_____ / month
- Other (describe): $_____ / month

How was the initial fee set? ____________________________________________

How was the management fee set? _______________________________________
What percentage of your revenue is derived from:

- Initial franchise fees  _____
- Continuing franchise fees  _____

Which of the following financial planning items were prepared prior to franchising? Accuracy of

- Startup cost (itemized)  Poor  Fair  Good  Excellent
- Proforma income statement  Poor  Fair  Good  Excellent
- Proforma cash flow  Poor  Fair  Good  Excellent
- Projected cash flow  Poor  Fair  Good  Excellent
- Breakeven analysis/goals  Poor  Fair  Good  Excellent
- Ratio Analysis  Poor  Fair  Good  Excellent
- Building Plans  Poor  Fair  Good  Excellent
- Layout/Design of offices  Poor  Fair  Good  Excellent
- Critical size goals  Poor  Fair  Good  Excellent

Please estimate any savings (over market price) your franchise realizes when buying:

- Equipment purchases  _____
- Supply purchases  _____
- Leases  _____

What forms of financial assistance do you offer franchisees?

How do you price your products?

- at competitive levels of surrounding dentists
- cost based
- demand based
- less than competing dentists
- other (describe) ________________

5) MARKETING

Total amount budgeted for marketing annually $ ______
Estimate marketing costs as a % of overall budget _____%
Describe your marketing strategy. ____________________________

Estimate the breakdown of total marketing between external and internal marketing

- external  _____%
- internal  _____%

How do you set your advertising budget?

- affordable method
- % of sales method
- competition
- objectives

Types of marketing used by your organization:

- External marketing
- Newspaper print  _____ % of total
- Magazine print  _____ % of total
- Television  _____ % of total
- Radio  _____ % of total
___ Direct mail coupons ___ % of total
___ Yellow pages ___ % of total
___ other (describe) ___ % of total

Which type of marketing do you feel is most effective for your organization? Why?

Describe your target population

Estimated cost/thousand $ __

Short run timing ___ Continuous
___ Intermittent

Which type of advertising appeal do you use most?
___ rational
___ humor
___ fear/ guilt
___ information

Internal marketing:
Please check all that apply
For consumer promotion ___ contests
___ coupons
___ samples
___ gifts
For salesforce promotion ___ bonuses
___ contests

What % of your new patients do you believe are attracted because of your:
Franchise Name ___ %
Marketing Efforts ___ %
Location ___ %
Word -of- Mouth ___ %

Has your organization ever used external marketing agencies?
a lot some use no use
advertising agency ___ ___ ___
sales promotion agencies ___ ___ ___
marketing consultants ___ ___ ___
marketing research ___ ___ ___

Are pre-market surveys performed? Yes / No
Are post-market surveys performed Yes / No

Discuss your franchise's positioning.

Are you planning to increase / decrease / no change your expenditures for marketing?
6) GENERAL

How easily was replication of your dental franchise system accomplished? _____________________________
__________________________________________________________
__________________________________________________________

Have any of your franchise units failed or terminated their franchise agreement with you? Yes / No
   If yes, how many? _____
   Why? ____________________________
__________________________________________________________

Have you terminated your franchise agreement with any franchisees? Yes / No
   If yes, how many? _____
   Why? ____________________________
__________________________________________________________

Please describe any strategies for change that your organization might have. (eg costs, targets, expansion)

________________________________________________________________________

What has been the biggest problem that your organization has faced? How have you solved it or tried to ____________________________
__________________________________________________________
________________________________________________________________________

Why do you think that so many franchises have failed? ______
________________________________________________________________________
________________________________________________________________________

What is your prediction for the future of franchised dentistry? __________________________________________
________________________________________________________________________
Appendix C
FRANCHISEE QUESTIONNAIRE

General

Number of centers owned and operated ________
Years with the franchise system ________
Total number of employees ___ full-time equivalents ___
   Number of contracting dentists ___
   Number of hygienists ______
   Number of dental assistants ___
   Number of managers ______
   Number of other office staff ___

Personal

Your age ___
Education _________________________________
Years of residence in your current area ________
Marital status S M D (please circle) ________
On a scale of 1 to 5, please rate yourself on your:

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<tr>
<td>Management background</td>
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<td>5</td>
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<tr>
<td>Risk taking</td>
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<tr>
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<tr>
<td>Financial security</td>
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Services Provided by your Franchisor

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<td>Operations manual</td>
<td></td>
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<tr>
<td>Quality assurance</td>
<td></td>
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<tr>
<td>Location</td>
<td></td>
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<td></td>
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<tr>
<td>Financing</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>New products</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Design of unit</td>
<td></td>
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<tr>
<td>Management services</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lease negotiation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Franchise rep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation of rep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of rep advice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Franchisor-generated demand for product</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of reports</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Computerized payroll</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tax planning</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Insurance planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Are there any services not provided that you would like to have?

<table>
<thead>
<tr>
<th>Promised</th>
<th>Reality</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Hours/work required</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Earnings claimed</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Service fees</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Terms of franchise contract</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Startup costs</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

Relationship with Franchisor

To what degree do you feel that you had autonomy in your practice with respect to:

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental procedures</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Management/operating procedures</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Advertising</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Staff selection/training</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Administrative/accounting</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Supplies</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Equipment</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Fees</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Hours</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Site selection</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Site location</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Upgrading of facility</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Product mix</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Quality control systems</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>
To what degree if any, did conflict exist between you and your franchisor? _________________________________

Estimate the conflict level between you and your franchisor:
In year 1  High / Medium / Low / None
In year 2  High / Medium / Low / None
After year 2  High / Medium / Low / None

What have been the major sources of conflict? Be specific

How much control do you feel you have over your franchise?
(circle) High / Medium / Low / None

When there was conflict, how was it usually resolved? How did your franchisor handle the conflict? Was this satisfactory to you? _________________________________

What initially attracted you to franchising in general?
(check all that apply)  ___ Boredom / need for change
___ Challenge / excitement
___ Management expertise
___ Lack of downside risk ie low franchise failure rate
___ Unsatisfied with just doing dentistry
___ Greater competition

What attracted you to this particular franchise?
___ Advertising
___ Word- of- mouth
___ Franchise representative
___ Media articles

Communication

How would you rate the level of communication between you and your franchisor? Excellent / Good / Fair / Poor

How often did a franchise representative visit the premises?
___ x/week ___ x/month ___ x/year
Should this be done: More often / Less often / The same

How often did you communicate verbally with your franchisor?
___ x/week ___ x/month ___ x/year
Should this be done: More often / Less often / The same
How often did you communicate in writing with your franchisor? ___ x/week ___ x/month ___ x/year

Should this be done: More often / Less often / The same

How open were lines of communication? Open / Medium / Closed

Did you talk the same language? Have the same concerns? Have the same business philosophy? Have the same economic objectives? 

How influential were you in the decision-making process?
  Very / Somewhat / Not very / None

Product

How would you rate the franchise product as to:

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction for you</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment opportunity for DMDs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment opportunity for staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of dental care provided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental practice efficiency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental fees</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

If you had it to do over, would you choose to franchise? If not, what kinds of alternatives would you choose?

Have you ever been involved in a legal dispute with your franchisor? Have you ever considered taking legal action?

Marketing

To what degree do you feel that your franchise established its franchise name (awareness and preference) in the public's mind?
  Excellent / Very good / Good / Somewhat / Poor / None

Please check 1) all marketing techniques used by your franchise 2) whether these promotional ideas were yours or the franchisors 3) your satisfaction with the technique.

<table>
<thead>
<tr>
<th></th>
<th>Do you use?</th>
<th>Franchisor Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper advertisements</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
</tbody>
</table>
Newspaper coupons  Y / N  Y / N  Y / N
Posted Specials on premises  Y / N  Y / N  Y / N
Flyers in newspapers  Y / N  Y / N  Y / N
Direct mail flyers  Y / N  Y / N  Y / N
Other (specify)  Y / N  Y / N  Y / N

How important is: In dentistry  NondentalIndustry
Very  Not very  Very  Not very
A recognized brand name
National advertising
Quality of advertising
Promotion
Market research

Finances

How would you rate the relative cost of franchising vs solo?  Greater / The same / Less
How would you rate the rate of return of franchising vs solo?  Greater / The same / Less
How well were your financial expectations met? Well/Not well

Estimates of

Number of new patients per week
Return rate of patients
Turnover rate of contracting DMDs
Gross income
Net income
Total franchise fees paid
Growth opportunities

As a percentage of gross income:
Advertising  %
Other marketing  %
Staff costs  %
DMD costs  %
Franchise fees  %
Rent  %
Equipment/Supplies  %
Overhead  %

Total annual franchise fees as a percentage of gross income?

Why do you think that your franchise failed?
Appendix D

LEGEND OF FINANCIAL RATIO TERMS

Cash Flow (CF) = Net Income (NI) + Depreciation (DEP)

Operating Cash Flow (OCF) = CF + Other expenses not affecting WC - Other revenues not affecting WC - increase in Accounts Receivable - increase in inventory + increase in Accounts Payable + increase in accrued liabilities.

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>Current Assets/Current Liabilities</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>(Cash+Securities+Accounts Receivable) / Current Liabilities</td>
</tr>
<tr>
<td>Return on Assets (ROA)</td>
<td>Net Income+Interest After Taxes / Average Assets</td>
</tr>
<tr>
<td>Return on Equity (ROE)</td>
<td>Net Income-Preferred Stock Dividends / Average Equity of Common Stockholders</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>Total Debt / Total Assets (TA)</td>
</tr>
<tr>
<td>Times Interest Earned (TIE)</td>
<td>(Net Income+Interest+Income Taxes) / Interest</td>
</tr>
<tr>
<td>Working Capital (WC)</td>
<td>Current Assets - Current Liabilities</td>
</tr>
</tbody>
</table>