

The Corporatization of Health Care in the New River Valley, Virginia

by

Abby S. Feman

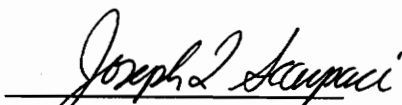
Thesis submitted to the Faculty of Virginia Polytechnic Institute and State University in
partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE

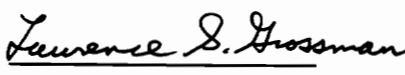
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Key Words: Corporations, Physician Autonomy, Managed Care

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(ABSTRACT)

This thesis examines several recent transformations in the United States health care system and their effects on the role of physicians. Technology, specialization, ancillary health care workers, for-profit hospitals and managed care corporations have all expanded throughout the health care industry. These changes have resulted in an increase in bureaucratic, capitalist and corporate influences over the system. As a result of the increasing costs of medical practice, the corporatization of health care is occurring in which physicians must not only rely on corporations for access to the capital that they need, but also relinquish some of their power to the corporations. McKinlay and Arches (1985) assert that these changes have led to the proletarianization of the physician. Health maintenance organizations (HMOs) and other forms of managed care companies continue to grow throughout the United States. Therefore, physicians, who have historically dominated the health care system, no longer have the autonomy that they once had. To measure physicians' attitudes toward these changes, The Managed Care in the New River Valley survey was conducted. The findings show that although managed care is not as strong as it is in other parts of the country, physicians still believe that their control of health care is declining. The importance of managed care companies and other third party

influences will continue to increase in the future, as they further extend to areas such as the New River Valley.

Key words: physician autonomy, corporations, health maintenance organizations, managed care, technology, preferred provider organizations

Acknowledgements

This research would not have been possible without the assistance of many people.

I am also very grateful to the eighty-seven physicians in the New River Valley who took the time to respond to the survey, especially the three physicians whom I interviewed.

James Todd, Executive Director of the American Medical Association, deserves a special thanks for giving me his input and the AMA's stance on these important issues. I am very grateful to John Boyer for his time and cartographic expertise. I would also like to thank my thesis committee, Charles Good, Larry Grossman and Deborah Collins for their comments and contributions to my work. I am deeply indebted to my thesis advisor, Joseph L. Scarpaci, for his continued time, encouragement and support of this project. While he deserves much of the credit for this project, I take full responsibility for any shortcomings.

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ABBREVIATIONS

ALOS. . . .	Average Length of Stay
AMA. . . .	American Medical Association
C/HCA . .	Columbia/Hospital Corporation of America
DRG. . . .	Diagnostic Related Group
GHA. . . .	Group Health Association
GHC. . . .	Group Health Cooperative of the Puget Sound
HIP.	Health Insurance Plan of New York
HMO	Health Maintenance Organization
IPA.	Individual Practice Association
MD.	Medical Doctor
MRH. . . .	Montgomery Regional Hospital
NRV.	New River Valley
NRVPDC.	New River Valley Planning District Commission
PCH.	Pulaski Community Hospital
PHO.	Physician Hospital Organization
POS.	Point of Service
PPO.	Preferred Provider Organization
RCH.	Radford Community Hospital

CHAPTER 1: The Changing Role of Physicians

Several competing perspectives have emerged to explain the recent changes in the U.S. health care system. These changes include increases in for-profit hospitals, medical technology and specialization. Bureaucracy and for-profit organizations have both spread throughout the system. McKinlay and Arches (1985) argue that because of the increase in bureaucracy, the physician is moving toward the role of proletarian. Doctors not only lose their professional dominance as corporations play a greater part, but they also become deprofessionalized as the public becomes more educated. Derber (1984) asserts that the changes in the health care system lead to a new relationship between the physician and the corporation.

J. Warren Salmon documents this new corporate model this way:

a dramatic alteration in the organization, financing and delivery of medical care in the United States. The shift to a corporate mode of production and the diminution of professional power characterizes this change (Salmon, 1990, 5).

Due to an increase in for-profit chain hospitals, which are run by business people rather than physicians, the position of doctors within the health care system has been altered.

"Doctors used to occupy a privileged position at the top of the medical hierarchy, but have slipped below to middle managers . . . Increasingly administrators permit the medical staff narrower control of technical aspects of care" (McKinlay and Stoeckle, 1988, 192). With the increases in technology and specialization, new workers and roles have emerged, and the position of capitalists has been strengthened. The spread of capitalism within the system has led to an increase in bureaucracy in which workers have become specialized within the hierarchy, are increasingly subject to superiors, third-party oversight,

established rules, and procedures (McKinlay and Stoeckle, 1988, 197). Thus, the control of work and the ownership of the tools of production become more important than they were in the past. Since these factors are controlled by capitalists, some believe that this process of bureaucratization has led towards the proletarianization of the physician (McKinlay and Arches, 1985, 161). Although these changes have occurred recently in health care, it has been asserted that "the heavy involvement of finance and corporate capital is the logical outcome of the dynamics of U.S. capitalism" (Navarro, 1985, 193).

Approaches to Medical Geography

The two main parts of medical geography are disease ecology and health services research. On the one hand, disease ecology began in the 1950s, as Jacques May incorporated the role of place in the global distribution of health and disease. It examines the societal factors that lead to disease in certain places at certain times (Mayer and Meade, 1994, 103). On the other hand, health services research is the study of the provision, location, accessibility and utilization of health care. As defined by the Association of American Geographers, the field of medical geography includes the "spatial aspects of health care delivery, health care policy and the political economy of health care" (AAG, July 1994). Recently, medical geographers have become more interested in health within the context of place (Scarpaci and Kearns, forthcoming) as evidenced by the creation of Health and Place journal in March 1995. "Place involves an interactive link between social status and material conditions, and can be used to interpret a range of situated health effects that imply a link between mind, body and society"

(Kearns and Gesler, forthcoming, 5).

Statement of Purpose

This thesis fits into the study of health care delivery, more specifically, the political economy perspective. It examines the broad question of physician behavior and attitudes in a for-profit managed care environment. Two different epistemologies of the nature of the changing health care system are used. The market-based view links the health care industry to the demographic and market factors of the area. The political economy view is a structuralist perspective that "explains the geography of capitalism as the outcome primarily of political and economic relationships and processes in the wider society" (Johnston, Gregory and Smith, 1994, 366). One aspect of the political economy view is the concept of physician proletarianization, based on the idea that because of increasing bureaucratization, doctors are losing their autonomy (Scarpaci 1990). Although medical geographers have not often conceptualized medical care this way, it is applicable to the changing position of doctors not only in the New River Valley, but also throughout the country. Simply put, as health care corporations gain more power, doctors' sovereignty is diminished.

This thesis uses several different approaches to examine the complex situation of health care. The processes of proletarianization, corporatization and the political economy of health care are assessed on a theoretical level. The workings of managed care and health care corporations are described and explained on an applied level. The scale of analysis is brought down to the local level with survey data and in-depth interviews from

the New River Valley. To understand a prominent organized physician stance, I've gone directly to the source: an interview with Dr. James Todd, the Executive Vice-president of the American Medical Association.

This thesis begins with a review of the changes in the health care system such as the growth of for-profit hospitals, bureaucratization, corporatization and the resulting changes in the position of the physician such as their decreasing autonomy. Chapter 2 surveys not only the factors that influence the growth of managed care throughout the United States, but also the AMA's stance on managed care. Chapter 3 analyzes both the socio-economic profile and the health care setting of the New River Valley. Chapter 4 interprets the findings of the Managed Care in the New River Valley survey. Chapter 5 provides a summary of the changes in the political economy of health care associated with growing corporatization, and the future prospects for managed care in the New River Valley. The New River Valley of Virginia was chosen as the study area because of its potential as a future market for managed care corporations and its competitive nature for investor-owned hospital chains. The New River Valley also coincides with the theories discussed in Chapter 1 and the trends in managed care discussed in Chapter 2.

The Growth of For-Profit Hospitals

Before 1890, American hospitals were non-profit voluntary or religious organizations owned and operated by the government and community. Then, corporate, proprietary hospitals began (Starr, 1982, 170). Over the past twenty years, there has been a continuing trend away from the individual ownership of proprietary hospitals, and

toward corporate control. For example, the number of hospitals owned by for-profit chains doubled from 1976 to 1982, and grew by 5.3% per year between 1978 and 1982 (Temin, 1988, 104). In 1980, about half of proprietary hospitals were owned by corporations that specialize in hospital ownership and management. At this time, 300 non-profit voluntary hospitals had contracted with professional corporations for management. By 1982, 10% of hospitals were owned and 4% were managed by profit chains (Mechanic, 1987, 467). From 1980 to 1986, the number of proprietary hospitals grew 25% to about 130. By 1986, two-thirds of all hospitals were owned or leased by large chains (Relman, 1987, 604). In the future, national and multi-national corporations will increasingly provide health care services.

In 1986, Arthur Relman, then editor of The New England Journal of Medicine, stated that the establishment of a "new medical-industrial complex" had become the most important recent development in American health care. The basis of this development is that there is a "large and growing network of private corporations engaged in the business of supplying health care services to patients for a profit, which were before provided by non-profits or individuals" (Relman, 1987, 597). The new medical-industrial complex continues to expand as privately owned local hospital chains are bought by larger national corporations. As will be discussed in Chapter 3, this phenomenon has taken hold in the New River Valley, with the recent entrance of Columbia/Hospital Corporation of America into the local health care market.

Corporate Hospitals v. Society, Patients and Physicians

The growth in for-profit hospitals has led to many debates within the health care system. Even though operating costs have been found to be slightly higher in investor-owned hospitals, they have also been shown to be less efficient (Relman, 1987, 602). Arthur Relman asserts that many Americans believe that health care is a basic human right, and therefore a public good. As such, health care policy and expenditures should be controlled by society, and the needs of society and patients should be more important than the financial situations of the corporations (Relman, 1987, 602). But, as health care corporations enlarge, their political influence in forming health policy also increases.

Unlike the non-profit voluntary hospitals in the past, the main purpose of the corporate hospital is profit. Therefore, according to Relman, corporate hospitals which sell their services to the public for-profit, conflict with the societal view. But, corporations benefit by providing the most profitable services to people who can afford them. For example, patient charges in investor-owned hospitals have been found to be 10-15% higher than in non-profits. Investor-owned corporations may eliminate some low frequency, unprofitable, yet medically necessary or socially valuable services. They may also exclude patients, who cannot afford their services, such as the uninsured (Relman, 1987, 604).

The growth of for-profit hospitals has also affected the roles of the patient and physician. Corporate hospitals may emphasize procedure and technology, as opposed to personal care. Personal care is more time-consuming and expensive, and consequently, less profitable. This has been shown to lead to a depersonalization of care (Relman, 1987, 604). As one NRV doctor stated "C/HCA doesn't care about patients, just numbers and

profits" (anaesthesiologist, Personal communication, September 1995). The MDs also lose position within the hospital, as corporate administrators and business people run the hospitals. Other studies have shown that the majority of MDs think that the medical directors represent the interests of the hospital rather than the medical staff (McKinlay and Stoeckle, 1990, 193). As will be discussed in Chapter 3, many NRV physicians feel that they too have limited input in hospital policy and management.

The Role of Technology

The increase in technology has had many effects on the health care system, including the changing role of the physician. With the advent of the computer the physicians' traditional monopoly over medical knowledge is decreasing. As computer information systems monitor medical work, it becomes more standardized, so that the role of the medical doctor in actual treatment and diagnoses decisions declines (Stoeckle, 1988, 83). Maxmen asserts that as computers and allied health workers replace physicians, the country is entering the 'post-physician era'(McKinlay and Arches, 1985, 177-178). In its crudest form, this technological reductionism means that physician skills have been reduced to finding the correct technology to meet the patients' needs .

One of the main reasons for the growth of the corporate sector in health care has been the increase in the role of technology. Corporations have access to the capital needed to finance the technology. An important Marxist interpretation of the current American health care system is that "as the cost of capital rose to exceed the means of individual producers, the owners of capital gained power, since producers without modern

equipment could not compete" (Himmelstein and Woolhandler, 1990, 14). Due to increasing need for capital, doctors have had to rely on corporations for supplies and equipment. In addition, as health care workers rely more on information systems, they must pattern their care after corporate standards of care (Stoeckle, 1988, 82).

Specialization

Another effect of technology has been an increase in specialization, which means that workers have greater knowledge, but in a limited area (Salmon, 1984, 145). It has been found that "technological demands have become too complex to be achieved except within collaborative frameworks" (Cooper, 1994, 683). Therefore, doctors need to depend more on each other and allied health workers. An advantage of specialization is that it "breaks down the medical field into discrete manageable components . . . Once it is broken down, it becomes more understandable to non-physicians, so other less skilled workers can do the work" (McKinlay and Arches, 1985, 176). This reduces hospitals dependence on physicians, as their assistants can provide many of the necessary services. Individual MDs may consequently lose control over certain aspects of health care, such as volume of service (Cooper, 1984, 683). This increase in specialization also alters the traditional physician-patient relationship. It may either divide the relationship because patients now have more than one physician, or it may eliminate the relationship because patients may only see physician extenders. For example, there has been an increase in private, diagnostic testing centers, which can market tests directly to the consumers (Stoeckle, 1988, 81).

Deskilling

The trend toward specialization can "carry the seeds of deskilling" (Light and Levine, 1988, 15). In the early 1900s the system of Taylorism, or piecework, in which tasks could be timed and measured, was proposed for medicine (Stoeckle, 1988, 78). Taylorism involved a division of labor, which included deskilling and formalizing job boundaries. Tasks could be controlled through a formal monitoring system and an incentive pay structure (Littler, 1982, 193). It was believed that "medical work could be 'deskilled' by the transfer of tasks to less highly trained professionals and then reorganized into faster production 'teams' for patient care" (McKinlay and Stoeckle, 1990, 197). Taylorism also allows for workers to be easily substituted. However, doctors resisted the process of industrialization because they feared a conflict of loyalties between the patient and the organization. Presently, the industrialization of medicine is occurring, through processes such as the corporate establishment of managed care. As shown in Chapter 2, the AMA still believes that organized medicine leads to several conflicts for the physician.

Braverman (1974), whose ideas were based on Taylorism, defined deskilling as not only a separation of the planning of work from those who actually do the work, but also an increased fragmentation of the labor process. Work is fragmented into segments and then redistributed amongst unskilled and semi-skilled workers. Through deskilling, new clerical and service people emerge. Industrialization causes the labor process to separate from the skills and control of the laborer. The division of labor also eliminates the power previously gained from the monopoly of knowledge. Science and technology are

controlled by capital and can deskill the labor force, particularly in assembly-line manufacturing (Littler, 1982).

Braverman's (1974) work parallels the situation of physicians, today. Doctors become deskilled as knowledge is transferred from highly trained physicians to more narrowly qualified specialists and assistants. New health care workers such as physicians' assistants represent cheaper labor, which increases corporate profit. Most medical technology has become unaffordable to the individual doctor, so it is controlled by the health care corporations. Specialization and technology have both been shown to decrease the physician's monopoly on medical knowledge.

Bureaucracy

Another effect of the growth of for-profit health care organizations has been a tremendous increase of bureaucracy within the health care system. Bureaucracy, as defined by Max Weber includes: a hierarchical organization, division of labor, specialization, and detailed rules and regulations (McKinlay and Stoeckle, 1990, 197). These four aspects of bureaucracy are expanding throughout the health care system. In a bureaucracy, capitalism sets the goal of the organization, constrains behavior of employees by regulatory norms, and constrains recipients of service. Bureaucratization occurs from the need to advance capital accumulation through social control. Bureaucracy also drives out competition, and leads to more biotechnology (McKinlay and Arches, 1985, 163).

In the health care system, the key factors which lead to bureaucracy are technological dependence, specialization, and the increasing costs of practice (McKinlay

and Arches, 1985, 168). Large for-profits replace individual fee-for-service physicians (McKinlay and Arches, 1985, 160). As shown in Chapter 3, NRV hospitals have begun to buy individual physicians' practices. McKinlay and Arches argue that through the process of bureaucratization, physicians lose control over their own labor power. "Increasingly, physicians take salaried positions in bureaucratic organizations where regulatory norms and administrative hierarchy shape the delivery of medical care" (Light and Levine, 1988, 16). Not only is their labor sold for wages and salaries, but it also creates a surplus value for others (McKinlay and Arches, 1985, 171). As Wolinsky found, "bureaucracy dominates over the profession" (Wolinsky, 1993, 16).

Proletarianization

Scarpaci (1990) conducted one of the few medical geography studies of physician proletarianization in Argentina and Uruguay. The health care systems of these countries are experiencing both increased bureaucratization and physician proletarianization. This study found that physicians have experienced a "loss of control over the nature of the goods and services that [they] produce" (Scarpaci, 1990, 363). McKinlay and Arches assert that the bureaucratization of medicine is leading the physician toward proletarianization. Although the strict Marxist definition of proletarianization is the separation of workers from the means of production, McKinlay and Arches define proletarianization as:

the process by which an occupational category is divested of control over certain prerogatives relating to the location, content and essentiality of its task activities, and is subordinated to the broader requirements of production under advanced capitalism (McKinlay and

Arches, 1985, 161).

Historically, individual producers could not afford fixed capital, such as equipment and facilities. As a result, they had to coordinate with others to obtain such capital (Derber, 1984, 218). Presently, individual doctors have to rely on corporations for capital. As Derber defined it ". . . the proletarianization thesis is that physicians have been drawn into new dependent relations of production with providers of capital, militating towards forms of wage-employment" (Derber, 1984, 217).

There are three aspects of the current health care system which further the proletarianization of the physician. First, because of the increasingly technical and organizational complexity of modern medicine physicians have to rely more on specialists, and allied health workers. Second, due to an increase in hospital chains and other investor-owned health care corporations, corporate employees have gained power over medical doctors. Finally, "institutional buyers who seek to control the rising costs of service," have been able to increase their control of the health care system (Light and Levine, 1988, 17). Thus, while physicians' independence has decreased, their financial accountability has increased.

McKinlay and Arches (1985) point out seven key areas over which physicians may lose autonomy as they succumb to proletarianization. Physician autonomy is defined as "freedom from control by peers or organizational constraints" (Haug, 1988, 53). Both the "criteria for entrance" into the medical profession, and the "content of training" are being more heavily influenced by outside interests, such as the government and corporations. As corporations take over hospitals, physician "autonomy over their terms and content of

work" diminishes. Many patients are now clients of managed care organizations, therefore the organizations maintain greater control over the physicians "objects of labor". Due to increasing costs, corporations, rather than the individual MDs, now have greater control of both the "tools of labor", such as biotechnology, and the "means of labor," such as hospital facilities. The government, through diagnostic-related groups (DRGs), which tell physicians not only how long a Medicare patient may stay in the hospital, but also how much the physician may charge per diagnosis (Scarpaci, 1988), and corporations, which have salaried doctors, also greatly influence 'the amount and rate of remuneration for physician labor' (McKinlay and Arches, 1985, 162).

The decline of physicians' power regarding these seven prerogatives is based upon the decline of "cohesiveness and unity within the group," and the "extent to which the profession can be technologized" (McKinlay and Arches, 1985, 192). The medical profession is largely based on technology. As shown in Chapter 3, AMA membership is declining and specialization is increasing, thereby eroding unity within the medical profession. Also, as the supply of physicians increases, so does the competition within the profession. During the process of proletarianization, physicians become subordinated to broader requirements of advanced capitalism (McKinlay and Arches, 1985, 176). In the health care system, proletarianization includes norms for treatment and allocating resources, and for defining physician practice profiles. As proletarians, individuals are reduced to selling their services, which more and more physicians are doing as corporate employees. In the future proletarianization will lead to the "eventual reduction of all workers to some common level in the service of the broader requirements of capital

accumulation" (McKinlay and Arches, 1985, 162). But since proletarianization is such a slow process, and doctors may not realize or admit that they are losing their position, (much less think of themselves as proletarians!) it is difficult to measure (McKinlay and Stoeckle, 1988, 201). This case study aims to make a modest contribution to understanding this important process.

Corporatization

Another way of explaining the changes in the American health care system, is through the process of corporatization, which "encompasses the proletarianization thesis without the same Marxist assumptions" (Light and Levine, 1988, 19). In health-care organizations that are controlled by corporate entities, individuals must follow corporate guidelines. For example, doctors must often follow organizational rules that they had little input in developing (Wolinsky, 1988, 39). Managed care corporations often have utilization and quality reviews, incentive pay structures, and restrictions on practice patterns and organization of practice. During the process of corporatization, the marketplace also changes from:

solo or small-group providers to multi-institutional complexes. Corporatization also refers to the paradox of physicians relying on complex organizations and financial arrangements to carry out their sophisticated work, yet realizing that these institutions intrude on their work, mediate their relations with patients, and potentially injure their credibility with society as a whole (Light and Levine, 1988, 19).

As shown in Chapter 2, the trend toward HMOs and group practices alters autonomy, as these physicians are subject to organizational constraints. Another aspect of corporatization is that it leads to "the development of the corporate impulse within the

profession" (Light and Levine, 1988, 20). Some physicians have joined hospitals in joint ventures and others have opened their own ambulatory care and testing centers instead of using the hospital. Starr (1982) shows that doctors will no longer be able to control such basic issues as their own time of retirement, and that there will be more regulation of the pace and routine of their work. Standards of performance are being imposed in which doctors will be evaluated and paid based on the amount of revenues they generate or the number of patients they treat per hour. Doctors who do not meet corporate standards are likely to lose their jobs. Corporatization will lead to the outside control of hospitals (Starr, 1982), as illustrated in Chapter 3 by the corporate ownership of NRV hospitals.

Although many view the shift towards corporatization in health care as a recent and dramatic change, corporations have been involved in the field of health care for many years in areas such as medical labs and hospital supply companies. "Thus, the rise of corporate providers, though regarded in the profession as a shocking radical departure, was very much an organic part of the profession's long term relation with capitalism" (Light and Levine, 1988, 24).

The Political Economy of Health Care

The health care industry conforms to the corporate model of monopoly capitalism to sustain itself. Monopoly capitalism is characterized by automation, a mass of unskilled clerical and service labor, detailed division of labor, relative surplus value and subordination. A "major transformation in the political economy of the health care business has been the shift from local, independent providers to hospital chains"

(Bergstrand, 1982, 50). Another key change in the political economy of health care is the shift away from self-employment to physicians being employed by corporations. Under a capitalist system, labor no longer dominates or governs the labor process of modern industry (Littler, 1982, 22). The high profits and advantage of economies of scale give these chains the ability to be more efficient in dealing with the fluctuations of capitalist economies. Their market power accrued from greater diversification and expansion, drives small businesses out of the market. Government interventions also lead to the expansion of monopolies. For example, the 1974 National Health Planning and Resources Development Act exempted health care institutions from anti-trust laws, thereby nurturing the growth of monopolies and chains (Bergstrand, 1982, 51).

As Navarro (1988) points out, health care is just one sector of economic production. As such, the changes in the health care system are part of the evolution of American capitalism. As a mode of production, capitalism is defined as:

a structuring in which the direct producers are legally separated from the means of production, and in which they no longer possess the means of production . . . Capitalists control the labor process (Littler, 1982, 20, 22).

Like other industries, the drive for capital accumulation, profit, and expansion determines the development of health care (Himmelstein and Woolhandler, 1990, 15). "Indeed, the penetration of capitalism into the social services, including medical care, is a logical outcome of the overwhelming influence of corporate America in all areas of social and economic life" (Navarro, 1988, 67).

Professional Dominance Theory

Traditionally, physicians had control over their work. From the nineteenth-century until recently, their professional dominance in health care stemmed from "their monopolistic control over the production of medical knowledge, the provision of medical services, and was reproduced by cultural, legal and economic means" (Navarro, 1988, 57). This professional dominance was characterized by four different aspects. First, physicians had autonomy over their sphere of work. Second, they had control over the work of others within the medical field. Third, American society had stronger cultural beliefs and deference for physicians. Lastly, physicians had greater institutional power (Light and Levine, 1988, 12). Recent changes in the health care system, discussed in Chapter 2, have affected these factors so that medical doctors no longer retain the power they once held. Government, insurance companies and hospital administrators have more power in deciding what is medically acceptable and appropriate. Managed care weakens physicians' position so that they "increasingly feel that their autonomy is being forcefully challenged by non-doctors" (Navarro, 1988, 59). One NRV physician added to the survey that there is "too much non-physician control of how to practice medicine." With the growth of specialization and physician extenders, doctors have less control over their work and the work of other than they did in the past. Throughout society, "the perception that doctors are in charge in the institutions of medicine is changing rapidly" (Navarro, 1988, 59). Now, physicians have become employees, and patients have become clients of the health care organization. Doctors used to manage their own practice, but as employees, physicians today may have little participation or control of practice management.

Deprofessionalization

The monopoly on knowledge that doctors held in the past is being eroded. Increased public education, health awareness, consumer self-help groups and computers have all led to a decrease of the physicians' monopoly of medical knowledge. As medical knowledge becomes less mysterious, physicians' authority is being challenged (Wolinsky, 1988, 28). Therefore, Haug showed that there has been a deprofessionalization of medicine in which "the profession of medicine loses its prestigious societal position and the trust that goes with it" (Wolinsky, 1993, 14). Doctors are now being held more accountable for their role in cost-containment. Physicians once had the ability to recruit and retain their own patients, with whom they had personal relationships. Now, they must rely on hospitals and HMOs for their patients (Wolinsky, 1993, 14). The physicians also have "far less opportunity to influence policy or control support staff governed by non-medical administrators" (Derber, 1984, 249).

Sponsorship

Derber maintains that doctors and health care corporations have a unique relationship based on a system of sponsorship, which he defined as:

any relationship between producers and providers of capital on whom they are dependent for capitalization of production or mediation of the market (Derber, 1984, 564).

Hospitals act as proprietary sponsors for physicians by providing fixed capital, such as the physical building, and supplies. Other third parties, such as insurance companies, act as market sponsors, by promoting, distributing and selling services. "Almost all physicians

are now required to accommodate to relationships with powerful market sponsors" (Derber, 1984, 221). Managed care companies, such as HMOs, are viewed as unified sponsors, because they act as both proprietary and market sponsors. Managed care companies may employ physicians and exert more direct control over them. Under a system of unified sponsors, MDs lose a substantial amount of control over their work, as the sponsor controls policy management and bureaucratic decision (Derber, 1984, 240).

Derber outlined four areas in which physicians lose autonomy to their sponsors. First, there is the ideological loss of autonomy in areas such as organizational policy and objectives. Second, there is the bureaucratic loss of autonomy in areas such as the work of auxiliary producers. Third, there is a productive loss of autonomy in areas such as scheduling and work-load. Fourth, is a technical loss of autonomy over skills and knowledge (Derber, 1983, 564). Derber believes that the goal of sponsors is to advance their own class interest; not only to maximize profit. The sponsor directly controls policy and bureaucratic decisions. The system of unified sponsorship "...undermines the most important function historically monopolized by physicians: recruiting and retaining their own patients" (Derber, 1984, 241).

Summary

The theory of professional dominance maintains that physicians had control over their own work, but due to many changes in the health care system, they no longer have the power they once held. As the public becomes more educated, the doctors' traditional monopoly on knowledge and resulting status declines. As for-profit hospitals,

technology, specialization and bureaucracy increase, corporations gain more power within the health care system. Corporations act as unified sponsors, not only providing fixed capital, but also distributing and selling the doctors' services. Therefore, the autonomy and authority of the physician declines. Medical doctors lose their position in for-profit hospitals because the hospitals are increasingly run by business people instead of the doctors. The tremendous cost of technology has forced doctors to rely on corporations for capital, thereby allowing the corporations to exert control over the doctors.

Technology and specialization have both led to the deskilling of doctors, because their traditional tasks can now be performed by less expensive ancillary health care workers. The increasing bureaucracy of the system has caused the physician to lose power over their own work, thus they are moving toward the role of proletarian.

This thesis explores physician behavior and beliefs in a for-profit managed care environment. It focuses on the political economy perspective, mainly the proletarianization theory, and also the theory of corporatization. Two factors that show the changing political economy of health care in the New River Valley are the entrance of a national hospital chain, Columbia/Hospital Corporation of America, into the area, and the purchase of individual medical practices by Carilion, a local hospital chain. In the New River Valley physicians work in a for-profit environment and feel that their autonomy is declining. One manner in which physician autonomy is being limited, across the country, is through corporate involvement in managed care, to which we turn in Chapter 2.

Chapter 2: The Organizational Variants of Managed Care in The United States

Several important changes are occurring in the American health care system. Over the past twenty years there has been an increase in managed care. While the common goal of managed care plans has been to maintain quality care and constrain costs, many different types of plans have emerged. The two main types of managed care plans are Preferred Provider Organizations (PPOs) and Health Maintenance Organizations (HMOs). These plans vary by ownership, method of payment, choice of physicians, and contract agreements. Although the growth of managed care has been uneven across the United States, it has led to much change within the medical profession.

— This chapter outlines the general features of managed care. It begins with some definitions and a brief history of managed care, before turning to HMOs and PPOs which are common variants of managed care. The latter part of the chapter examines factors that influence market growth and the kinds of physician practices which are likely to join managed care organizations.

Throughout the United States not only do more generalists than specialists have managed care contracts, but also doctors in group practices are more likely to be involved in managed care than physicians in solo practices (Iglehart, 1994, 1168). In 1994, over 80% of physicians under forty years old had managed care contracts and 66% of those over fifty-five years old did (AMA, 1994, 30). Some people predict the "likely crash of medical practice outside the realm of managed care" (Himmelstein and Woolhandler, 1994, 265). Due to the increase in managed care, "the patient-doctor relationship is giving way to the employer-health plan contract" (Himmelstein and Woolhandler, 1994,

265). The AMA is also implementing its own strategy for managed care. "Managed health plans, representing millions of consumers are creating the most radical changes in health care delivery and are dictating the terms of the future" (McDermott, 1988, 58).

Managed Care

The Health Insurance Association of America defines managed care as:

Health care systems that integrate the financing and delivery of appropriate health care services to covered individuals by arrangement with selected providers to furnish a comprehensive set of health care services, explicit standards for selection of health care providers, formal programs for ongoing quality assurance and utilization review and significant financial incentives for members to use providers and procedures associated with the plan (Gold, 1991, 204).

Many managed care plans are also based on a capitation system of payment which is "a flat payment, usually monthly, for each plan member's health care" (McDermott, 1988, 58). Another key element in managed care is the method of utilization review in which "the company decides whether a procedure or test is necessary and whether the company will pay for the service" (Tamkins, 1995, 1). Managed care organizations use a gatekeeper referral system in which the primary care physician has control of specialty and hospital referrals (Mack, 1993, 42).

The History of Managed Care

In 1929, the first pre-paid comprehensive health care delivery system began in Los Angeles, with the establishment of the Ross-Loos Clinic for employees of the Los Angeles Power and Water Department. Although the AMA and other physician groups opposed

this type of system, the Ross-Loos Clinic and similar ones were successful because they maintained high quality care for less cost than the fee-for-service system (Starr, 1982, 301). During the 1930s and 1940s, other pre-paid group practices such as the Group Health Association (GHA), the Group Health Cooperative of the Puget Sound (GHC), Kaiser Permanente, and the Health Insurance Plan of New York (HIP) were established (Physician Payment Review Commission, 1992, 327). In August 1942, Kaiser Permanente started two pre-paid group practices (in Oakland, California and Portland, Oregon) to cover Kaiser ship-building employees and their families during World War II. Although the plan was successful during the war, employee membership declined at the end of the war. Then, the Kaiser Permanente Medical Program was opened to the public and as membership increased Kaiser again became successful (Shouldice, and Shouldice, 1978, 30). Kaiser Permanente and HIP are currently the largest group-model HMOs (Physician Payment Review Commission, 1992, 328); that is, they contract with physician groups to provide care for their members. Both the GHC and GHA still exist as staff-model HMOs; that is, as defined in Table 2.1 (page 25), they employ their own full-time salaried MDs. Following the success of these programs, in 1959 the federal government began the Federal Employees Health Benefits Program, which not only established comprehensive medical plans, but also gave federal employees access to pre-paid group plans (Physician Payment Review Commission, 1992, 332). In 1970, Paul Ellwood Jr., named these comprehensive pre-paid group practices, Health Maintenance Organizations, or HMOs (Starr, 1982, 395). In an attempt to control costs and provide comprehensive coverage, the federal government passed the HMO Act of 1973, as an amendment to the Public

Health Service Act. This bill not only provided federal government funds to establish HMOs, but also required:

firms employing 25 or more workers and offering an insurance plan to their employees must offer employees the option of joining at least one of each type of federally qualified HMO (group, staff or IPA) and must make contributions on behalf of employees equal to those provided by traditional indemnity plans (Physician Payment Review Commission, 1992, 335).

But since the HMO Act also set standards for government approval, it actually slowed the growth rate of HMOs. From 1973 to 1975, the growth rate was 41%, but it fell to 32% from 1975 to 1980 (Cromley, 1990, 167). Also, 60% of the HMOs that qualified for federal funding were developed in areas that were already medically resource-rich areas, which had medical schools and other regional support (Cromley, 1990, 167). The HMO Act did not provide any geographic goals for HMOs, but in 1979 a national strategy was established to target urban areas for HMO development (Cromley, 1990, 156). Then, in 1982, Ronald Reagan ended direct federal involvement in HMOs by eliminating all new HMO funding from the federal budget. However, HMOs and other forms of managed care have continued to grow throughout the United States as large employers try to contain health care costs (Iglehart, 1994, 1167).

Health Maintenance Organizations

The Group Health Association of America defines HMOs as "organizations that integrate financing and delivery of health services by offering comprehensive care from an established panel of providers to an enrolled population on a capitated, pre-paid basis" (Gold, 1991, 189). Patients must use a participating doctor, except in emergency

situations. Salaried doctors may either be employed directly by the HMO or they may maintain their private practice, and have contracts with the HMO enrollees (Iglehart, 1994, 1168). HMOs can "regulate the supply of hospital beds, physicians and other providers in relation to the population they serve" (Goodman, Kronick, Wagner and Wennberg, 1993, 148). HMOs are the most structured form of managed care, and throughout the country there are several different types of HMOs (Table 2.1).

Table 2.1: Types of HMOs

Staff Model: Salaried physicians practice solely as employees of the HMO in plan-owned facilities. Enrollees are restricted to HMO doctors and hospitals.
4.9% of all HMOs.

Group-Model: The HMO contracts with a physician group to provide care for its patients. Physicians may contract with more than one plan and are paid on a capitation basis.
9.2% of all HMOs.

Individual Practice Association (IPA): The HMO contracts with an individual doctor or network of independent doctors practicing in their own offices. Some physicians are paid on a discounted fee-for-service basis but most are capitated.
56% of all HMOs.

Network-Model: The HMO contracts with a network of independent single or multi-specialty groups. Physicians are paid either on a capitation basis or fee-for-service basis.
8.5% of all HMOs.

Hybrid Model: Combines elements of staff, group and IPA models.
21% of all HMOs.

Sources: Weiss, 1995, 36, Physician Payment Review Commission, 1992, 326, and AMA Board of Trustees Report, 1994, 33-34.

HMO enrollment has increased greatly since 1978 (Figure 2.2). HMO growth was

strongest from mid-1984 to mid-1987 when the number of plans increased from 306 to 622 and enrollment increased from fifteen to twenty-nine million members (Gold, 1991, 195). Currently, 20% of the American population is enrolled in an HMO (USA Today, October 17, 1995, 1D). The tremendous growth of HMOs has had great impact on the health care system. First, by lowering hospital admissions and lengths of stay, it has lowered the use of hospital services. In trying to contain health care costs, HMOs have also been shown to use expensive tests and procedures less. However, doctors in HMOs use more preventive services than non-HMO doctors (Luft and Miller, 1994, 1512).

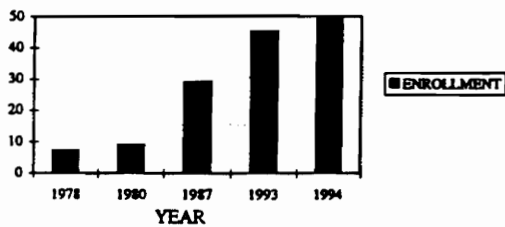


Figure 2.1: HMO Enrollment by Millions

Sources: Gold, 1991, 190 and Weiss, 1995, 32-33.

Levels of physician and patient autonomy also vary in different types of HMOs. The staff and group-model HMOs most restrict patient choice and physician autonomy. The AMA believes that staff-model HMOs, in which physicians are employees, have a very high degree of control over how the physicians practice medicine and how they are paid (AMA, 1994, 51). In group-model HMOs, income is often pooled and distributed, so that although the group may have both clinical and financial autonomy, the individual physician usually does not have financial autonomy (AMA, 1994, 34). Therefore, IPAs began as a response to staff and group models because doctors felt that these latter types threatened their autonomy (Collins, Davis and Morris, 1994, 179). In IPAs, patients often

have a wider choice of doctors, and individual MDs are able to maintain their clinical and financial autonomy (AMA, 1994, 34). Recently, the IPA model has been growing faster than the other types of HMOs. Physicians in IPA-type HMOs have been found to value self-employment and clinical autonomy more than physicians in group or staff-model HMOs (Weiss, 1995, 31).

Although the clinical autonomy of these physicians (in HMOs and PPOs) is diminished by utilization review controls and the use of gatekeepers by many HMOs, overall they continue to have high levels of economic autonomy (AMA, 1994, 34).

Point of Service Plans

Some HMOs offer a point of service (POS) plan in which the physician 'gatekeeper' has the responsibility to coordinate all of a patient's medical care (Iglehart, 1994, 1168). However, a member may choose to go to a non-participating doctor, but will have to pay greater deductibles and copayments (Weiss, 1995, 27). Point of service plans began in 1988, and by 1993 there were over two million enrollees throughout the United States (Weiss, 1995, 27). Since point of service plans allow enrollees a greater choice of physicians, they are growing rapidly. In 1982, 6% of employers offered POS plans, by 1991, 11% did (Harris, 1992, 64). In 1992, POS membership increased 40%, while all HMO membership increased only 25% (Stroetzel and Stroetzel, 1993, 79). In 1994, the percentage of employers offering POS plans tripled, and the 6% of enrollees increased to 15%. It was estimated that by 1996, 15% of employers will offer POS plans (Weiss, 1991, 31).

Preferred Provider Organizations

A second main type of managed care is the preferred provider organization (PPO) which developed in the 1980s from west coast medical care foundations. PPOs were established to maintain professional autonomy (Cromley, 1990, 171). Preferred provider organizations are "networks of individual physicians, medical groups and hospitals that accept a discounted rate of payment in exchange for the plans' efforts to deliver a large volume of patients" (Iglehart, 1994, 1168). The PPOs coordinate MDs and hospitals already in the area (Cromley, 1990, 173). Many doctors join PPOs because they are afraid to lose patients to network physicians (Mack, 1993, 39). Network physicians are paid on a discounted fee-for-service basis, as opposed to capitation, which is common in other forms of managed care. Another important factor in PPOs is that the patient can choose their doctor, from those in the network. Patients can also receive some financial coverage if they choose to go to a non-network provider. However, the use of non-network providers may cost more or be restricted. Over 60% of physician respondents to the Managed Care in the New River Valley survey were members of a PPO. According to The American Association of PPOs, PPO enrollment in 1987 was 12.2 million, and by 1993 it had increased to 76.6 million people (Weiss, 1995, 26). It is also estimated that about two-thirds of the 124 million people enrolled in pre-paid plans are in PPOs (Stroetzel and Stroetzel, 1993, 78). In 1992 there were 2,578 separate PPO networks, most of which were organized and controlled by insurance companies (AMA, 1994, 52).

In comparison to other forms of managed care, there is also little organizational linkage between the physician and the PPO (Miller and Luft, 1994, 440). But the PPO

physicians' autonomy is limited by methods such as pre-certification, concurrent reviews, utilization management referral systems and discharge planning (Physician Payment Review Commission, 1992, 321). The AMA believes that "PPOs are starting to deliberately focus patient volume on a smaller pool of physicians to gain greater control over such physicians' medical decisions and their pay" (AMA, 1994, 52). As the size of the PPO network is decreased, patient choice is further restricted. As the physician panel size decreases, and there is also a greater oversupply of doctors, PPOs can demand that physicians reduce their fees (AMA, 1994, 35). Most growth in managed care has occurred in PPOs because physicians can maintain their autonomy in their own practice, and patients can choose their doctors. Within PPOs "providers have very little influence over payment and medical decision making" (AMA, 1994, 52).

Regional Trends in Managed Care

The growth of PPOs and HMOs has varied throughout the country. HMOs began in California, where in 1966, 10.7% of Californians were enrolled in them. By 1976, this figure had risen to 20% (Goldberg and Greenberg, 1981, 422). In 1971, there were 46 managed care plans in 20 states and the District of Columbia. Two years later the number of managed care plans grew to 127 in 28 states and D.C. At that time, half of these plans were in California.

By 1980, pre-paid plan development had intensified in states of early origin, particularly California and had spread to the southeast and southwest, which had no plans in 1971. . . Seventy-eight percent of the increase in HMOs, from 1973 to 1980, were in states that already had at least one HMO, and 40% of the plans developed at this time were in New Jersey (Cromley, 1990, 156).

In 1980, only ten states had ten or more HMOs, and only California had one million enrollees (Gold, 1991, 190). Fifty-nine percent of HMO members were in the west, and 40% were in California. At this time, the west also had larger plans (Cromley, 1990, 156). By 1990, twenty-one states had ten or more HMOs and eleven states had one million enrollees (Gold, 1991, 190). As shown in Table 2.2, in 1989, the Pacific region had the highest percentage of employers offering HMO and PPOs. The South Central region had the lowest percentage of employers offering HMOs (McEachren, 1990, 32).

Table 2.2: Percentage of Employers Offering At Least One HMO Or PPO, 1989

Region	HMO	PPO
Pacific	80	56
Mountain	50	43
North Central	62	30
South Central	42	39
New England	70	12
Mid-Atlantic	68	12
South Atlantic	48	26

Source: McEachren, 1990, 32.

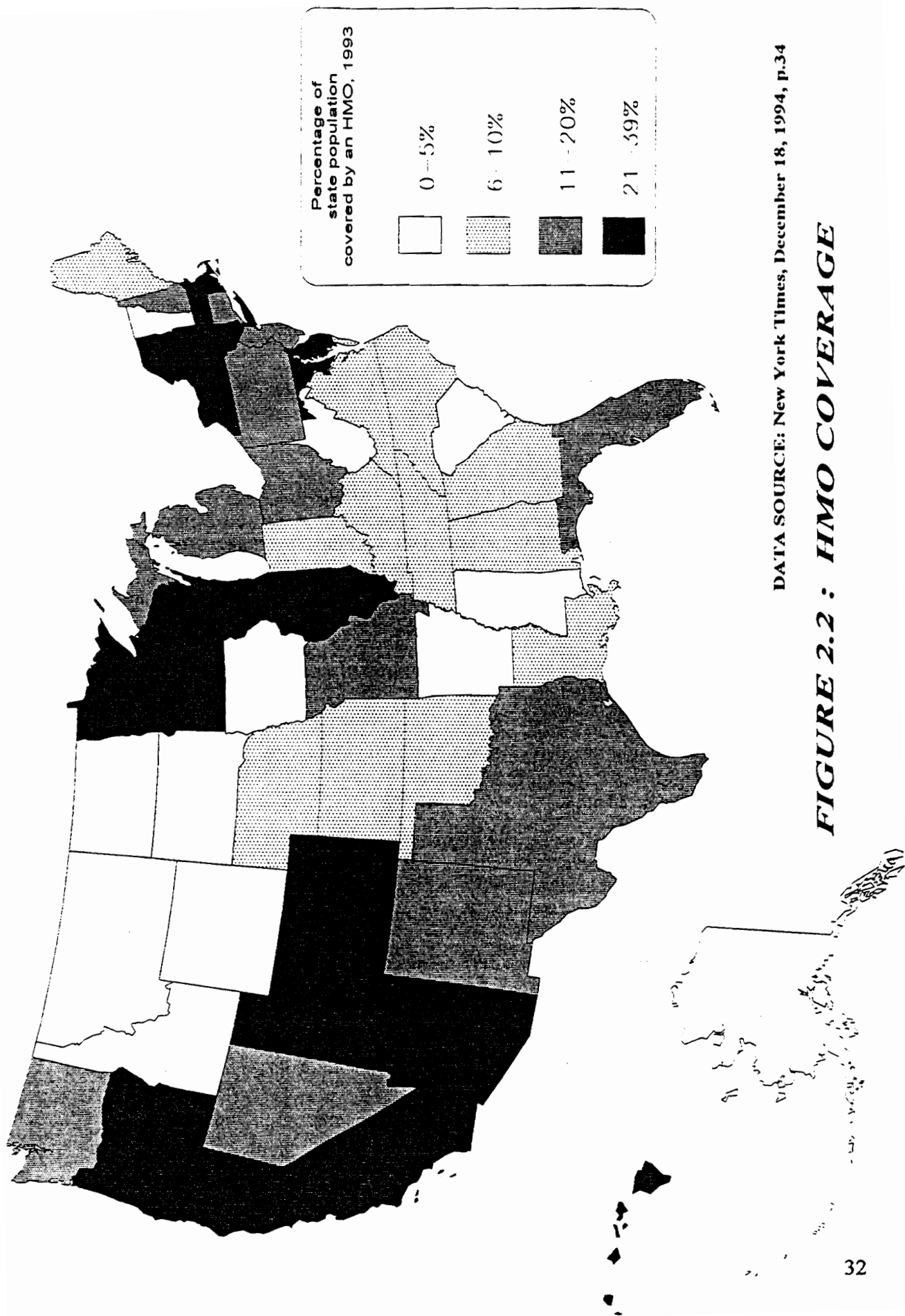
A 1990 Health Insurance Association of America survey found that the market share of HMOs to be "nearly twice as high in the west (30%) and in the north central (26%) regions as in the northeast (17%) or south (13%)" (Physician Payment Review Commission, 1992, 332). One reason for this variation is that managed care began earlier in the west and some north central states. Another way of showing the variation in managed care is through the percentage of physicians with at least one HMO or PPO

contract in different parts of the country, as shown in Table 2.3. According to the Medical Economics Continuing Survey for 1994, New England, the Far West and the Great Plains region has the highest level of physician involvement in managed care plans. The AMA estimated that in 1993, 81% of the physicians in New England and the Pacific Northwest had HMO contracts, while the national average was 48% (AMA, 1994, 27). The Mid-eastern states and the Southwest have the lowest percentage of physicians with managed care contracts. As shown in Figure 2.2 (page 32), there is much state variation in HMO enrollment. Massachusetts, California and Minnesota all had over 35% of their population enrolled in an HMO. There were still no HMOs in Alaska, Wyoming or West Virginia (New York Times, December 18, 1994, 34).

Table 2.3: Percentage of Physicians Involvement In At Least One HMO Or PPO, 1994

Region	HMO	PPO
Far West	69	69
Rocky Mountain	60	62
Great Plains	68	70
Great Lakes	59	59
Southwest	49	62
Mid-southern	55	70
South Atlantic	52	64
Mid-east	64	48
New England	86	57

Source: Weiss, 1995, 32-33.



Currently, over 20% of the population in the thirty largest metropolitan areas is enrolled in some managed care plan. However, HMO enrollment also varies among cities. For example, in 1990, due to federal employment, 80% of the population in Washington, D.C. was enrolled in an HMO; versus 40% of the population in San Francisco, and only 11% of the New York City population (Savitz, 1994, 9). HMOs have had problems developing in rural areas. In rural areas it is more difficult to find the concentration of providers for managed care network (Stenson, 1995, 1), as shown in the case study in this thesis. In the New River Valley, there are less than 200 doctors on staff at the three main hospitals. Rural populations and doctors also have different attitudes than those in urban areas, that affect their willingness to accept managed care. Another difference is that there are fewer large employers in rural areas to encourage the formation of managed care plans (Physician Payment Review Commission, 1992, 332).

Market Influences on Managed Care Growth

Three market forces, which are defined as "impersonal economic and demographic conditions which affect the demand and supply of services," are the most important influences on managed care growth and enrollment (Goldberg and Greenberg, 1981, 427). In the enrollee population, one factor that has been correlated with managed care growth is population mobility, because more mobile populations are less likely to have personal physicians. Second, HMOs have been shown to attract younger, and healthier employees with young children or no children. Third, HMO members tend to have higher income and education levels than the average population (Goldberg and Greenberg, 1981, 421).

Managed care prospers in large urban areas because of economies of scale. The estimated population base for a 'typical' HMO within a complete health care delivery system is 450,000 enrollees (Goodman, Kronick, Wagner, and Wennberg, 1993, 150). However, the AMA estimates that an HMO offering primary and secondary services with just 240 beds could succeed in an area with 120,000 people (AMA, 1994, 43). Urbanized areas have larger employers who attempt to decrease their health care expenditures and contain costs through managed care (AMA, 1994, 27). Since decreasing costs of health care is a primary goal of managed care, it has also been able to develop more in areas with higher hospital costs per person and per day (Goldberg and Greenberg, 1981, 427). HMO markets require a large concentration of doctors in order to form health care delivery networks. Managed care has also been more successful in areas with a greater number of large group practices (AMA, 1994, 27), presumably because of the potential to aggregate large pools of enrollees.

Barriers to Managed Care Growth

Although market forces encourage the growth of managed care in certain areas, there are also several deterrents to its growth. In areas of greater population stability and less population movement, the defined list of managed care providers often disrupts the relationship between the physician and the patient (Moran and Wolfe, 1991, 122).

Patients may prefer to stay with their own doctor, instead of switching to a managed care physician. Areas with small populations cannot take advantage of economies of scale and may not be able to generate the necessary financial support for managed care companies.

State laws, through Certificates of Need, can also restrict the growth of managed care. Physician opposition to managed care has greatly impeded its growth. There has been a failure to attract doctors in some areas to managed care, and there has also been an unwillingness of physicians to only associate with managed care networks (Goldberg and Greenberg, 1981, 423). Physician preference for maintaining at least some solo, private practice comes out of a long history of the American physician working as an independent professional in the community (Starr, 1982). Fewer HMOs have also been found in areas with higher medical society membership (Goldberg and Greenberg, 1981, 429). In the New River Valley, 60% of the physician respondents were members of the Virginia State Medical Society, which may influence their opposition to the development of managed care in the area.

Cost Control

Managed care plans often attempt to control costs through the provision of services (Iglehart, 1994, 1167). "Managed care on the whole has a mixed record at cost control. Some managed care plans perform better than traditional fee-for-service, others actually do worse" (AMA, 1994, 4). A 1993 KPMG Peat Marwick study of 1,316 hospital facilities found that managed care lowers hospital costs and improves quality of care (American Medical News, June 19, 1995, 6). Average hospital costs in areas of high managed care were less than the national average, creating a savings of \$678 per case. In these areas mortality rates were lower and average lengths of stay was shorter than the national average (Table 2.4). This study suggests that managed care presents

"opportunities for significant cost savings without an adverse impact on clinical outcomes" (American Medical News, June 19, 1995, 6). However, in medium-sized managed care markets hospital costs were 1.7% higher than the national average. Also, in 1994, "businesses for the first time ever paid one percent less per worker. But this reflects one-time savings as employers are pushed into lower cost managed care plans . . . once people are in managed care, costs will go up as fast as costs are going up for the traditional health plans" (National Public Radio Transcript, August 8, 1995). It is estimated that by the year 2000, 80-90% of the United States population will be enrolled in a managed care plan. To reach that goal in just four years, rural populations such as in the New River Valley must be brought into the managed care system. This increase in enrollment, though, could pose a problem because "when a managed care group negotiates lower group rates with a hospital, costs shift to fee-for-service patients" (Freudenheim, 1994, 42). If everybody were enrolled in a managed care plan, it would be difficult to shift costs.

Table 2.4: Managed Care's Impact

	High managed care	Low managed care
Hospital costs	11.5% below national average	3.6% above average
Patient stays	16.9% shorter than expected	17.5% longer than expected
Mortality rates	8% lower than expected	2% lower than expected

Source: American Medical News, June 19, 1995, 6.

The Role of the Physician

The growth of managed care has led to many changes in the role of the physician. There are two main reasons that physicians join managed care organizations. First, many doctors join managed care plans because they are afraid that they will lose patients to managed care physicians (Iglehart, 1994, 1170). Another reason that MDs join managed care plans is to gain access to capital (Mack, 1993, 50). Two ways that managed care companies attempt to control costs is by modifying the physicians' behavior and by limiting the patients' access to doctors (Iglehart, 1994, 1167). Therefore, the AMA wants to promote the ability of patients and physicians to choose treatments. The method of payment also influences the role of the physician. In the traditional fee-for-service system, physicians profit increases with more care, but in the capitation system physician profit increases by spending less money on each patient (Iglehart, 1994, 1170). Another trend is that managed care companies employ fewer doctors and use a smaller proportion of specialists than traditional medical care (Schroeder, 1994, 239). Therefore, some people believe that "physician practice is what is 'managed' in managed care . . . and the selection of physicians is the start" (Luft and Miller, 1994, 1512). HMOs typically employ one physician per 800 enrollees, but the United States has one physician per 400 people. Therefore, "HMOs absorb twice as many patients per physicians, than non-HMO settings" (Himmelstein and Woolhandler, 1994, 265). "By signing on with managed care plans, physicians show some willingness to accept some financial risk in making clinical decisions and to adapt to health plans that, by definition, seek to curtail their independence" (Iglehart, 1994, 1167). HMO doctors often complain that they have to have their tests

and referrals approved by untrained HMO employees (Shaffer, 1995, 1). Another problem for physicians is that "the unexplained, arbitrary termination on managed care plans is becoming more common throughout the United States" (Bailey, 1994, 59). Therefore MDs and 22 state medical societies are now forming their own managed care companies (Shaffer, 1995, 1). These managed care companies may be better for physicians because even though they will lose some autonomy, they could still be involved in management decisions that may affect the quality of patient care (Clanton 1994, 4).

As Jim Todd, Executive Vice-president of the American Medical Association, told me: "in any managed care situation doctors will have to adjust to the idea that they will not have infinite freedom...because when you work for someone else you do what they say" (Jim Todd, Personal communication, March 1995). In many cases doctors have become salaried employees of the health care corporation. Physicians in managed care feel that their power, or control over the flow of patients, is declining (Coile, 1994, 79). "Whether physicians are salaried employees or contractors, they have a relationship with the HMO or PPO wherein they give up some clinical and financial autonomy to that organization" (Physician Payment Review Commission, 1992, 325).

Solo versus Group Practice

The organizational complexity of the medical market has brought changes in how physicians exercise their trade. These changes are evident in the great increase in group practices, and the corresponding decrease in solo practices. "The current growth of group practice signals the development of organized medical corporations" (McDermott, 1988,

58). In 1975, 17% of physicians were in groups of five or more, by 1983, 23% were. Currently, about 60% of physicians are in group practices throughout the country (AMA, 1994, 29). This trend toward group practice may continue because "in today's marketplace physicians can no longer thrive in a solo private practice. Physicians who are interested in practicing in the future need to become part of organizations that will allow them to negotiate for contracts and have strength in the marketplace" (Shaffer, 1995, 1). More doctors in group practices are affiliated with managed care plans. Sixty-nine percent of solo practitioners and 87% of doctors in groups of 10-24 members have managed care contracts (AMA, 1994, 29). Fifty-seven percent of respondents to the Managed Care in the New River Valley survey were members of group practices. However, such practices were small. Only four respondents were in groups with more than six members. Nationally, specialists' income is about 15% to 35% greater than primary care physicians' income, and group practitioners' income is about 10% to 25% greater than solo practitioners (Coile, 1994, 76). "The growth of managed care will make it almost impossible for newly trained specialists to enter solo fee-for-service practice" (Iglehart, 1994, 1167).

Specialist and Primary Care Physicians

Forty years ago, 60% of MDs were primary care physicians (Cooper, 1994, 681). In 1986, 52% of medical residents were in generalist areas, but by 1993 only 38% were (Schroeder, 1994, 239). Primary care or generalist physicians are those in general or family practice, internal medicine or pediatrics. Even though doctors are becoming more

specialized, managed care companies hire more primary care physicians than specialists. In managed care plans the "primary care doctors regulate the flow of patients and associated revenue to specialists" (Topics in Health Care Financing, 1993, vii). By the year 2000, there will be a shortage of primary care physicians to meet the demand of managed care. There will also be an oversupply of specialists because managed care focuses on primary and outpatient care (Topics in Health Care Financing, 1993, vii). However, as a general surgeon from Radford Community Hospital wrote, "primary care doctors do not have the sufficient expertise or training to determine whether certain tests or services are necessary or the current standard of care in all specialties." The highest growth rates in managed care participation have been by hospital-based physicians (anaesthesiologists, radiologists, pathologists and emergency room physicians), internists, obstetricians and gynecologists (AMA, 1994, 29). Since there is greater utilization review, the number of referrals to specialists is also fewer than in non-managed care settings (Topics in Health Care Financing, 1993, vii). "In the new market, where controlling costs is important, the primary care physician represents less expensive medicine" (McDermott, 1988, 58).

Physician and Patient Relationship

The growth of managed care has also affected the traditional physician-patient relationship. There are several aspects to the ideal physician-patient relationship. The patient should have a choice of physician, practice type and setting, emergency facility and treatment alternatives. The physicians should be competent, compassionate and show no conflict of interest. There should also be a continuity of care and much communication

between the physician and patient (Dubler and Emanuel, 1995, 324). "However, the expansion of managed care and the imposition of significant cost control have the potential to undermine all aspects of the ideal physician-patient relationship" (Dubler and Emanuel, 1995, 324). Doctors and patients both feel that their autonomy is limited by managed care (Physician Payment Review Commission, 1992, 315). Managed care threatens patients' autonomy by limiting the choice of physicians and treatments because both employers and managed care plans can exclude some physicians, treatments and facilities (AMA, 1994, 211). More expensive treatments may not be offered as options. Also, while there may be greater communication with physician extenders, communication with physicians and continuity of care are likely to decrease (Dubler and Emanuel, 1995, 323).

The AMA stated that "the fundamental duty of physicians is as patient advocate" and "physicians can best advocate within the health care system for patients' needs" (AMA, 1994, 206). However, also according to the AMA, managed care situations create great conflict for the physician because they are forced to balance the interest of their patients with others, and the needs of the patients conflict with the financial interest of the physician. To reduce this conflict, the AMA asserts that doctors should develop managed care guidelines and managed care companies should have a medical staff structure with three physicians on the board to review restrictions (Jim Todd, Personal communication, March 1995). Peer-review organizations, which were mandated by Congress, "to evaluate care and appropriateness of hospital admissions and discharges," have also been found to be limit physicians clinical autonomy (McKinlay and Stoeckle, 1990, 54).

"The patient-physician relationship, so important to good medical care and successful practice is repeatedly threatened by managed care companies and their emphasis on the financial bottom line" (Bailey, 1994, 59). An anaesthetologist from Montgomery Regional Hospital echoed this sentiment: "the doctor-patient relationship is gone. In managed care the patient knows the doctor makes money off not treating and not sending to specialists. If you, as a patient, use the health care system too much, you become a problem" (family practice physician, Personal communication, November 1995). Therefore, one goal of the AMA is to protect both physicians and patients because "while managed care plans are of high quality it is inevitable that there will be abuses. Patients will receive poor care or care will be withheld from them, and physicians will be mistreated" (AMA, 1994, 10).

The Role of Physician Extenders

The increased use of physician assistants and nurse practitioners is a vital part of managed care, because they are paid less than medical doctors. "These health workers are encroaching upon the traditional domain of the doctor" (McKinlay, 1988, 3). Clanton (1994, 45) noted a similar trend: "especially in a capitated environment, when remuneration is less than the cost of physician time, use of less expensive practitioners may be the only way to stay in the black." However, the AMA wants medical doctors to supervise any medical care given by physician extenders, including nurse practitioners (Gramling, 1995, 1). The AMA's statement on the issue of physician extenders is as follows: "...let us be clear. We practice medicine, physician extenders do not." But,

nurse practitioners are licensed to be independent providers in most states. Therefore, they are allowed to work without supervision (Gramling, 1995, 1).

The Growth of For-Profit Health Care Companies

In 1980, the HMO industry was mostly non-profit independent or multi-plan organizations (Gold, 1991, 193). At that time, there were eight national HMO firms offering 29 plans. Then, in the mid 1980s, for-profit chains began to dominate the managed care industry. In 1982, only 18% of managed care companies were for-profit, by 1988, 67% of the industry was for-profit (Collins, Davis and Morris, 1994, 181). By 1990, there were 22 health care corporations which either owned or managed 242 HMOs. These 22 corporations had 43% of all plans and 52% of all enrollees (Gold, 1991, 193). Also, in 1990, 66% of HMOs were for-profit, including insurance companies which owned or managed 43% of the HMOs (Gold, 1991, 194). The majority of HMOs are in for-profits (Eckholm, 1994, 1). Regionally, the West and South have the highest HMO affiliation with national firms (Cromley, 1990, 173). As shown in Table 2.5, from 1988 to 1993, there was a much greater increase in enrollment in for-profit managed care members.

Table 2.5: Managed Care Enrollment by Millions

Year	Non-profits		For-profits	
	Absolute Number	Relative %	Absolute Number	Relative %
1988	17.2	21.3	20.4	25.3
1993	18.4	22.7	24.8	30.7

Source: AMA, 1994, 37.

According to the AMA, insurance company ownership of PPOs increased from 7% in 1985 to 30% in 1991, while physician sponsored PPOs declined from 17% in 1985 to 8% in 1991 (AMA, 1994, 31). As shown in Table 2.6, most managed care organizations are owned by insurance companies, and fewest by physicians (AMA, 1994, 30-31). "Most health care delivery networks and health plans are not physician controlled and many will continue to be controlled by non-physicians. These plans usually have no mechanism for participating physicians to have input in health plans" (AMA, 1994, 8). By 1993, 10 firms controlled 70% of the HMO market (Himmelstein and Woolhandler, 1994, 265).

Table 2.6: Percentage Ownership of HMOs and PPOs, 1994

	HMO	PPO
Insurance Companies and Blue Cross Blue Shield	37.7	50.1
National Managed Care Companies	16.8	7.9
Physicians, Medical Groups and PHOs		

Source: AMA, 1994, 30-31.

Health care has grown to be one of the most profitable industries in the United States. In 1994, health care mergers "surpassed in value those of any other industry" (Eckholm, 1994, 1). However, in 1987, only 38% of established plans and 13% of new plans were profitable, and the HMO industry, as a whole, lost one billion dollars. In 1989, 66% of established plans and 46% of new HMOs were profitable. This profit came not only from increased enrollment, but also from improved cost controls, such as utilization reviews (Gold, 1990, 195). The actual number of HMOs has decreased since the late 1980s because of consolidation (Weiss, 1995, 26). The 1987 profit loss led to the closing of 76 HMOs and the consolidation of 61 HMOs with other, from 1987 to 1990 (Gold, 1990, 195). Further consolidation is expected in the future because not only are large national managed care firms buying smaller ones, but also medium-sized firms are consolidating their local positions (Hospitals, 1987, 32). Since HMOs require lower start-up costs, and the health care industry is now profitable, many companies not previously involved in health care have now entered the market. Many people believe that "the new health care powers know finance, insurance, perhaps law-not medicine or nursing" (Himmelstein and Woolhandler, 1994, 265). In 1994, four of the largest managed care companies had over a billion dollars in liquid assets, and some mid-sized firms had over a half a billion dollars. Nine of the biggest publicly traded companies have \$9.5 billion dollars in cash, bank deposits and securities. Even though the company profits are so tremendous, "physicians are capitulated and encouraged to save money" (Anders, 1994, 1). Such windfalls concern the AMA. As Jim Todd remarked: "the AMA has real problems with the for-profit mentality of some health plans. The money should be recirculated for

patient care" (Anders, 1994, 1).

Physician Hospital Organizations (PHOs)

A PHO consists of a hospital or group of hospitals and their affiliated physicians, which contract their managed care services to an existing HMO or employer (Ribka, 1993, 27). PHOs began in the late 1980s, but most have been formed since 1992 (Hudson, 1993, 36). In 1993, there were about 3,000 PHOs each with on average, a physician staff of 363 (Hudson, 193, 36). Physicians and hospitals form PHOs because they do not want to lose patients to other managed care organizations. PHOs improve their members' access to managed care markets. The goal of PHOs is to improve contracting of their managed care services with HMOs or employers, whose bargaining power declines as doctors and hospitals work together (Hudson, 1993, 36). A PHO can also help the physician and hospital to work together to decrease costs and maintain quality (Ribka, 1993, 27). Since managed care has been shown to decrease physicians' incomes, PHOs help to offset this loss by reducing their overhead and management costs (Hudson, 1993, 36). However, some believe that they add more administration which actually increases costs (Ribka, 1993, 27). "PHOs give physicians greater input and more frequent opportunities to provide a say in hospital decisions affecting them" (Hudson, 1993, 36). They also educate physicians about managed care. By improving economies of scale and organizational efficiency, the PHO can increase its market share and profits (Kenkel, 1993, 39). But, since the profits are redistributed, the physicians' independence is also lessened. "Loss of physician autonomy may be the most significant detriment to the PHO" (Mack,

1993, 49). To succeed, PHOs need an equally shared partnership in which both hospitals and physicians are financially accountable (Kenkel, 1993, 390). In many physician hospital organizations, "the primary care physicians and hospitals are full members and the specialists are only affiliates" (Hudson, 1993, 37). As the market changes, doctors and hospitals must cooperate with each other to maintain their positions. For example, as a response to increased competition with Radford Community Hospital (RCH), Montgomery Regional Hospital (MRH) has formed the Southwest Alliance PHO. MRH has been losing patients to RCH and hopes that the PHO will increase its position in the marketplace (anaesthesiologist, Personal communication, September 1995).

The AMA and Managed Care

Since most managed care plans are controlled by non-physicians, organized medicine has been fighting to restrict its expansion (Iglehart, 1994, 1167). For example, the AMA, which represents 50% of physicians in the United States, has been:

a staunch defender of pay-as-you-go health care and has long turned a cold shoulder to HMOs . . . For years the AMA and state medical societies have fought to prevent the spread of HMOs, impeding recruitment of doctors to group health associations, and helping impose restrictions on HMO. (Abramowitz, 1992, 8).

But, in 1992, the AMA changed their position and Jim Todd not only said that the AMA has been slow in recognizing benefits of managed care, but also praised HMOs for cutting costs, managing care effectively with limited resources, and providing alternative career opportunities for physicians (Abramowitz, 1992, 8). The AMA acknowledges that managed care does cover preventive and primary care services and constrain costs, but

that "sometimes their programs become harassing, intimidating and deceptive" (AMA, 1994, 206). However, managed care is altering physicians' practices throughout the country, and as Jim Todd said "we just can't stop it" (Jim Todd, Personal communication, March 1995). Therefore, the AMA has set its own strategy for helping physicians deal with managed care. "Choice and autonomy are threatened by a trend toward more tightly integrated health care delivery systems that use fewer doctors, organize and control the medical practices of the individual physicians and restrict patient choice" (AMA, 1994, 3-4).

The AMA believes that physicians face several risks with the growth of managed care. One risk is workforce reduction. "In 1992, the Department of Health and Human Services projected an oversupply of 49,500 physicians in the year 2000. But another forecast, based on HMO staffing patterns predicted a surplus of 165,000 physicians in the year 2000" (AMA, 1994, 51). A second risk for doctors is the loss of autonomy and the increased accountability to managed care organizations. As Jim Todd said, "accountability is the name of the game...doctors shouldn't fear fair accountability...the question is what's fair" (Jim Todd, Personal communication, March 1995). While methods such as utilization review controls and gatekeepers limit the clinical autonomy of physicians, high levels of economic autonomy remain (AMA, 1994, 33). Since managed care limits some forms of physician autonomy and increases their accountability, the AMA is also "looking for non-intrusive methods of accountability instead of chart reviews, but that won't happen until the far future" (Jim Todd, Personal communication, March 1995). Another risk for physicians is reduced compensation. "PPOs demand that physicians reduce their fees . . .

they reduce the size of their panels and tell the survivors that they must reduce fees or also be terminated" (AMA, 1994, 51-52).

On the other hand, there are also opportunities for physicians in managed care settings if they can influence management decisions and scientific assessment of quality and also work with self-insured employers and businesses to decrease costs (AMA, 1994, 5). "If physicians are involved in the leadership of both medical and non-medical management of health plans, the focus will shift to the overall health and well-being of patients, rather than symptoms of illness. This will increase the quality of care" (AMA, 1994, 5).

To maximize patient and physician autonomy, the AMA wants to create a "triple option plan which would require employers and insurers to offer a choice of health plans and physician-i.e., a traditional insurance plan, a managed care plan (either HMO or PPO) and a benefit payment schedule plan" (AMA, 1994, 8).

Summary

Throughout most of the United States, the growth in managed care pervades the health care system. As managed care enrollment increases, more people become clients of the health care organization, and thus the traditional physician-patient relationship is threatened. Another major change is that more managed care organizations are for-profit health care organizations owned and managed by non-physicians. Many physicians have shifted from traditional solo, fee-for-service practitioners to salaried group members, or even corporate employees. As employees, the autonomy of the physician is decreasing.

"The power of organized medicine is limited compared with the enormous power of corporate America" (Navarro, 1988, 68). Now, they are being held more accountable, by both corporations and employees, for their actions. As one New River Valley physician stated "we would rather not see managed care develop at all." However, it will continue to develop in areas such as the New River Valley, because as another New River Valley physician stated "managed care is the wave of the future."

Before exploring physicians' perceptions of managed care, in the NRV, we turn to and overview of the region's economic, demographic, and health-care profile, in the chapter that follows.

CHAPTER 3: The New River Valley: A New Frontier for Managed Care?

The New River Valley of Virginia represents a future market for managed care corporations. It has a competitive market for investor-owned hospital chains. Similar to other regions of the country, the New River Valley is experiencing changes in the political economy of health care. The New River Valley is located in Southwest Virginia (Figure 3.1, page 52). The conventional boundaries of the New River Valley include: Radford City, and Pulaski, Montgomery, Floyd and Giles Counties. But since Floyd County has no hospital, and the hospital in Giles is neither C/HCA nor Carilion (the dominant hospital chain owners in the area), only data from Radford, Pulaski and Montgomery are used in this case study. As discussed in Chapter 2, the market share of HMOs is lowest in the south (Physician Payment Review Commission, 1992, 332).

Socio-economic profile

As shown in Table 3.1, the population of the New River Valley has grown in the past, and is projected to grow into the future (Table 3.2). From 1980-1995, the area's population increased by 13.7%. From 1995-2010, it is projected to grow by 4.9%. Pulaski County's population has decreased since 1980, and continued loss is expected. This will be offset in overall NRV population growth as Radford and Montgomery are both gaining population. However, as discussed in Chapter 2, to take advantage of economies of scale, a much larger threshold population is needed for a 'typical' HMO.

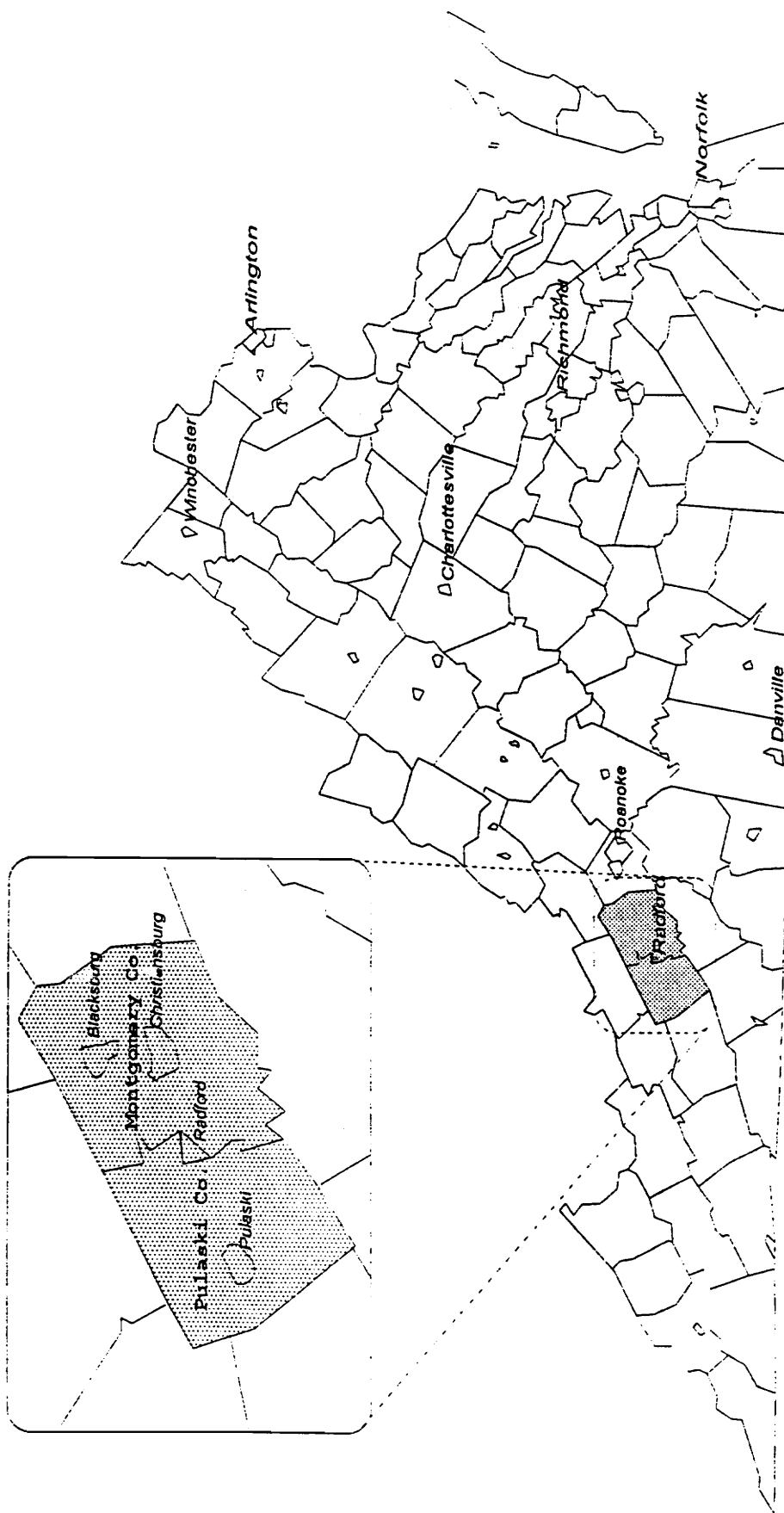


Figure 3.1 The New River Valley, Virginia

TABLE 3.1: Population Size

	1980	1990	1992	1995	Change 1980-1995 (%)
Montgomery County	63,385	73,913	74,515	76,828	21.2
Pulaski County	35,229	34,496	34,534	34,347	-2.5
Radford City	13,456	15,940	16,120	16,587	23.2
Total	114,050	126,339	125,169	129,757	13.7

Sources: County and City Databook, 1994, 592, 606, and Virginia Statistical Abstract, 1994, 597-598. Percentages calculated by the author.

TABLE 3.2: Population Projection

	2000	2005	2010	Change 1995-2010 (%)
Montgomery County	79,604	81,760	83,915	9.2
Pulaski County	34,206	34,202	34,198	-0.4
Radford City	17,203	17,601	17,999	8.5
Total	131,013	133,563	136,112	4.9

Sources: Virginia Statistical Abstract, 1994, 597-598. Percentages calculated by the author.

Although the NRV population has grown, the NRV lost at least 4,826 jobs from 1989- 1995 (NRVPDC, 1995, 4). The Radford Army Ammunition Plant, which was the area's largest private employer, has laid off 3,206 employees since 1989 because of national defense downsizing. In 1995, the largest employment sectors were: service industries (36%), manufacturing (25%) and trade (19%) (NRVPDC, 1995, 15).

Chapter 2 established that managed care thrives in areas which have higher than average incomes. However, as Figure 3.2 shows, even though the median family income

has grown in Radford, Montgomery and Pulaski since 1980, it is still lower than both the Virginia and United States average. Median family income is defined as total income by related family members, and is adjusted for inflation (City of Radford, 1995, 8).

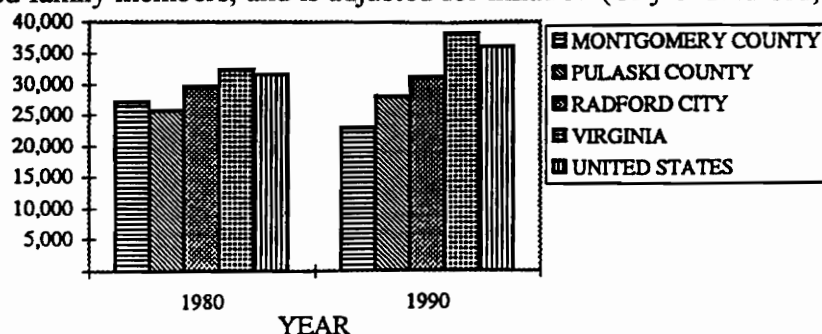


Figure 3.2: Median Family Income (\$)

Source: City of Radford, 1995, 8.

Chapter 2 also showed that age and education are the most important factors that influence managed care enrollment. Table 3.3 shows that Montgomery, Pulaski and Radford all have rather young populations, a positive influence on managed care enrollment. However, since college students comprise over 24% of the area's population (NRVPDC, 1995, 3) most of the area's young are probably covered under their college's student health plans (ambulatory-care health services are covered by mandatory student fees). Therefore, the effect of age on managed care enrollment may not be as strong as in other areas. People with young children are also more likely to be enrolled in managed care, and Table 3.3 also shows the percentage of the population who are young children. According to the 1990 Census, over 40% of the households in each of these three areas are families with their own children at home (although the age of the children is unknown). On the other hand, over 15% of the households in each of these three areas have at least one member over the age of 65 (County and City Databook, 1995, 597,611).

Table 3.3: Percentage of Population by Age 1990

	<5	5-17	18-24	25-34	35-54	55-64	65+
Montgomery County	5.4	12.5	31	16.4	20.6	6.0	8.1
Pulaski County	5.9	16.4	10.4	14.9	27.6	10.1	14.8
Radford City	3.5	9.2	48.2	9.9	15	5.8	8.5

Source: County and City Databook, 1995, 593, 607.

Managed care companies are also more likely to succeed in areas where the population is highly educated. Figure 3.3 shows that, in 1990, the majority of people over the age of 25 in the NRV were high school graduates, and many had bachelors degrees or higher. There is also a large discrepancy between the percentage of those with college education in Montgomery, Radford and Pulaski.

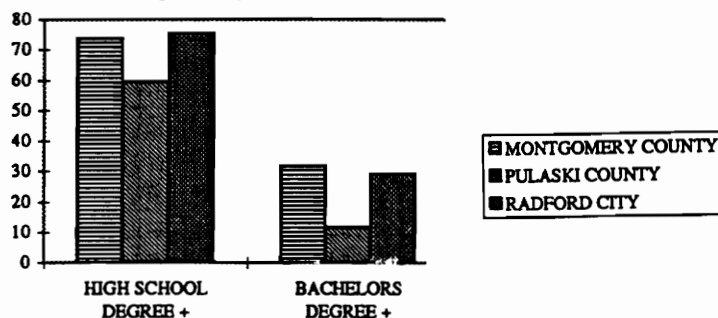


Figure 3.3: Educational Attainment of Population over 25 (%)

Source: County and City Databook, 1995, 596, 610.

Radford City

About 90% of Radford's employment is distributed evenly amongst manufacturing, government (including Radford University), and the service sector (including health care)

About 90% of Radford's employment is distributed evenly amongst manufacturing, government (including Radford University), and the service sector (including health care) (City of Radford, 1995, 2). In 1990, there were 1,190 health service jobs, employing 9.9% of the population. According to the growth index, health services are ranked as the third growth industry in the city, behind business and general merchandise. [The growth index compares the growth of different size industries over time. It is the total employment change multiplied by the percentage change in employment] (City of Radford, 1995, 16). Radford's percentage of people in skilled professions is higher than the national rate. In 1990, the median family income in Radford was \$31,318, which is 5% less than it was in 1970 (City of Radford, 1995, 3). Since students account for over half of Radford's population, the median household income was \$19,478. In 1990, only 1.25% of all Radford households had an income of \$150,000 or more, and 12.1% made less than \$5,000 (City of Radford, 1995, 3). Over 5% of the population was on public assistance (City of Pulaski, 1995, 7).

Montgomery County

Virginia Tech employs 30% of the working population in Montgomery County's and is the county's largest employer. In 1990, about 10% of the county's households earned less than \$5,000 per year and 17.2% earned more than \$50,000 (Montgomery County, 1995, 6). More than 30% of the people in Montgomery County who are over 35 years old have at least a bachelors degree or better (Montgomery County, 1995, 2). Service sector jobs account for 13.7% of the labor force, 32% of the population has

government jobs (including Virginia Tech), and 21.5% are in manufacturing. Health services account for one-third of the service sector jobs and 5% of the county's total employment (Montgomery County, 1995, 18). From 1986-1990, the health care industry was not one of the top 10 growth industries, according to the growth index (Montgomery County, 1995, 19-20). In 1992, the Montgomery County unemployment rate was 8.3%. In 1990, 22.1% of all people were below the poverty level and 5% of the population was on public assistance (City of Pulaski, 1995, 7).

Pulaski County

In Pulaski County, 43.3% of the labor force is employed in manufacturing. This percentage accounts for 5,501 jobs. Another 15.4% of the labor force is in government and 13.8% are in retail (City of Pulaski, 1995, 6). In 1990, 7% of the population was employed in health services. In 1992, 1,038 people were employed in the health services at PCH. Health care is not considered a growth industry in this county. Less than 30% of the population is high school graduates and fewer hold college degrees. In 1990, the average household income was \$28,057 and only 12.4% of households had an income over \$50,000 (City of Pulaski, 1995, 6). In 1990, 13.4% of all people were below the poverty level. Over 8% of the county's population is on public assistance (City of Pulaski, 1995, 6).

Health Care

In a recent Human Needs Assessment study conducted by the New River Valley

third have difficulty affording medical services and/or prescription drugs. However, in planning for NRV growth in the future, no health care initiative has been outlined by regional planners (NRVPDC, 1995, 6).

New River Valley Hospitals

The three New River Valley hospitals used in this case study are: Montgomery Regional Hospital (MRH), Pulaski Community Hospital (PCH) and Radford Community Hospital (RCH). Both MRH and PCH are hospitals owned by the national firm of Columbia/Hospital Corporation of America (C/HCA). C/HCA is a for-profit health care corporation based in Nashville, Tennessee. With 311 hospitals and 125 clinics in 37 states and two foreign countries, it is the world's largest hospital chain. In 1995, it had yearly revenues of \$17.7 billion. RCH, which was built in 1942, is owned by the Carilion Health System. In these three hospitals, as in much of the country, Average Length of Stay (the average number of days patients stay in the hospital) has been reduced (Figure 3.4). As a result, in areas such as the NRV, the number of both licensed beds and staffed beds has decreased as shown in Table 3.4 and Table 3.5. In the future, inpatient hospital use is likely to continue to decrease, as outpatient care increases.

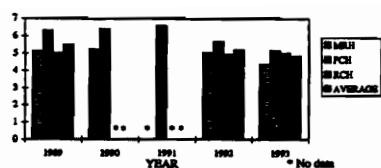


Figure 3.4: Average Length of Stay (ALOS) 1989-1993

Source: Virginia Health Services Cost Review Council, 1995.

Table 3.4: Number of Licensed Beds 1989-1993, 1995

	1989	1990	1991	1992	1993	1995
MRH	146	146	146	135	123	146
PCH	153	153	153	153	141	153
RCH	175	175	175	148	148	148
Total	474	474	474	436	412	447

Source: Virginia Health Services Cost Review Council, 1995.

Table 3.5: Number of Staffed Beds 1989-1993

	1989	1990	1991	1992	1993
MRH	146	146	146	135	123
PCH	153	153	84	84	69
RCH	175	175	175	148	132
Total	474	474	405	367	324

Source: Virginia Health Services Cost Review Council, 1995.

Table 3.5 shows that the NRV lost 150 staffed beds in just five years. As a result of the decline in the number of hospital beds, the percentage of occupancy of staffed beds has increased overall, from 1989-1993 (Figure 3.5). However, it has been estimated that

"about half of the area's licensed beds are not used" (Kelley, A2, 1995). This may be attributed to lower ALOS, DRGs and other pressures on physicians to discharge patients

early.

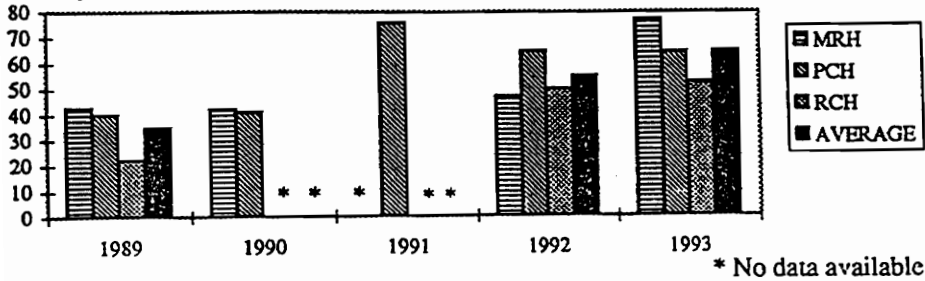


Figure 3.5: Percentage of Occupancy of Staffed Beds 1989-1993

Source: Virginia Health Services Cost Review Council, 1995.

Carilion v. C/HCA

Carilion, a not-for-profit hospital chain based in Roanoke, Virginia, owns 13 hospitals throughout the state of Virginia. RCH is its third largest hospital. Until 1995 Carilion was the main provider of health care in Southwest Virginia. Then, five hospitals, including MRH and PCH, became part of C/HCA. When MRH opened it was owned by HCA, then in 1987, Health Trust bought the facility. C/HCA, the country's largest hospital corporation, owns and operates 311 hospitals throughout the United States and Europe. Now, Carilion and C/HCA are in competition to open a new hospital in the NRV. Originally, C/HCA wanted to buy RCH and renovate it. Since that plan did not work, C/HCA now wants to build a 50 bed hospital in Radford for an estimated cost of \$26 million. MRH and PCH representatives have also said "the demand for inpatient services could easily be met without a hospital in Radford (Kelley, A2, 1995). It would

cost Carilion \$17.3 million to renovate RCH or \$61.7 to build a new hospital. Carilion wants to close their current facility and open a 98 bed hospital two miles outside Radford (Dellinger, 1995, 1-2). One NRV physician pointed out that the hospital will be used less, because of the emphasis on outpatient care, so neither corporation should put so much money into a new structure (family practitioner, Personal communication, November 1995). RCH's Gateway Economic Study tried to show that moving the hospital to the new area at I-77 and 81 would quickly increase development in the area. However, a critique of this study showed that the area has a lack of demand and topographical problems which would hinder development. Even if the hospital were built, the area's development would be slow and limited (Levy, 1995). Although the people of Radford would like the hospital to maintain its current location, in early October 1995, the Health Systems Agency of Southwest Virginia approved Carilion's Certificate of Need to build the new hospital outside city limits. The state health commission has not made a final decision yet. If Carilion is granted their Certificate of Need by the state health commission, C/HCA will probably appeal (Kelly, 1995, A1-A2). The area physicians' opinions on this issue are further discussed in Chapter 4.

Summary

The health care changes that are occurring in the New River Valley are related to the national trends in the increase of for-profit health care corporations. The socio-economic profile of the NRV shows an area with a young, educated population, positive influences on the growth of managed care. However, income levels are lower than

average, there are few non-university large employers, the population is small and there are less than 200 physicians in the area. As discussed in Chapter 2, these factors limit the growth of managed care in rural areas. The locational struggle between C/HCA and Carilion is important because as noted in Chapter 1, when corporations take over hospitals, the role and power of the physician are diminished. Corporate employees and auxiliary health care staff gain more control of the hospital. As shown in Chapter 2, there has been a trend toward the consolidation of hospital ownership with fewer, but larger multi-national corporations dominating the health care industry. If C/HCA were to build the new hospital, the NRV health care system would be dominated by such a corporation.

CHAPTER 4: Physicians' Attitudes Toward New River Valley Managed Care

The Managed Care in the New River Valley survey was conducted to assess the national trends in managed care on a local level. The survey measured the doctors' attitudes toward issues such as: the role of third parties, autonomy, diagnostic related groups, physician extenders, managed care and the conflict between C/HCA and Carilion. Managed care is not yet strong in the NRV, but doctors still believe that their independence is being reduced as third parties gain more power.

This chapter presents the survey findings of the NRV sample. The Managed Care in the New River Valley survey measures the attitudes of physicians toward regulations and the resulting changes in their position in the health care system. This chapter builds upon previous ideas in Chapter 1 and Chapter 2 such as autonomy, political economy, and also the changing position of doctors in a managed care setting, including deskilling, proletarianization and sponsorship. It also situates the attitudes of the NRV physicians in the U.S. health care system.

Methodology

Background

Most of my library research for background information on managed care and the increasing role of corporations in health care was conducted at Health Policy International and the American Hospital Association libraries, both in Princeton, New Jersey. I also met with Jim Todd, the Executive Vice-president of the American Medical Association, in Chicago, in March 1995, and received data and policy statements about the AMA's views

on managed care. I received information about the study area from The New River Valley Planning District Commission. After many unsuccessful attempts to obtain information about the hospitals in the study area, from the hospitals, themselves, the state medical licensing boards, and the state and county medical societies, The Virginia Health Services Cost Review Council in Richmond, Virginia was able to provide some hospital statistics. After months of phone calls to the AMA, I finally received their demographic data of NRV physicians for the years 1984-1994.

I based part of the Managed Care in the New River Valley survey on other physician surveys. Questions 15 and 18-22 were adapted from Leighton Ku and Dena Fisher's (1990) "The Attitudes of Physicians toward Health Care Cost-Containment Policies." Fisher and Ku conducted a telephone survey of 500 physicians, and received a 55% response rate. Their main finding was that physicians "disfavored policies that decreased [their] autonomy of practice" (Fisher and Ku, 1990, 25). Questions 9-14, 16 and 17 were revised from Lawton R. Burns, Ronald M. Anderson and Stephen M. Shortell's (1986) "The Effect of Hospital Control Strategies on Physician Satisfaction and Physician-Hospital Conflict." They surveyed 1,367 physicians and received a 54% response rate. Their conclusion was that "hospital ownership appears to exert the biggest effect on physician satisfaction and conflict" (Burns, Anderson and Shortell, 1986, 527).

NRV Physician Demographics from AMA Data

From 1985-1994, the total number of physicians in the NRV increased from 156 to 206. The number of female physicians in the NRV doubled from 16 to 32. During this

time, 34 male physicians also started practices in the NRV. Therefore, as a percentage of all doctors, females increased from 10% to 16% (AMA data, 1995). Twelve percent of the respondents to this survey were female. Also, as the NRV grows, younger physicians should be attracted to the area; however, the number of doctors under the age of 35 decreased from 10% in 1984, to only 5% in 1994. Figure 4.1 shows the change in the age structure of NRV physicians, using AMA data for 1985-1994.

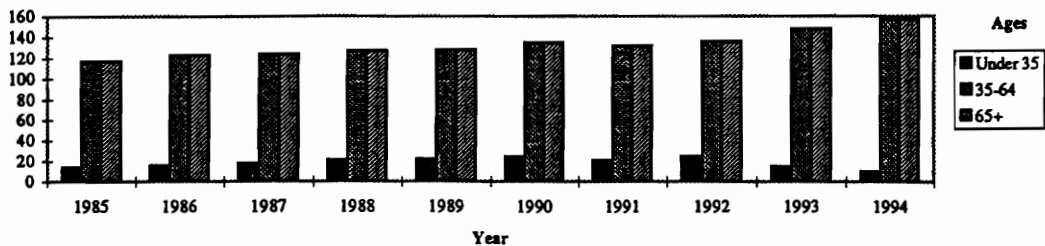


Figure 4.1: NRV Physicians by Age 1985-1994

Source: American Medical Association.

Sampling Frame

The sampling frame included all doctors listed in the directories of Montgomery Regional Hospital, Pulaski Community Hospital and Radford Community Hospital. That list was expanded by including all doctors from the area's telephone directory yellow pages, who did not appear in the hospital directories. There were 176 New River Valley physicians in the sampling frame.

Pre-testing

In preparation of the survey, I spoke with several area physicians and both the chief operating officer and health planner at MRH. I was able to do in-depth interviews and pre-test the survey with three physicians: an anaesthesiologist and a family practitioner

affiliated with MRH, and a family practitioner affiliated with PCH. I tried to do more pre-testing but because it is very time-intensive and imposes opportunity costs on physicians (losing revenue and free-time) I was only able to do three. However, these interviews allowed me to change the wording, improve clarity, and reorganize question sequencing. Throughout this thesis, the comments obtained from these three interviews are cited as personal communications. While all three assured me that the survey dealt with important issues, they also felt that the response rate would not reach 20%. One doctor thought that it would be particularly difficult to survey physicians because "health care in the NRV is a moving target" and doctors are too busy for surveys (family practice physician, Personal communication, October 1995).

Response Rate

In early October 1995, a letter was mailed to the New River Valley physicians from Professor Joseph L. Scarpaci, my thesis supervisor. The letter explained the nature of the research and requested that they respond to the survey which would arrive shortly. On October 12, 1995, 176 surveys, titled *Managed Care in the New River Valley*, with my cover letter were mailed. Three surveys were returned from the post office because the doctors had moved and left no forwarding address. By November 29, 1995, without sending any reminders, I had received 87 responses, giving a 50% response rate. In his study of physician proletarianization in Argentina and Uruguay, Scarpaci (1990) also received a 50% response rate. Babbie (1989) maintains that a 50% response rate is fair for the general population. Thus, a 50% response rate was very acceptable for a survey of

doctors, who are already inundated with paperwork. The survey, letters, daily response numbers and the codebook are all in Appendix 1. As McKinlay and Stoeckle observe "it is extraordinarily difficult to obtain information from say, the AMA, or to gain access to medical institutions" (McKinlay and Stoeckle, 1988, 200).

Tests of Significance

I edited, coded and transcribed the responses into Microsoft Excel. The Pearson chi square (χ^2) test in StatXact was then used for data analysis. The StatXact package was used instead of the standard χ^2 because it gives exact probability levels for small scale samples instead of large scale approximations. The formula for the Pearson chi-square test is:

$$\frac{\sum (O_{ij} - E_{ij})^2}{E_{ij}^2}$$

[O=observed values, E=expected values, i=rows, j=columns]. All of the chi-square tables can be found in Appendix B. In the following section, the first recorded number is the χ^2 value and the second number represents the probability value.

Survey Findings

Survey Respondent Demographics

The average age of the survey respondents was 46 years old. Six percent of the respondents were under 35 years old. Fifty-two percent of respondents stated that they were in an HMO, and 40% were in a PPO. Several of these physicians were members of

both an HMO and PPO. This was a curious finding because there are no HMOs in the NRV. The HMO participation rate may include physicians who are in HMOs based in Roanoke or anticipate joining an HMO in the future. The average number of years in practice was 16. Fifty-nine percent were in a group practice. The average number of years in a group practice was eight, showing that this is a recent trend. The average group practice size was 11.4, but without three outlier responses of 120, 130 and 180, the average number of group members decreased to 3.8. These outlier responses referred to the Roanoke HMOs noted above. As one respondent stated, "it is difficult to get physicians to form groups [in the NRV], because doctors are too independent to work together" (anaesthesiologist, Personal communication, September 1995). Therefore, getting doctors to reach contract agreements for group practice is difficult. Another problem in forming large groups is that doctors are not allowed to discuss their fees with other physicians because of anti-trust laws (anaesthesiologist, Personal communication, September 1995).

Table 4.1: Respondent Demographics

Average Age=46
Male=88%, Female 12%
Average Number of Years in Practice=16
Group Practice Member=59% Solo Practice=41%
Average Number of Years in Group Practice=8
Specialists=59%, Generalists=41%
Specialists in Group Practice=62% Generalists in Group Practice=55%
Specialty Organization Member=80% State Medical Society Member=60% AMA Member=40%

New River Valley Hospital Construction

Growth of for-profit hospital chains, as shown in Chapter 2, is occurring in the New River Valley. Across the country, large hospital chains such as C/HCA are competing with smaller local chains such as Carilion. As previously discussed, both Carilion and C/HCA want to build a hospital in the New River Valley. Although The Roanoke Times (September 10, 1994) reported that "getting area doctors to comment on the competing proposals is darn near impossible," the Managed Care in the New River Valley survey found that physicians have strong opinions on the issue. One physician believes that "not enough input has been sought from physicians, because the fight for Radford is about corporate control" (anaesthesiologist, Personal communication, September 1995).

Several respondents supported both the construction of a new hospital on I-81 (49%) and the expansion and renovation of RCH (52%) (Questions 27 and 28). Of the physicians who refer their patients mainly to MRH (Question 38, n=25), 36% support the construction of the new hospital ($\chi^2=2.236$, .21, Table 1) and 60% support the expansion and renovation of RCH ($\chi^2=8.517$, .0043, Table 2) (Questions 27 and 28). Of the physicians who refer their patients mainly to RCH (Question 38, n=44), 80% support the construction of a new hospital ($\chi^2=35.56$, <.0001, Table 3), and 48% support the expansion and renovation of RCH ($\chi^2=.6304$, .49, Table 4) (Questions 27 and 28). Of the doctors whose primary hospital is PCH (n=21), 19% supported the construction of a new hospital and 19% also supported the renovation and expansion of RCH.

These findings show that physicians do not want just one hospital chain in the area, even if it is their own. As a doctor who mainly refers his patients to PCH commented, "having just one chain in the region will only benefit the chain, not doctors or patients . . . with managed care, one chain can force physicians to work under their own conditions" (family practice physician, Personal communication, November 1995). As shown in Chapter 2, when doctors join a managed care organization their autonomy is reduced. The hospital chain will act as a unified sponsor for the doctors, further reducing their autonomy, as shown in Chapter 1. Since the goal of the corporation is profit, physicians might be deskilled if the corporation chooses to give their work to less qualified health care workers. Another physician stated that neither company should invest so much money into a new hospital, because in-patient hospital use is on a continual decline (family practice physician, Personal Communication, November 1995). These findings also

suggest that physicians do not want to be employed by a corporation and their autonomy is more important than corporate allegiance. Physician resistance to the loss of autonomy is strong in the NRV even though there is no formal opposition to it. As one doctor on the staff of MRH commented "both hospitals should be allowed to build in Radford, because the competition is necessary to ensure quality care" (family practice physician, Personal communication, October 1995).

Regulations

Before reviewing the findings on regulations, it will be useful to summarize the key national trends in this regard. Due to the health care inflation and corporate control of health care, physicians are being held more financially accountable for their medical care decisions, than they were in the past. One NRV doctor stated that "doctors could lose their jobs if their numbers (Average Length Of Stay, surgeries) are not the same as national averages" (anaesthesiologist, Personal communication, September 1995). Both the government and insurance companies regulate the health care industry through methods such as DRGs (Scarpaci, 1988). Employers, through managed care organizations, are trying to decrease expenditures on employee health care. Employers alter the traditional physician-patient relationship as they choose the managed care organization (Bailey, 1994). Physician autonomy becomes limited because the employers, insurance companies and managed care corporations all have influence over the physicians' work, as shown in Chapter 2. If physicians fail to contain costs, they may not receive managed care contracts. Doctors become deskilled because managed care organizations use more

ancillary health workers, to keep costs down. Competition between doctors is also increased because there is an oversupply of physicians, and fewer physicians are needed in managed care organizations. Since there is an oversupply, corporations can more easily fire and hire physicians (AMA, 1994). As the following findings reveal, the regulatory settings pervade the physicians' work setting.

Of the respondents, 64% agreed that cost-containment measures by third parties influenced their decisions about testing (Question 1a), 72% agreed that cost-containment measures influenced their decisions about hospitalization (Question 1b), and 69% agreed that cost-containment measures influenced their medical decisions about prescriptions (Question 1c).

Specialists and generalists disagreed about whether their medical decisions were influenced by third party cost-containment measures. Among generalists (n=36), 72% agreed that cost-containment measures influenced their medical decisions about testing, versus only 47% of specialists (n=51). Although there was a 25% difference, this finding was not statistically significant ($\chi^2=3.076$, .39, Table 5). Seventy-five percent of generalists and 56% of specialists also agreed that third party cost-containment measures influence their decisions about hospitalization. This finding was also not statistically significant ($\chi^2=3.196$, .38, Table 6). Eighty percent of generalists agreed that their prescription decisions were influenced by third party cost-containment measures, but only 49% of specialists did. However, this finding was not statistically significant ($\chi^2=2.578$, .48, Table 7). As shown in Chapter 2, generalists are gaining more control in health care, thereby being held more accountable for health care costs.

The influence of cost-containment measures also varied between doctors who are in group practice (n=50) and those who are in solo practice (n=35). However, the findings in regard to testing and hospitalization were not statistically significant. Of those in group practice, 73% agreed that their medical testing decisions are influenced by third parties while only 45 % of those in solo practice did ($\chi^2=7.191, .0679$, Table 8). Seventy-five percent of group practitioners also agreed that their hospitalization decisions are affected by third parties compared to 54% of the solo practitioners ($\chi^2=3.884, .27$, Table 9). Seventy-nine percent of group practitioners and 42% of solo practitioners agreed that third party cost-containment measures influenced their prescription decisions. This finding was statistically significant ($\chi^2=11.71, .0071$, Table 10). These differences suggest that physicians are not only feeling pressure from the insurance companies and hospitals, to keep costs low, but are aware of pressure from other doctors in their groups. Although over 60% of physicians responded that they are clearly feeling the effects of cost-containment measures, they do not seem to influence clinical judgement. As one internist voluntarily wrote after question 1: "cost-containment measures do not affect my decision/recommendation. They do, however, often affect whether we can implement those decisions."

Autonomy

As discussed in Chapter 1, proletarianization is "a function of the degree of unity or cohesiveness within an occupational group" (McKinlay and Arches, 1985, 192). In 1985, 60% of physicians in the NRV were specialists and 40% were generalists. As might

be expected in corporate for-profit medical settings, the percentage of specialists increased to 62% of all NRV physicians, while the percentage of generalists decreased to 38% of all NRV physicians by 1994 (AMA data, 1995). The number of specialists increased by 34, while the number of generalists only increased by 16. Even though the number of generalists is decreasing, they are gaining more power than specialists in managed care environments (Chapter 2). Fifty-nine percent of the respondents were specialists and 41% were generalists. As specialization increases among physicians, their political strength decreases. The national physician workforce becomes fragmented into smaller specialty organizations, each trying to advance the needs of their own individual specialty, instead of the needs of doctors, in general. This comes as a result of the fact that more physicians are only affiliated with their specialty organization and not the AMA, whose membership is decreasing yearly (McKinlay and Stoeckle, 1990, 136). This phenomenon is occurring in the NRV where 80% of the respondents belonged to specialty organizations, 60% were members of the state medical society, and only 40% were members of the AMA (Question 37). Currently, about 50% of physicians nationwide belong to the AMA (Jim Todd, Personal communication, March 1995).

A seeming contradiction surfaced in areas of physician autonomy. Almost all (90%) of the physicians surveyed agreed that their primary hospital does give them sufficient autonomy with regard to patient care (Question 6). However, 44% also agreed that they lack the necessary control over medical care decisions (Question 7), and 57% also concurred that their input in hospital policy is too limited (Question 12). These findings indicate that there are forces other than the hospital which erode physician

autonomy. Physicians may feel that they lack control over medical care decisions because of insurance companies, allied health care workers, DRGs and technology.

Managed care companies and hospital corporations have also been shown to encourage the use of certain tests, while discouraging the use of others. In the New River Valley, more doctors (46%) feel pressure not to order certain ancillary tests and services, than those who feel pressure to order certain tests and services (30%) (Questions 8 and 9). Although most did not feel pressured into requesting testing and services, one MD stated that "surgeons at MRH have had to change their techniques based on what equipment and techniques C/HCA wants them to use" (anesthesiologist, Personal communication, September 1995).

DRGs have also been shown to affect physician autonomy. In 1983, DRGs were implemented by the government to cap spending. These 470 prospective payments tell physicians not only how long a Medicare patient may stay in the hospital, but also how much the doctor may charge per diagnosis. Therefore, the provider and the hospital have an incentive to keep the cost of treatment equal to the DRG payment. DRG reimbursement varies based on hospital type (teaching v. non-teaching), cost of living data, and location (rural v. urban), all within census regions. In the south, DRG payment is low, representing the lower cost of medical wage labor and the potential for corporations to make a greater profit (Scarpaci, 1988). In the NRV, only 30% of generalists and 31% of specialists agreed that DRGs affected their treatment decisions. This finding was not statistically significant ($\chi^2=.26, .9$, Table 11) More generalists (39%) than specialists (29%) believed that DRGs influenced their testing decisions ($\chi^2=.29, .02$, Table 12) More

generalists (30%) also agreed that DRGs influenced their diagnostic decisions, and only 22% of specialists did ($\chi^2=.18$, .95, Table 13). Even though less than 40% of NRV physicians felt that their medical care was influenced by DRGs, other studies have shown that DRGs "clearly impinge on practice autonomy" (Haug, 1988, 53-54).

Physician Extenders

Another major impact of managed care is the increase in the use of physician extenders. They perform medical services that were previously done by MDs. Even though 60% of physicians surveyed thought that there is an inadequate number of nurses for patient care (Question 14), only 48% agree that hospitals should encourage the use of nurse practitioners, midwives and physicians' assistants in some tasks traditionally performed by doctors. This difference was statistically significant ($\chi^2=21.82$, .0438, Table 14) (Question 15). This sentiment suggests that although physicians feel that more nurses are needed for patient care, they do not want nurses impinging on their traditional domain. In response to question 15, an orthopedist voluntarily wrote that encouraging physician extenders is a good idea but they have "a different level of competence-extreme care should be taken." Further research is required to identify the specific tasks that NRV physicians find acceptable for physician extenders.

If managed care also leads to shorter hospital stays and less use of in-patient services, then NRV physicians should have a role in directing patient flows to local hospitals. Ninety-four percent of the respondents agreed that it is acceptable to encourage people to have minor surgery and certain tests done in clinics and doctors' offices, rather

than the hospital (Question 22). Only 48% agreed that the hospital should encourage physician extenders. The relationship between these two variables was not significant ($\chi^2=3.430$, .9267, Table 15). Since there was a large percentage difference, this relationship implies that doctors may be willing to perform medical care outside of the traditional hospital setting, and that they also want to be in charge of this care. A larger sample population may further clarify this relationship.

Health Insurance

Four survey questions (18-21) referred directly to the recent changes by health care insurance companies and other health care corporations. First, although it is widely practiced by insurance companies, only 23% of all physicians (26% of generalists and 19% of specialists) surveyed found it acceptable to include only designated providers with lower fees in insurance plans, and exclude other hospitals and doctors that are more expensive (Question 18). When insurance companies only include physicians with lower fees into a managed care organization, other physicians are often forced to lower their fees (anaesthesiologist, Personal communication, September 1995). In response to question 18, another respondent voluntarily wrote that this practice is "accepted because physicians do not have a choice, but it is not desirable."

Second, as discussed in Chapter 2, patients who choose physicians not selected by their plan must often pay greater expenses for care than for approved physicians and hospitals (Question 19). Only 59% of physicians (68% of generalists and 49% of specialists) agreed that this policy is acceptable. In response to question 19, one NRV

surgeon stated that this practice is not acceptable because "patients' cost should reflect co-responsibility of care [use of generalists and specialists] and [plans] should not restrict access to specialty care particularly if that care is not represented in their insurance plan." Another respondent also added that "plans may only select poor doctors so choice needs to be maintained."

The next question (Question 20) not only asked if it was acceptable to have patients select a physician from a list of approved providers, but also whether the selected doctor should provide all basic medical care for a pre-determined fee, and have the physician be responsible for authorization of all lab, specialist and hospital services. Interestingly, almost twice as many (67%) generalists agreed with this 'gatekeeper' method than specialists (34%). This difference was highly significant ($\chi^2=12.94$, .0020, Table 16). This finding corroborates the idea that specialists do not want their services to be determined by generalists even though this policy is widespread, as discussed in Chapter 2. As an additional response to question 20, a doctor from RCH wrote "primary care physicians having gained more control, are at times, inappropriately refusing to refer patients to specialists, when a specialist could better manage the patient's specific needs." However, also in response to question 20, one NRV primary care physician stated that in the New River Valley "presently, managed care means do what you are told by Carilion. Primary care MDs are not managing care."

A fourth question addressed new trends in health insurance and asked whether it was acceptable to have the patient obtain prior payment approval for care in non-emergency hospitalization (Question 21). Sixty-three percent of all MDs (67% of

generalists and 59% of specialists) agreed with this practice. One respondent added to question 21 that the problem with the policy of prior payment is that "insurance companies often state their payment as representing the 'usual and customary charge', which bears little truth to the actual marketplace." Another physician complained that in the NRV, "Blue Cross/Blue Shield's reimbursement is some [sic] of the lowest in the country."

Physician Assessment of Managed Care

The next question that referred to managed care was whether or not managed care is developing appropriately for physicians in the New River Valley (Question 29). Of the 69 physicians who responded to this question, 62% believed that it is not. None of the 26 physicians who responded to the open-ended part of this question had a positive response. There were a few respondents who just did not approve of the whole idea of managed care. For example, one replied that it was "NEVER NECESSARY" (original emphasis) to have managed care. Other responses dealt with the changing role of the patient in the managed care system. Several doctors stated that patients need to choose their care-givers, but as one put it "their [patients] interest seems lost to business." Another physician remarked that "patients, in general, hate to have their care 'managed' for them, and the patients want free choice." Several physicians wrote that neither physicians nor patients have had enough input in the development of managed care in the NRV. One doctor epitomized this idea: "managed care needs to be 'managed' by physicians and patients" (original emphasis). Several others complained that the only outcome of a managed care system will be increased profits for managed care corporations and

insurance companies. A doctor echoed this sentiment about managed care when he wrote "[managed care] is not a pleasant process for anyone (patients, physicians, hospitals) except for the managed care administrators and sales people, who plan to get rich at the expense of everyone else."

Another sign of corporate influence throughout the health care system is the "corporate imperative" of health care professionals, as discussed in Chapter 1. Seventy-two percent of physicians surveyed agreed that their primary hospital is willing to form joint ventures with them (Question 11). The physician-hospital organization, as discussed in Chapter 2, is one such venture. As opposed to a joint venture, 120 primary care physicians in the NRV and surrounding areas, have also formed their own group, Blue Ridge Primary Care, in competition with the hospitals (anaesthesiologist, Personal communication, September 1995). There has also been an increase in the physician ownership of clinics and health care testing facilities. Fifty-two percent of respondents agreed that there is competition between the physician-owned and hospital-owned diagnostic testing services (Question 13).

Summary

The Managed Care in the New River Valley survey showed that even though managed care is not pervasive throughout the area, doctors have strong opinions about it. Like much of the country, the area has recently experienced the growth of for-profit hospitals. Regardless of their own primary hospital affiliation, area doctors do not want one hospital chain to dominate the area. Doctors know that their autonomy is decreasing,

and having only one chain in the area would further diminish their sovereignty. However, physicians did not think that their hospital was limiting their autonomy. Other factors such as cost-containment pressures, physician extenders, 'gatekeepers' and DRGs are eroding physician autonomy in the NRV.

CHAPTER 5: Conclusion

Major transformations are occurring throughout the United States health care system. Historically, physicians had the professional power to stop third-party interests in their profession (Chapter 1). Largely due to their monopoly on medical knowledge, doctors were able to dominate the health care field. Today, as society becomes more educated, doctors have become deprofessionalized (Wolinsky 1988). Corporations and other third parties such as the government, insurance companies and ancillary health workers are gaining power. As these groups play a greater role in health care, and encroach upon the traditional domain of physicians, administrative power of the physician has been diminished. As shown in Chapter 1, the growth of for-profit companies, specialization and technology have led to decreases in the physicians' autonomy, including new checks on their clinical decision making. The growth of for-profit hospitals and other health care corporations have allowed business people to supervise the work of medical doctors. The high cost of technology and regulatory controls have made it costly for solo practitioners to operate their practices. Therefore, if doctors want access to capital, they must rely on corporations (i.e., managed care) and follow corporate guidelines. Increases in specialization have forced physicians to rely on each other and physician extenders. With increasing technology and specialization, work can be broken down into smaller, more efficient parts. Then, corporations can use ancillary health care workers and increase corporate profit. Technology, specialization, increasing costs and the growth of for-profit health care corporations have all contributed to an increase in efficiency as well as a larger bureaucracy throughout the health care system (McKinlay

and Arches 1985). As part of the bureaucracy, doctors must follow bureaucratic norms and regulations that were formulated by business people. McKinlay and Arches (1985) argue that because of this increasing bureaucracy and decreasing autonomy, physicians are taking on the role of proletarian. As proletarians, they lose control over certain aspects of their work. Physicians work for managed care companies and other health care corporations which now own the physicians' means of production, such as technology. Although their autonomy is decreasing, doctors are not likely to think of themselves as proletarians, because of the pejorative Marxist connotation associated with the term. Therefore, it has been asserted that the health care system is undergoing the process of corporatization, in which physicians must relinquish some of their autonomy to corporations in exchange for capital (Light and Levine 1988). Another interpretation of these changes is that managed-care companies gain control of physicians because the corporation acts as a unified sponsor. As a sponsor, the company controls policy management and bureaucratic decisions (Derber 1984). The theories of proletarianization, corporatization and sponsorship are different ways of showing that as corporate power increases, the traditional autonomy of the physician decreases. Although most NRV doctors agreed that the hospital gives them sufficient autonomy, there were several other areas, such as cost-containment pressures and the use of physician extenders, where NRV doctors felt their sovereignty decreasing (Chapter 4).

The Political Economy of Health Care

The political economy perspective provides a critical assessment of the health care

system. It emphasizes production, accumulation and the distribution of the surplus produced (Johnston, Gregory and Smith, 1994, 446). "In the medical care industry, surplus value is value created by the labor of hired physicians and appropriated by pre-paid medical programs" (Scarpaci, 1990, 364). The Marxian view includes the idea that "production and distribution are a product of a particular set of historical circumstances" (Johnston, Gregory and Smith, 1994, 447). According to the political economy view, for-profit hospitals and managed care companies expand across the country because it is within the logic of capital to seek out new market shares.

Two significant changes are occurring within the political economy of health care. First, there has been a shift from local, independent health care providers to national hospital chains. Also, instead of being self-employed, more doctors are becoming corporate employees, or joining group practice (Bergstrand 1982). Both changes are apparent in the New River Valley. The national hospital chain of C/HCA now owns two hospitals and is trying to build a third in the area. Carilion, the area's other hospital chain, is buying medical practices, turning the once independent doctors into corporate employees. With the recent entrance of C/HCA into the area, the influence of corporations in the health care system of the New River Valley will increase. According to the AMA, C/HCA believes that physicians are the most important part of the hospital because "happy doctors make happy patients" (Jim Todd, Personal communication, March, 1995). However, as the process of corporatization unfolds, physicians will have to follow C/HCA guidelines of care. Locational struggles such as the one between C/HCA and Carilion are occurring in many areas as both multi-national and local companies

attempt to expand throughout the health care industry.

Prospects for Managed Care in the New River Valley

As outlined in Chapter 2, many forms of managed care have rapidly emerged throughout most of the country. The south has had the lowest percentage of managed care organizations and future growth is expected (Chapter 2). There are several reasons that managed care companies have grown more slowly in rural and southern areas (Chapter 2). Managed care and the national for-profit chain C/HCA have just begun to emerge in the New River Valley. As one doctor wrote, area doctors "have had more warning and time to prepare for it than physicians in some areas." Managed care requires a concentration of providers in large group practices, and large employers to encourage cost savings (AMA, 1994). These elements are not found in the New River Valley. There are less than 200 doctors in the area, and according to my survey the average group size is only 3.8. The Radford Army Ammunition Plant was the areas' largest employer, but has laid off thousands of people in the past five years (City of Radford 1995).

Managed care also has greater success in areas that have a population that is younger, more educated and wealthier than the average population (Goldberg and Greenberg 1981). Even though the NRV's population is younger than average, it may not be a factor in the growth of managed care because of the high proportion of college students. As a whole, the population of the NRV is highly educated, but their income is lower than state and national averages. Although the population is growing, it is still smaller than the estimated population needed for complete managed care organization.

Therefore, the population characteristics of the area do not meet the requirements for managed care.

Physician opposition is another reason that managed care has difficulty developing. Managed care leads to greater use of physician extenders, 'gatekeepers', and less use of specialists. As argued in Chapter 4, the Managed Care in the New River Valley survey documented that many area doctors do not think that the hospitals should encourage the use of physician extenders. The number of specialists in the area is growing, and they do not want the use of their services to be determined by generalist 'gatekeepers'. Even though many NRV physicians do not favor managed care, it will continue to expand to areas such as the New River Valley because of the power that managed care companies and other health care corporations retain. Future research will be necessary to follow the evolution of these trends. Hopefully, this study will serve as a basis against which future trends in physician proletarianization and the corporatization of health care might be assessed.

**APPENDIX A:
MANAGED CARE IN THE NEW RIVER VALLEY**

Dear Dr:

As you know, health care in the New River Valley has been the subject of much debate. In a few days a student of mine, Abby S. Feman, will be contacting you in writing.

I would be very grateful if you would take a few minutes to answer a brief questionnaire that she designed for her graduate thesis.

Thank you in advance for your assistance. Feel free to speak with me (231-7504) if you have any questions.

Sincerely,

Joseph L. Scarpaci, Associate Professor
Health Policy

October 9, 1995

Dear New River Valley Physician:

Managed Care in the New River Valley

I am interested in views that physicians have regarding managed health care. I am conducting this survey about physician attitudes toward managed health care delivery in the New River Valley. I am working with Professor Charles Good and Professor Joseph L. Scarpaci who wrote to you last week.

I hope that you will take a few minutes from your busy schedule to complete this survey. Your participation is important to ensure the validity of the results. All responses will be confidential.

If you would like a copy of the results, please note your address on the return envelope. If you have any questions, please call me at (540)951-7572 or e-mail at afeman@vt.edu.

Thank you for your anticipated cooperation in this effort!

Sincerely,



Abby S. Feman, A.B.

Managed Care in the New River Valley

The first set of questions concerns your attitudes about regulatory issues. For each item listed, please check the appropriate box. To what extent do you agree or disagree with the following statements?

I. REGULATIONS:

1. Cost-containment measures by third parties have influenced my medical decisions about:

- a) testing.
b) hospitalization.
c) prescriptions.
d) surgery.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. In-office chart reviews by third parties influence my decisions about:

- a) treatment.
b) testing.
c) diagnoses.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Second opinion surgical decisions influence my surgical decisions.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The use of DRGs influence my decisions about:

- a) treatment.
b) testing.
c) diagnoses.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following statements pertain to your attitudes about your primary hospital.

II. YOUR HOSPITAL:

5. Post-hospital chart reviews by third parties influence my decisions about:

- a) treatment.
b) testing.
c) surgery.
d) prescriptions.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. The hospital gives me sufficient autonomy in relation to patient care.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Physicians lack the necessary control over medical care decisions.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. There is pressure to order certain ancillary tests/services.

strongly agree	agree	disagree	strongly disagree	no opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Please Continue to the Next Page)

	<i>strongly agree</i>	<i>agree</i>	<i>disagree</i>	<i>strongly disagree</i>	<i>no opinion</i>
9. The use of certain ancillary tests/services is not encouraged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. There are inflexible hospital rules pertaining to physician discretion in treating patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The hospital is willing to form joint ventures with physicians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Physician input in developing hospital policy is too limited.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. There is competition between hospital-owned diagnostic testing services and physician-owned diagnostic testing services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. There is an inadequate number of nurses for patient care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. The hospital should encourage the use of nurse practitioners, midwives and physicians' assistants rather than physicians, in some tasks traditionally performed by doctors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Hospital involvement with pre-paid plans (HMOs) is inappropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Hospital involvement with PPOs is inappropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions pertain to your attitudes about health insurance.

III. HEALTH INSURANCE:

	<i>strongly agree</i>	<i>agree</i>	<i>disagree</i>	<i>strongly disagree</i>	<i>no opinion</i>
18. It is acceptable to include only hospitals and doctors with lower fees in insurance plans, and exclude those that are more expensive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Patients who use physicians and hospitals selected by the plan should pay a lower share of the cost of services than patients who choose doctors not selected by the plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. It is acceptable to have patients select a physician from a list of doctors, <u>and</u> the selected doctor provides all basic medical care for a pre-determined fee, <u>and</u> is responsible for authorizing all services from specialists, labs, and hospitals for that patient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Please Continue to the Next Page)

- | | | | | | | | | | | |
|--|--------------------------|-----------------------|--------------------------|--------------|--------------------------|-----------------|--------------------------|--------------------------|--------------------------|-------------------|
| 21. It is acceptable to have the patient obtain payment approval from the insurance company, for specific expenses and length of hospitalization prior to non-emergency hospitalization. | <input type="checkbox"/> | <i>strongly agree</i> | <input type="checkbox"/> | <i>agree</i> | <input type="checkbox"/> | <i>disagree</i> | <input type="checkbox"/> | <i>strongly disagree</i> | <input type="checkbox"/> | <i>no opinion</i> |
| 22. It is acceptable to encourage people to have certain tests and minor surgery done in clinics and doctors' offices rather than in the hospital. | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |

IV. LOCATION:

As a geographer I am very interested in your office location. Please check the appropriate boxes and write answers where necessary.

23. Which of the following describes your primary office?
- ☐ Private, free-standing office
 - ☐ Private office in office complex
 - ☐ Group office with shared facilities
 - ☐ Hospital office
 - ☐ Other: _____
(please describe)

24. Years at your current office location: _____ years

25. Your previous office location was:
- ☐ Private, free-standing office
 - ☐ Private office in office complex
 - ☐ Group office with shared facilities
 - ☐ Hospital office
 - ☐ Other: _____
(please describe)
 - ☐ Not applicable - This is my first office.

26. How far is your office from:
a shopping center? _____ miles
a retail activity? _____ miles

- | | | |
|---|------------------------------|-----------------------------|
| 27. Do you support the construction of a new hospital at I-81 in Montgomery County? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 28. Do you support the expansion and renovation of the Radford Community Hospital? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 29. Is managed care developing appropriately for physicians in the New River Valley?
(Please explain in the space below) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

(Please Continue to the Next Page)

VI. DEMOGRAPHICS:

Now, I would like to ask you some questions about yourself. Please check the appropriate boxes and write answers where necessary.

30. ☐ Male ☐ Female

31. Year of Birth: _____

32. From which medical school did you graduate? _____

(city and state)

33. Year of medical school graduation: _____

34. Which of the following best describes your practice?
☐ generalist (i.e. family practice) _____
(please describe)
☐ specialist (i.e. dermatology) _____
(please describe)

35. Total number of years in practice? _____
Number of years practicing in the New River Valley ? _____

36. Are you in a group practice? ☐ Yes ☐ No
If yes, for how many years have you been a member of the group? _____ years
How many members are in your group? _____ members

37. Are you a member of: (Please check all that apply).
☐ the AMA?
☐ the state medical society?
☐ a medical specialty organization?
☐ a HMO?
☐ a PPO?

38. To which facilities do you normally refer most of your patients?
☐ Montgomery Regional Hospital
☐ Radford Community Hospital
☐ Other: _____
(please fill in)

THANK YOU!

If you have any further comments or questions about this survey, please do not hesitate to contact me at (540) 951-7572.

Please return this survey in the self-addressed, stamped envelope.

Thank you very much for your cooperation.

MANAGED CARE IN THE NEW RIVER VALLEY CODEBOOK

VARIABLE NAME	QUESTION NUMBER	CODES
COSTTEST	1a.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
COSTHOSP	1b.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
COSTPRES	1c.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
COSTSURG	1d.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
INOFTRFA	2a.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
INOFTEST	2b.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
INOFDIAG	2c.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
SECOPSUR	3	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion

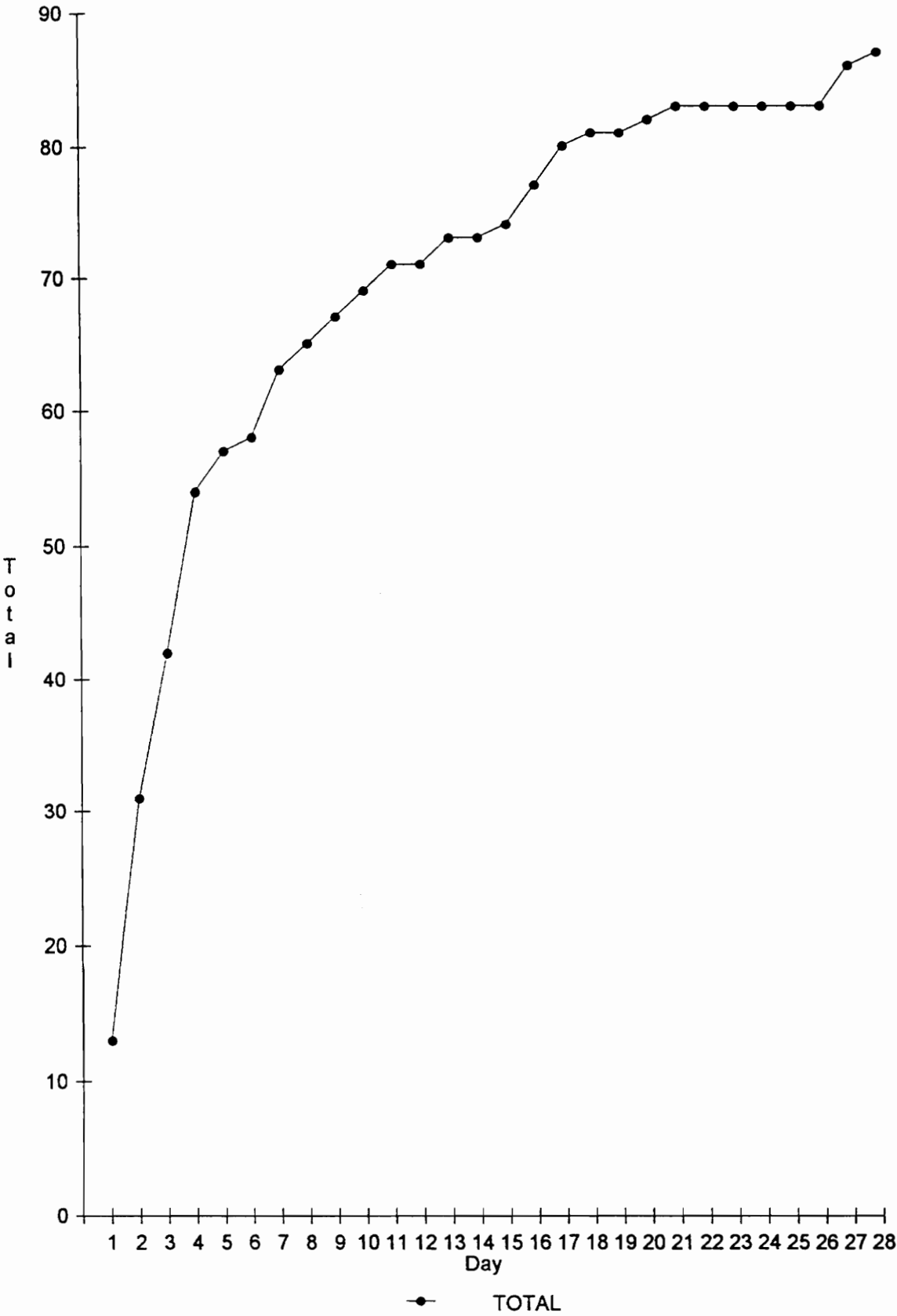
DRGTREA	4a.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
DRGTEST	4b.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
DRGDIAG	4c.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
POSTTREA	5a.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
POSTTEST	5b.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
POSTSURG	5c.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
POSTPRES	5d.	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
HOSPAUTO	6	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
PHYSCONT	7	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion

PRESTEST	8	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
NOTTESTS	9	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
INFLRULE	10	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
HOPHVENT	11	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
PHYSINFO	12	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
HOPHCOMP	13	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
INADNURS	14	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
HOSPENPE	15	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
HOSPHMOS	16	1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion

HOSPPPOS	17	<ul style="list-style-type: none"> 1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
INCLLOW	18	<ul style="list-style-type: none"> 1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
HOPHPAY	19	<ul style="list-style-type: none"> 1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
PHYSALL	20	<ul style="list-style-type: none"> 1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
PAYPRIOR	21	<ul style="list-style-type: none"> 1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
ENCLINOF	22	<ul style="list-style-type: none"> 1. strongly agree 2. agree 3. disagree 4. strongly disagree 9. no opinion
PRIMOFF	23	<ul style="list-style-type: none"> 1. private, free-standing office 2. private office in office complex 3. group office with shared facilities 4. hospital office 5. other
YRCURROFF	24	
PREVOFF	25	<ul style="list-style-type: none"> 1. private, free-standing office 2. private office in office complex 3. group office with shared facilities 4. hospital office 5. other 6. Not applicable-this is my first office
DISTOFSC	26	miles
DISTOFRA	26	miles

CONSMONT	27	1. yes 2. no
EXPENRAD	28	1. yes 2. no
MNGCRNRV	29	1. yes 2. no
MNGEXPL	29	
SEX	30	1. male 2. female
AGE	31	
MDSCHGRD	32	
YRMSGRD	33	
PRACTYP	34	1. generalist 2. specialist
YRPRACT	35	
YRNRVPRC	35	
GRPRACT	36	1. yes 2. no
YRGRPPRAC	36	
NUMEMGRP	36	
AMA	37	1. yes 2. no
SMSOC	37	1. yes 2. no
MEDSPEC	37	1. yes 2. no
HMO	37	1. yes 2. no
PPO	37	1. yes 2. no
MRH	38	1. yes 2. no
RADFORD	38	1. yes 2. no
OTHERH	38	1. yes 2. no

Daily Total of Survey Responses



**APPENDIX B:
CHI-SQUARE TABLES**

CHI-SQUARE TABLES

1. Support the construction of a new Hospital at I-81 in Montgomery County

		Yes	No	Row Total
MRH is Primary Hospital	Yes	27	14	41
	No	33	8	41
Column Total		60	22	

N=82 $\chi^2=2.2$ p=.21

2. Support the expansion and renovation of Radford Community Hospital

		Yes	No	Row Total
MRH is Primary Hospital	Yes	33	4	37
	No	24	16	40
Column Total		57	20	

N=77 $\chi^2=8.5$ p=.0043

3. Support the construction of a new hospital at I-81 in Montgomery County

		Yes	No	Row Total
RCH is Primary Hospital	Yes	34	7	41
	No	7	34	41
Column Total		41	41	

N=82 $\chi^2=35.06$ p<.0001

4. Support the expansion and renovation of Radford Community Hospital

		Yes	No	Row Total
RCH is Primary Hospital	Yes	20	17	37
	No	18	22	40
Column Total		38	39	

N=77 $\chi^2=.63$ p=.49

5. Cost-containment measures by third parties influence on testing decisions

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
Practice Type	Generalist	5	20	9	2	36
	Specialist	11	18	14	5	48
	Column Total	16	38	23	7	

N=82 $\chi^2=3.076$ p=.39

6. Cost-containment measures by third parties influence on hospitalization decisions

Practice Type		Strongly	Agree	Disagree	Strongly	Row
		Agree			Disagree	
Practice Type	Generalist	5	20	7	4	36
	Specialist	13	19	8	3	43
	Column Total	18	39	15	7	
N=79 $\chi^2=3.196$ p=.39						

7. Cost containment measures by third parties influence on prescription decisions

Practice Type		Strongly	Agree	Disagree	Strongly	Row
		Agree			Disagree	
Practice Type	Generalist	8	20	6	2	36
	Specialist	7	20	12	5	44
	Column Total	15	40	18	7	
N=80 $\chi^2=2.5$ p=.48						

8. Cost-containment measures by third parties influence on testing decisions

Group Practice Member		Strongly	Agree	Disagree	Strongly	Row
		Agree			Disagree	
Group Practice Member	Yes	5	11	13	5	34
	No	11	25	10	2	7
	Column Total	16	36	23	7	
N=82 $\chi^2=7.2$ p=.07						

9. Cost containment measures by third parties influence on hospitalization decisions.

Group Practice Member		Strongly	Agree	Disagree	Strongly	Row
		Agree			Disagree	
Group Practice Member	Yes	4	15	8	4	31
	No	13	23	7	3	46
	Column Total	17	38	15	7	
N=77 $\chi^2=3.9$ p=.27						

10. Cost-containment measures by third parties influence on prescription decisions

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
Group Practice Member	Yes	3	12	12	5	32
	No	12	26	6	2	46
	Column Total	15	38	18	7	
		N=78 $\chi^2=11.7$ p=.007				

11. The use of DRGs influence on treatment decisions

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
Practice Type	Generalist	1	11	17	4	33
	Specialist	1	15	19	6	41
	Column Total	2	26	36	10	
		N=74 $\chi^2=.26$ p=.95				

12. The use of DRGs influence on testing decisions

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
Practice Type	Generalist	1	13	15	4	33
	Specialist	1	14	20	6	41
	Column Total	2	27	35	10	
		N=74 $\chi^2=.29$ p=.95				

13. The use of DRGs influence on diagnostic decisions

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
Practice Type	Generalist	0	8	19	6	33
	Specialist	0	12	23	7	42
	Column Total	0	20	42	13	
		N=75 $\chi^2=.18$ p=.95				

14. Hospital should encourage the use of physician extenders

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
<i>There is an inadequate number of nurses for patient care.</i>	Strongly Agree	0	2	2	2	6
	Agree	1	19	13	2	35
	Disagree	0	12	11	3	26
	Strongly Disagree	1	1	0	0	2
	Column Total	2	34	26	7	
		N=69 $\chi^2=21.8$ p=.0001				

15. Hospital should encourage the use of physician extenders

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
<i>Encourage people to have minor tests and surgeries done in clinics and doctors offices.</i>	Strongly Agree	0	6	5	2	13
	Agree	2	27	21	6	56
	Disagree	0	1	2	0	3
	Strongly Disagree	0	0	1	0	1
	Column Total	2	34	30	8	
		N=73 $\chi^2=3.4$ p=.005				

16. Selected physician should provide all basic care and service authorization

		Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total
<i>Practice Type</i>	Generalist	0	25	8	3	36
	Specialist	1	15	26	7	49
	Column Total	1	40	34	10	
		N=85 $\chi^2=12.94$ p=.0001				

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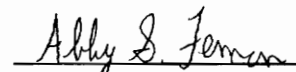
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