

**Alternative Health Care in the 1990's:**

*The Influence of Legal Constraints on the Locational  
Behavior of Acupuncturists, Chiropractors, and Homeopaths*

by

Leonard Baer

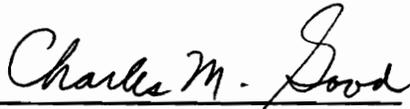
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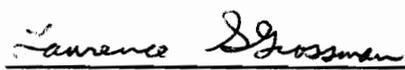
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Geography

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## Abstract

This study showed that state laws and policies constrain the locational preferences of alternative health care providers to varying degrees, depending on the particular profession and level of legal status. Three separate surveys were conducted, focusing on acupuncturists, chiropractors and homeopaths in Maryland, Virginia, North Carolina, and the District of Columbia. The acupuncture findings revealed intraprofessional divisions that lead to a strong influence of legal constraints on the locational behavior of non-MD acupuncturists. Results from the chiropractic survey reflected an established profession with a less pronounced, but moderate, influence of state laws and policies on location and mobility. The homeopathy findings, while based on a much smaller sample, did not reveal a strong relationship between legal constraints and spatial characteristics, except in the extreme case of North Carolina's recent prohibition. This study also postulated a model to explain the progression of alternative health care professions toward legitimation. The variables of public acceptance and legal constraints on location were plotted on the model to identify particular levels of progression. The importance of this research is highlighted by impending health care reforms, the need for access to professional health services, skyrocketing biomedical costs, and the

documented utilization of alternative health care in this country.

Key words -- alternative health care, acupuncture, chiropractic, homeopathy, location, mobility, medical geography

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**Abbreviations**

AAAOM . . .	American Association of Acupuncture and Oriental Medicine
ACA . . . .	American Chiropractic Association
ACR . . . .	American College of Radiology
ACS . . . .	American College of Surgeons
AHC . . . .	Alternative health care
AAMA. . . .	American Academy of Medical Acupuncture
AHMA. . . .	American Holistic Medical Association
AMA . . . .	American Medical Association
CCE . . . .	Council on Chiropractic Education
DCs . . . .	Doctors of Chiropractic
DOs . . . .	Doctors of Osteopathy
FCLB. . . .	Federation of Chiropractic Licensing Boards
FDA . . . .	Food and Drug Administration
GIS . . . .	Geographic information systems
HMO . . . .	Health Maintenance Organization
ICA . . . .	International Chiropractors Association
L.Ac. . . .	Licensed Acupuncturist
LDC . . . .	Less developed country
MDs . . . .	Medical Doctors
NBCE. . . .	National Board of Chiropractic Examiners
NCCA. . . .	National Commission for the Certification of Acupuncture
NCH . . . .	National Center for Homeopathy
NIH . . . .	National Institutes of Health
OAM . . . .	Office of Alternative Medicine
PACs. . . .	Political action committees
PBS . . . .	Public Broadcasting System
PPO . . . .	Preferred Provider Organization
SCASA . . .	Straight Chiropractic Academic Standards Association
TAI . . . .	Traditional Acupuncture Institute
TCM . . . .	Traditional Chinese Medicine

**PART I**  
**Chapter 1**  
**Introduction**

If you think alternative health care (AHC) is practiced only among the fringe elements of society, think again. During 1993, at least three major events occurred that reflect the growing acceptance of AHC: the New England Journal of Medicine published a groundbreaking study documenting the popularity of AHC; Bill Moyers documented the importance of mind-body health in a five-part series shown on the Public Broadcasting System (PBS); and the newly created Office of Alternative Medicine (OAM) at the National Institutes of Health (NIH) solicited grant applications and provided federal funding for research into the validity of AHC. These recent events indicate the timeliness of studies into AHC, and the need for additional research.

*RECENT EVENTS IN ALTERNATIVE HEALTH CARE*

The New England Journal of Medicine study revealed that approximately one out of every three people in the United States used AHC in 1990.<sup>1</sup> Ten percent of study respondents said that they had sought care from an alternative provider that year (Eisenberg et al., 1993; Brown, 1993). Extrapolation of the latter data suggests that, in the U.S., patients made 425 million visits to alternative providers in 1990, compared with only 388 million visits to "primary care

physicians" (defined as "general and family practitioners, pediatricians, and specialists in internal medicine") (Eisenberg et al., 1993, p.250). Overall out-of-pocket expenditures on AHC accounted for approximately 10.3 billion dollars in 1990. This compared with 12.8 billion dollars in out-of-pocket expenditures for all hospitalizations (Eisenberg et al., 1993).

One month after publication of the study, a highly acclaimed documentary series, Healing and the Mind, appeared on PBS (Moyers, 1993a; Mason, 1993; Judge, 1993; Rosenberg, 1993; Rovner, 1993; Toufexis, 1993a).<sup>2</sup> While not focused exclusively on AHC, the series explored in detail a key tenet for many members of the alternative health movement: doctors and patients should regard the mind and body as one entity. In interviews with Moyers for the series and for his best-selling book, several medical doctors agreed with their alternative counterparts that the whole person, not just a limb or organ, plays a vital role in curative and preventive care (Moyers, 1993a, 1993b; Viewer's Guide: Healing and the Mind with Bill Moyers, 1993). Such agreement underscores the possibility that, directly or indirectly, AHC has influenced the course of biomedicine.

The growing acceptance of AHC is further demonstrated by the work of the Office of Alternative Medicine (Frampton, 1993; Toufexis, 1993b). The OAM's purpose, according to the

NIH Guide for Grants and Contracts (1993, p.1) "is to encourage the investigation of alternative medical practices, with the ultimate goal of integrating validated alternative medical practices with current conventional medical procedures." At this writing, the OAM is providing grants for small-scale projects (up to \$30,000 each) to 30 researchers to test the validity of various forms and applications of AHC, such as: utilizing acupuncture to alleviate depression in women, and, in an unrelated project, to alleviate attention deficit hyperactivity disorder in children; utilizing infrared cameras to detect the effect of chiropractic manipulations on the spine; determining which conditions, and which patients, are best suited for homeopathy, e.g., the influence of patient belief, or placebo effect, on the outcome of homeopathic care; and studying the scientific validity of numerous other forms of AHC, such as biofeedback, hypnosis, imagery, massage, Ayurvedic medicine, and yoga (Weiss, 1993). The message of these grants holds as much significance as the projects themselves: the federal government recognizes that AHC may indeed benefit the health of patients.

#### *RESEARCH AND HYPOTHESES*

Unlike the OAM grant recipients, I make no claims about the efficacy of any form of health care. This thesis

examines instead the political and legal framework surrounding certain major forms of AHC. At issue: do state laws and policies influence the locational behavior of acupuncturists, chiropractors and homeopaths? From a geographical perspective, I contend that legal constraints do affect the locational behavior, and, consequently, the spatial patterns, of alternative providers.

The study focuses on four areas: North Carolina, Virginia, Maryland, and the District of Columbia (Figure 1.1). These areas were selected for the following reasons:

- Variations in laws or policies. North Carolina serves as the logical starting point for this study, being the only state in the country to ban homeopathy. In Virginia, restrictive laws toward non-MD acupuncture<sup>3</sup> provide a stark contrast to the more flexible laws toward non-MD acupuncture in Maryland.

- Variations in the number of practitioners per capita. Maryland has the lowest number of chiropractors per capita of any state in the country (Federation of Chiropractic Licensing Boards (FCLB), 1993). The state also has approximately twice as many acupuncturists as the rest of the study area combined.

- Geographical proximity. The three states and the District of Columbia are neighbors, so I can trace mobility and boundary effects from one area to another.

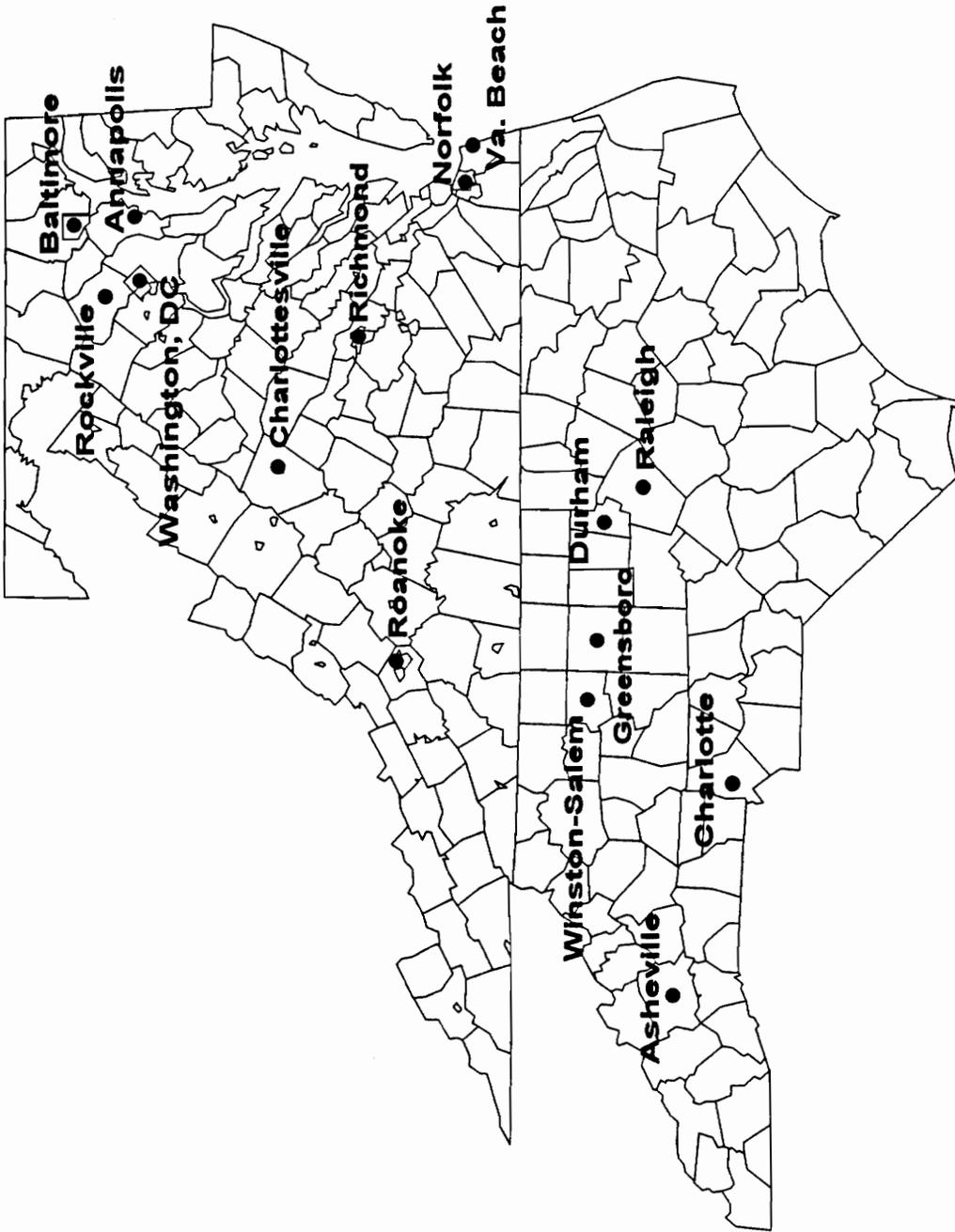


FIGURE 1.1 MAP OF STUDY AREA

- My own location within the study area.

Location and mobility are the primary geographic concepts in this study. The location of any health care resource often shapes its patterns of utilization. In addition, practitioner mobility helps determine what brings or draws services to or from a particular area. If state laws and policies influence the distribution of AHC services, policymakers can gain a better understanding of how to improve (or, conversely, weaken) accessibility, availability, and utilization. Lack of a causal relationship between legal constraints and locational preference would further underscore the complexities involved in health services research.

A common sense approach suggests that alternative providers are less likely to locate their practices in states with restrictive laws and policies. Some of the expected findings for this study include the following:

- Acupuncture: state laws and policies strongly influence choice of practice location for non-MDs in search of legal status;

- Chiropractic: the influence of state laws and policies on locational preference is minor, due to the lack of wide variation in chiropractic laws throughout the study area;

- Homeopathy: the mobility of homeopaths is restricted

because its practice had been banned recently in North Carolina.

#### *POLITICAL SIGNIFICANCE*

A political understanding of acupuncture, chiropractic, and homeopathy bears special importance at this time because of impending national health care reform. President Clinton's proposals can be expected to affect the accessibility, cost and quality of health care, including AHC. His reform package provides states with the option to include AHC in managed care programs (Chen, 1993; The Patient's Advocate, 1993). Even if a state decides to include AHC, coverage may be severely restricted or limited, as is the case with required referrals or caps on reimbursement. It follows that insurance reform has the potential to isolate the alternative health movement. As evidence, most alternative providers currently face exclusion from Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs) (Caplan and Scarpaci, 1989). Patients belonging to HMOs and PPOs are often financially restricted from access to AHC. Concerns over health reform explain why the American Chiropractic Association (ACA) increased donations to political action committees (PACs) by 128% between 1991 and 1993 (Babcock, 1993, using figures obtained from the consumer group,

Citizen Action).

In the U.S., political decisions toward health care frequently mirror the public's attitudes. If patients do not view AHC as legitimate, it is unlikely that legislators will do otherwise. Furthermore, a number of issues affect choice of AHC: the public's concerns about effectiveness, lack of awareness that a myriad of alternatives to biomedicine exist, social attitudes toward AHC, competition from biomedicine and the pharmaceutical industry, critical media coverage, lack of adequate insurance coverage, and current state laws and policies. Despite such obstacles to public and legal acceptance, AHC presents some patients with increased choice when selecting health care providers, particularly at a time of skyrocketing technological costs related to biomedicine.

#### *A GEOGRAPHICAL PERSPECTIVE*

Researchers may find it relatively easy, in many cases, to learn where health care providers are located. A more complex issue is, put succinctly, why practitioners choose certain locations. What factors explain the distribution of health care phenomena? Spatial analysis can bring about a spectrum of new ideas relating to accessibility, availability, and utilization of health care resources. Using an interdisciplinary approach, medical geographers can

often bring a fresh perspective to health care provision and numerous issues that other disciplines have not adequately addressed (Meade, Florin & Gesler, 1988).

This study follows a line of geographic research applied mainly to non-Western health care in less developed countries (LDCs). Such studies are germane to this project because they focus on the full complement of available health care systems, or "ethnomedical systems." For example, Good (1987) identified the great variety of health care strategies in sub-Saharan Africa. In the same work, Ethnomedical Systems in Africa, he demonstrated the need for increased collaboration between traditional healers and biomedical providers there. Stock (1987) showed that people in Nigeria prefer to use either biomedicine or traditional healing, dependent upon illness.

Scholarly research into AHC, conducted mainly by health care professionals, sociologists, and anthropologists, has dealt almost exclusively with LDCs (e.g., Janzen, 1978; Green, 1992; Green et al., 1993; Foster, 1978; Chavunduka, 1986). In contrast, the subject of AHC in the U.S., Canada, Western Europe, and other highly industrialized regions remains largely unexplored by medical geographers (Anyinam, 1990). Gesler's analysis (1988) of the spatial distribution of chiropractors in North Carolina serves as a notable exception. Ongoing and future research will further

demonstrate the importance of applying medical geography to ethnomedical research, as more medical geographers concentrate on AHC in the U.S.

Medical geographers have more frequently examined accessibility and utilization of biomedical services. For example, Joseph and Phillips (1984) found that, in the U.S., local governments sometimes create incentives to attract more physicians, thus causing more MDs to move to certain locations. Parker and Tuxill (1967) showed that many MDs choose their practice locations early in their careers. However, recent developments, such as the increasing financial debt incurred from a biomedical education, lead many MDs to work as associates until, free of debt, they relocate to their own independent practices (Anderson, 1993a). These facts, combined with the increasing trend toward specialization, reveal a complex picture of the locational behavior of MDs.

Regardless of specialization, numerous variables influence the locational preferences of MDs. Many MDs, for example, have a tendency to locate practices in large, urban areas, leading to limited accessibility for many rural communities. The location of hospitals, health clinics, and peers also attracts MDs. Other potential factors influencing spatial characteristics include the locational behavior of the general public as indices for MD location;

and high incomes of MDs leading to greater mobility (Joseph & Phillips, 1984; Diseker & Chappell, 1976; Parker & Tuxill, 1967).

While a number of studies have examined biomedical providers, few researchers in any discipline have explored legal acceptance and legitimation of AHC in the U.S. This study is a step toward remedying that shortcoming. Hopefully, the approach used here will serve as a starting point for others conducting research on issues relating to AHC, health care in general, public policy, and unrelated topics.

#### *TERMINOLOGY*

For the purpose of this study, AHC is defined as any form of health care that 1) has a hostile relationship with the American Medical Association (AMA) or with other members of the biomedical community; and 2) has not gained legal acceptance parallel to biomedicine in all fifty states.

Terminology for this or any study, in my view, must satisfy two criteria: conveyance of meaning to the general public; and consensus among biomedical and alternative providers as to its appropriateness. The task is easier said than done, given the hostile attitudes that permeate the AHC debate (Gevitz, 1988).

On one extreme, critics charge alternative providers

with the indefensible act of practicing "quackery." The term is elusive, and its main purpose serves to stifle, rather than promote, debate about the merits of AHC. On the other extreme, advocates now promote the term, "complementary health care." This latter term accurately describes the pluralistic nature of health care behavior: most people who use AHC also use biomedicine or osteopathy (Eisenberg et al., 1993; Murray and Shepherd, 1993). However, "complementary health care" does not distinguish AHC from limited, biomedical care, such as podiatry, optometry, or occupational therapy. At this time, the term in question is also not well-known among the general public.

A number of alternative and biomedical providers label themselves as "holistic," even though they adhere to principles inconsistent with "holistic health," i.e., the providers may promote the separation, rather than integration, of mind and body (Salmon and Berliner, 1980). The terminology can be misleading, and is therefore objectionable in some cases.

If AHC is not always holistic, is it at least medicine? Anderson (personal correspondence, 1993b), of the AMA, wrote that chiropractors do not practice medicine, because their therapies are based on chiropractic principles, not medical science. I have therefore decided, for the sake of balance,

not to use the term "medicine" in describing chiropractic and other forms of AHC. Also, because of concerns expressed to me by several alternative providers, I refer to no one in this study as "unorthodox" or "unconventional." Such terms can promote a biased image of AHC as exotic and bizarre. Therefore, I refer to "alternative providers" and "alternative health care."

It is worth noting that the term "alternative" inaccurately suggests total exclusion from biomedicine (Jingfeng, 1987). Nonetheless, "alternative" satisfies the above criteria in that it is recognizable by the general public, and is acceptable by proponents and critics of AHC.

Also, I do not use the term, "healer," except when referring to traditional healers. "Healer" can call to mind spiritual or faith healers. By contrast, the words "provider" and "practitioner" do not connote any magical or mystical qualities that may or may not benefit health.

Finally, I considered using the term, "regular medicine," as a description of so-called "modern medicine." Even though "regular medicine" is borrowed from an advocate of homeopathy, Harris Coulter (1982), some readers might misinterpret the term to mean that alternative providers are not regular, or that AHC practices are somehow inappropriate. Also, the terms, "scientific medicine" and "medicine," if applied to biomedicine, suggest that all

other systems are either unscientific, or are not medicine. Scholarly terms, such as "biomedicine" and "allopathy" are not recognizable to many readers, but I think that "biomedicine" provides a neutral description. Therefore, I use the term throughout this paper.

#### *INTERNATIONAL COMPARISONS*

Variations exist among health care cultures in the United States and other post-industrial countries. For example, one out of every 200 biomedical visits in France results in a prescription for hydrotherapy, or spas (Payer, 1988, 1990). Spas have attained even greater popularity among the biomedical community in Germany (Payer, 1990). Yet such prescriptions are extremely rare in the U.S. Lynn Payer (1988; 1990, p.39), author of a book titled Medicine and Culture, poses the logical question: "Where does science end and culture begin?"

The issue of health care culture can be applied just as easily to the scope of biomedicine as to the prevalence of various forms of AHC, such as homeopathy. Homeopathy, a form of health care in which patients take infinitesimal doses of substances as remedies, is most popular in France, Germany, Great Britain, Argentina, Brazil, Greece, India, Mexico, Pakistan and South Africa (Ullman, 1985). Approximately one third of all biomedical doctors in Germany

have used homeopathic remedies at least once (Ullman, 1985). Several reports indicate that the Royal Family in Great Britain uses homeopathy, as well (Furnham and Smith, 1988). In the United States, however, homeopathy is not widely accepted as a legitimate health care profession. Two factors explain homeopathy's lack of popularity in the U.S.: 1) homeopathy had been the most popular alternative to biomedicine throughout much of the 19th Century (Coulter, 1982). As a result, the AMA actively campaigned against homeopathy, nearly eliminating the profession; and 2) the pervasive health care culture in this country does not lend itself to the re-emergence of homeopathy anytime soon.

In the U.S., health care is often characterized by aggressive treatment (Payer, 1988, 1990). Surgeons in the U.S. perform cardiac bypasses and hysterectomies at least twice as often as in Europe, per 100,000 patients (Payer, 1988, 1990). Recent studies show that biomedical doctors in the U.S. perform surgery twice as often as in England, and prescribe antibiotics twice as frequently as in Scotland (Payer, 1990). By contrast, in homeopathy, smaller doses, not larger doses, are believed to have stronger potencies. The idea that less of a substance may produce stronger results runs counter to the more aggressive, interventionist approach of health care in the U.S.

Similar arguments can be advanced concerning other

forms of AHC, such as chiropractic. Chiropractic, a form of health care in which practitioners seek to correct spinal misalignments, has gained legal status in 36 countries (National Board of Chiropractic Examiners (NBCE), 1993). However, several countries, such as Germany, Great Britain, and Ireland, permit chiropractic only under restrictive laws, or grant no recognition at all (International Chiropractors Association (ICA), 1992). Also, few countries, if any, rival the ratio of chiropractors per capita in the U.S. (1:5,100), Canada (1:7,324), and Australia (1:8,300) (ICA, 1992).

France has somehow resisted the trend toward legalization in nearly all surrounding and nearby countries, even though as many as 400 chiropractors (1:140,00) practice in France (ICA, 1992). French chiropractors face hostility from biomedical doctors and the government, perhaps due to the political clout of the biomedical community. Also, the historical importance of the liver in French medicine may constrain legal acceptance of chiropractic. Many biomedical providers in France believe that the liver is responsible for ailments as varied as fatigue, painful menstruation, acne, dandruff, herpes, asthma, low blood pressure, and insomnia (Payer, 1988). Complaints about the liver did decline fourfold<sup>4</sup> between 1970 and 1980 (Payer, 1988), but many French lawmakers would have to make an enormous and,

perhaps, inconsistent leap, to accept chiropractic's focus on the spine.

#### *OVERVIEW OF CHAPTERS*

This chapter introduces some of the key concepts and issues in the study. I have focused mainly, until now, on AHC in general. In Chapter 2, I turn my attention specifically to the historical and legal backgrounds of acupuncture, chiropractic, and homeopathy in the U.S., including relevant laws and policies in the study area. These first two chapters lay the groundwork for the rest of the study, and constitute Part I. Part I includes most, but not all, of the literature review.

Part II begins with a brief discussion on methodology. In particular, I discuss the participation of alternative providers in my research, and explain the formulation of several surveys in conducting the study. This is followed by my analyses of the relation between legal acceptance and locational behavior of acupuncturists, chiropractors, and homeopaths in chapters 4, 5, and 6, respectively. Using survey findings, I elaborate on the geographical characteristics of each group of providers. The three chapters are followed by a concluding chapter, endnotes, appendices, and bibliography.

## Chapter 2 Alternative Backgrounds

I used three criteria to narrow down my specific research choices to acupuncture, chiropractic, and homeopathy. First, these three forms of health care clearly represent AHC, and not biomedicine. Second, existing state laws and policies relating to acupuncture, chiropractic, and, until recently, homeopathy enable comparative research between states. Even within individual states, laws and policies toward one form of AHC, such as acupuncture, inevitably differ from laws and policies toward other forms of AHC, such as chiropractic. Finally, acupuncture, chiropractic, and homeopathy have enough practitioners in the study area for me to conduct statistical research.

Naturopathy was excluded because it has only a handful of practitioners in the study area. Osteopathy was excluded because it no longer represents AHC, having made a transition to biomedicine in the U.S. (Gevitz, 1988). Other forms of AHC, such as midwifery and massage therapy, might have passed the above criteria, and added weight to my research, but were excluded to keep the study a manageable size. Exclusion from the study does not imply a view that certain forms of AHC are less or more important. Rather, acupuncture, chiropractic, and homeopathy complement one

another especially well in this project, as each stands at a different level of legal acceptance in the U.S. The legal history of acupuncture, chiropractic, and homeopathy overlaps, particularly regarding organized opposition from biomedicine.

The following text provides brief overviews of the forms of AHC under study in this project, as well as relevant state laws and policies. I divide the text into separate sections for acupuncture, chiropractic, and homeopathy. The chapter sets the stage for detailed analyses of the relation between legal variations and the spatial distribution of alternative providers.

## A. Acupuncture

The American Academy of Medical Acupuncture (AAMA) has a pamphlet titled, "Doctor, What's This Acupuncture All About?" The answer to the AAMA's question is that acupuncture involves the insertion of needles at precise acupuncture points to promote health. Acupuncture can also entail electrical stimulation or heat application (AAMA pamphlet (a); Beinfield and Korngold, 1991; Olsen 1990; Findlay et al., 1991). Acupuncture points, located along the skin, provide access to Qi (pronounced "chee"), an invisible and non-material energy, which circulates along channels throughout the body (Beinfield and Korngold, 1991; Wallis, 1991). Disruptions in the flow of Qi can cause pain or disease, according to acupuncture theory (Findlay et al., 1991; Jacobs, 1992). The concept of Qi runs counter to a biomedical understanding of anatomy and health (Kaptchuk, 1993). An ensuing gap in comprehension contributes to skepticism by biomedical providers, the general public, and state lawmakers toward acupuncture.

Ask acupuncturists about the many styles of acupuncture, and, most likely, they will disagree on definitions and classification headings. A sampling of acupuncture styles includes, but is not limited to: Traditional Chinese Medicine (TCM), Five Elements, Japanese,

Medical, Auricular/detoxification, French energetic, and Korean hand acupuncture. Many proponents of acupuncture claim a number of benefits, such as: pain relief, detoxification from drug dependence, strengthening the immune system, and alleviating chronic disorders. In Asia, acupuncture has also been used frequently for anesthesia, although such practice is not common in the U.S.

#### *ACUPUNCTURE IN THE UNITED STATES*

Researchers disagree over the date of acupuncture's first appearance in the United States. U.S. News & World Report and Congressional Quarterly report that acupuncture was not introduced into the U.S. until the 1930's (Findlay et al., 1991; CQ Researcher, 1992). Kaplan, (1991), an acupuncturist and osteopath, wrote that the practice of acupuncture was first introduced into the U.S. as far back as the 1820's. The National Commission for the Certification of Acupuncturists (NCCA) (1993) offers yet another opinion: acupuncture first appeared in the U.S. approximately 100 years ago. In any case, acupuncture's arrival here is relatively recent, compared with the therapy's origins in China over 2000 years ago. In addition, acupuncture did not gain initial popularity in the U.S. until 1972, after President Richard Nixon's visit to China (Congressional Quarterly, 1992; Anderson, personal

correspondence, 1993b).

Acupuncture's popularity led to passage of state laws to regulate it in the early 1970's. Other factors contributing to passage of state laws included perceived misuses of acupuncture, and demands from the biomedical community for restrictions on non-MD practice (McRae, 1982). The AMA lobbied its state branches in 1974 to support stringent state laws and policies, e.g., supervision of non-MD practice, and confinement of acupuncture to research settings (McRae, 1982). The new laws usually favored the AMA's approach, to varying degrees (McRae, 1982).<sup>5</sup> Acupuncture soon became an "underground phenomenon," practiced mainly in Asian communities (Kaplan, 1991, p.7).

From today's perspective, acupuncture's initial popularity has either been unsustained or merely exaggerated: less than one percent of people in the U.S. used acupuncture in 1991, according to the New England Journal of Medicine study (Eisenberg *et al.*, 1993). The Food and Drug Administration (FDA) has not approved the use of acupuncture for treating any condition, and requires acupuncture needles to be labeled as investigational devices (Kaplan, 1991; Anderson, personal correspondence, 1993b). Medicare and Medicaid do not reimburse patients for acupuncture services, although a growing number of insurance companies now provide coverage (Clark, 1993; Anderson,

personal correspondence, 1993b). Moreover, conflicts among acupuncturists threaten to undermine any potential inroads in utilization and legal change.

#### *MD VERSUS NON-MD ACUPUNCTURISTS*

MD and non-MD acupuncturists conflict with each other over several issues: perceived competition, differences in approaches to health care, and variations in state laws and policies. The latter issue, particularly regarding education requirements, has caused significant tension and rifts among practitioners.

MD acupuncturists express concern that high school graduates, who subsequently receive two or three years of professional training in acupuncture, demand parity with biomedical doctors. In my own conversations with acupuncturists, MDs and non-MDs agree that a knowledge of biomedicine can benefit the practitioner's level of competence. MD acupuncturists contend that the relatively brief, non-MD training does not, and cannot, school students adequately in biomedicine.

Non-MD acupuncturists counter that many MDs lack sufficient training in acupuncture. Two or three years of training for non-MDs contrasts with only 220 hours, or approximately six months, of training for MDs who join the AAMA, the major professional association for MD

acupuncturists (McDaniels, 1991; AAMA, pamphlet (b)). Education requirements might contribute to the fact that, as reported in a popular journal, only about 500 of an estimated 3000 MD acupuncturists belong to the AAMA (Consumer Reports, 1994). In fairness, only about 2000 of an estimated 6000-7000 non-MD acupuncturists belong to the NCCA (1993), the major professional association for non-MD acupuncturists (Kaplan, 1991; Findlay et al., 1991). The NCCA requires its members to take written and oral exams, and also provides a "Credential Documentation Review." NCCA evaluations play important roles in the licensure process in many states (National Acupuncture Foundation, 1993). Because of a lack of licensing for many practitioners in the United States, the NCCA and AAMA add needed credibility to their respective members.

At least twelve states, including the District of Columbia, reportedly impose any restrictions, such as minimum educational standards, on MD acupuncturists (National Acupuncture Foundation, 1993).<sup>6</sup> Acupuncture is legal in all jurisdictions within the U.S., if practiced by an MD or doctor of osteopathy (DO).

Twenty-one states currently prohibit non-MD practice (National Acupuncture Foundation, 1993). Besides de jure prohibitions, states have developed several approaches toward regulation of non-MD practice, such as required

referrals from biomedical doctors, as well as biomedical supervision, often limiting the acupuncturist's role to that of a physician's assistant. Applicants wishing to become licensed acupuncturists (L.Ac.) usually face requirements comparable to the NCCA's standards, i.e., educational and testing requirements.

In most jurisdictions, State Boards of Medicine issue and oversee acupuncture regulations (Anderson, personal correspondence, 1993b). In contrast, Florida, Hawaii, Nevada, New Jersey, New Mexico, North Carolina, Rhode Island, Texas, and Utah have separate Boards of Acupuncture or equivalent (National Acupuncture Foundation, 1993; Anderson, personal correspondence, 1993b). In these cases of licensure by separate boards,<sup>7</sup> acupuncturists have greater autonomy as a profession. The resulting increase in stature as health care professionals is an important component of legitimation.<sup>8</sup>

#### *ACUPUNCTURE LAWS AND REGULATIONS IN THE STUDY AREA*

Two states within the study area took steps toward loosening prohibitions on non-MD acupuncture during the course of this project: North Carolina and Virginia. Meanwhile, the legal atmospheres in Maryland and the District of Columbia continue to promote non-MD practice.

*North Carolina*

North Carolina has gained a reputation, in recent years, for restricting AHC, particularly homeopathy. In 1990, a cease and desist order was issued to a prominent Asheville acupuncturist, alleging that she was practicing medicine without a license (Garloch, 1992, 1990; Breeze, personal correspondence, 1993). The District Attorney decided not to prosecute the acupuncturist because the time, effort and cost involved would not justify pursuing the misdemeanor charge (Breeze, personal correspondence, 1993).

According to my count, North Carolina had 51 acupuncturists in June, 1993, shortly before the law changed. Of those 51, my list included 11 MDs, 10 chiropractors, three naturopaths, and 27 other non-MD acupuncturists. The non-MDs practiced in defiance of the law, although some question existed concerning the legality of chiropractic and naturopathic acupuncture. State law defined acupuncture as the practice of medicine, and limited legal practice to biomedical doctors, who practiced unrestricted (NC General Statutes, 1993; Paris, 1972; Kaplan, 1991; American Association of Acupuncture and Oriental Medicine (AAAOM), 1993).

Biomedical doctors may still practice acupuncture unrestricted in North Carolina. Chiropractors may also practice acupuncture unrestricted, under the same provisions

as MDs (N.C. Legis., 1993). New legislation also permits non-MDs to practice, free of biomedical supervision or referral (N.C. Legis., 1993). Scope of practice includes adjunctive therapies, such as herbology, massage, nutrition, therapeutic exercise, and moxibustion.<sup>9</sup> North Carolina even created a separate Acupuncture Licensing Board to promulgate regulations concerning non-MD acupuncture (N.C. Legis., 1993).<sup>10</sup>

### *Virginia*

Whereas North Carolina has a hodgepodge of MD, non-MD, chiropractic, and naturopathic acupuncturists, Virginia's list consists mainly, perhaps entirely, of MD acupuncturists: 39 MDs, three DOs, and possibly a few illegal providers (Virginia Board of Medicine, 1993). The predominantly non-MD NCCA (1993) lists 10 members in northern Virginia, only one of whom possesses a state license. Most likely, the unlicensed NCCA members commute to a nearby state to practice, or do not practice at all. AAAOM (1993), a non-MD advocacy organization, cited Virginia, along with Missouri and New Hampshire, as "particularly antagonistic" toward non-MD acupuncture.

Virginia law prohibited non-MD acupuncture until the Board of Medicine adopted new regulations in February 1994 (Virginia Code, 1992; Virginia Board of Medicine, 1991,

1994). The new regulations require each patient to receive a referral from a biomedical doctor before undergoing non-MD acupuncture (Virginia Board of Medicine, 1994). In order to gain the required licensure, non-MDs must present proof of three years training at an accredited acupuncture college, including 18 semester hours in the biological sciences. They must also take several examinations, including the NCCA test (Virginia Board of Medicine, 1994).

Until the new regulations took effect, an applicant for licensure had to possess an MD, DO, or podiatry license in Virginia, with a minimum of 200 hours of relevant training (Virginia Board of Medicine, 1991; Kaplan, 1991). The Board still imposes no testing requirements related to acupuncture for MDs (Virginia Board of Medicine, 1991, 1994; Kaplan, 1991).

Scope of practice for all acupuncturists in Virginia, unlike North Carolina, excludes common therapies in Traditional Chinese Medicine, such as herbology and nutrition. This fact held little relevance, if any, until February's easing of restrictions on non-MD practice. A biomedical doctor can, of course, prescribe medication and offer nutritional counseling within the scope of an MD license.

The change in policy can be attributed, at least in part, to the general public's interest in acupuncture, as

well as successful lobbying efforts on behalf of non-MDs. The easing of restrictions has taken place despite the vigorous opposition of many biomedical providers in the state.

### *Maryland and the District of Columbia*

The laws in Maryland and the District of Columbia are similar to one another. In contrast with Virginia, Maryland attracts non-MD providers, at least in part because of the location of the Traditional Acupuncture Institute (TAI) in Columbia, Maryland. TAI plays an integral role in promoting non-MD acupuncture amid strained tensions with the comparatively few MD acupuncturists in Maryland. MD acupuncturists must take 540 hours of approved training courses in order to be registered, according to Kaplan (1991). Few states have more stringent educational requirements for MD acupuncturists than Maryland (Kaplan, 1991). One MD I met even dared the Maryland Board of Medicine to reprimand him for practicing acupuncture without the necessary registration. The Board took no action.

The District of Columbia requires that MD acupuncturists take at least 250 hours of approved training courses (District of Columbia Register, 1989; Kaplan, 1991). The District Board of Medicine, like Maryland, licenses acupuncturists with the advice of Acupuncture Advisory

Councils (Department of Consumer and Regulatory Affairs, 1986; Maryland Medical Practice Act, 1992).

With regard to non-MD providers, Maryland's "supervision" law compares easily with the District's "collaboration" law (Maryland Medical Practice Act, 1992; District of Columbia Register, 1989). Supervision and collaboration laws require some oversight of non-MD practice by biomedical doctors, primarily concerning reviews of patient records. Under such laws, patients seeking non-MD acupuncture services must first seek referrals from biomedical doctors (Maryland Medical Practice Act, 1992; District of Columbia Register, 1989). If a patient's doctor does not grant a referral, the acupuncturist might recommend a doctor who can do so. Some of the larger practices even have a biomedical doctor on staff. The supervision laws, while burdensome to many non-MD acupuncturists, present non-MDs with an attractive alternative to neighboring Virginia's recent ban.

Currently, Maryland has approximately 230 acupuncturists, or one acupuncturist for every 20,287 people [Table 2.1]. The District of Columbia has at least 25 acupuncturists (1:24,280), although the Board of Medicine lists 56 licensed acupuncturists, mostly from neighboring Maryland and Virginia. Exact counts are difficult because some providers maintain active licenses in one state, but

provide the Board with out-of-state addresses. Also, a minority of practitioners remains unlicensed. Finally, available state records do not indicate whether or not providers hold medical or osteopathic degrees, so the distinction between MDs and non-MDs is difficult to make at the outset of this study.

TABLE 2.1 OVERVIEW OF STATE LAWS AND REGULATIONS CONCERNING ACUPUNCTURE IN 1993

	Hours training for MD acupuncturists	Legality of non-MD acupuncture	Approximate in-state total of acupuncturists
North Carolina	None	*	51
Maryland	540	Yes	230
Virginia	200	No	42**
Washington, DC	250	Yes	25

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\* North Carolina had prohibited non-MD acupuncture, but changed the law during the course of this project.

\*\* Virginia's total does not include unlicensed NCCA members, who were included in the study.

Sources: Maryland Medical Practice Act, 1992; District of Columbia Register, 1989; Virginia Code, 1992; Virginia Board of Medicine, 1991; N.C. Legis., 1993; Paris, 1972; NC General Statutes, 1993; AAAOM, 1993; Kaplan, 1991.

## **B. Chiropractic**

To understand chiropractic, a Virginia chiropractor told me it is essential to understand some basic principles of anatomy -- more specifically, the nervous system. Referring to a model of the human spine, he explained that different parts of the body receive nerve impulses from different parts of the spinal column (see also ACA, 1991). Subluxated vertebrae, or misalignments of the spinal column, can irritate and disrupt nerves. Such disruptions can impair health, according to chiropractors. Doctors of Chiropractic (DCs) seek to correct spinal misalignments by adjusting, manipulating, and massaging the spine and paraspinal tissue (ACA, 1991). The corrective procedure, known as spinal manipulative therapy, relies on chiropractic's hands-on, manual, drug-free, and non-invasive approach.

Most common conditions seen by chiropractors include spinal misalignments, headaches, backpains, muscular strains, osteoarthritis, high or low blood pressure, and tendinitis (NBCE, 1993). Yet many patients believe that chiropractic is a limited health care profession, like optometry or podiatry.

*CHIROPRACTIC IN THE UNITED STATES*

The discovery of chiropractic occurred in 1895 in Davenport, Iowa (ACA, 1991; Wardwell, 1988; U.S. Department of Health and Human Services, 1990; Gesler, 1988). D.D. Palmer, a student of magnetic healing, adjusted and manipulated a janitor's upper spine (ACA, 1991; Wardwell, 1988). The janitor had become deaf 17 years earlier, after having experienced a back problem (ACA, 1991). His hearing improved, perhaps as a result of the chiropractic manipulation (ACA, 1991).

Now consider the context: in parts of the Midwest, including nearby Kansas and perhaps even Iowa, "heroic medicine" still survived in the late 19th Century (Jochims, 1979, Anderson, 1990). In other words, patients were treated through such means as vomit and diarrhea inducers, and bloodletting (Coulter, 1982; DiBacco, 1993). For many patients, chiropractic served as a more reasonable, and healthier, alternative.

The first chiropractic school nonetheless opened to low enrollment in 1898, and, at first, the profession did not gain popularity quickly (Wardwell, 1988; Gesler, 1988). In 1907, B.J. Palmer bought the school from his father, D.D. Palmer, and led the Palmer School and Infirmary of Chiropractic to growing enrollment (Wardwell, 1988). B.J. and D.D. Palmer also opened other schools of chiropractic,

as did several of their graduates, mainly in the Midwest (Wardwell, 1988).

Chiropractic expanded beyond the central United States, at least in part due to professionalization through state licensing. In 1913, Kansas passed the first state licensing law, but Arkansas granted the first licenses in 1915 (Wardwell, 1988). Other states followed suit and, by 1931, 39 states legally recognized chiropractic (Wardwell, 1988). In 1974, Louisiana became the last state in the country to grant legal status to chiropractic (Wardwell, 1988).

The diffusion of chiropractic occurred alongside internal controversy over the future of the profession. On one extreme, some DCs would "mix" spinal manipulative therapy with medical diagnoses, ancillary therapies, or even naturopathy, acupuncture, and other health care systems (U.S. Department of Health and Human Services, 1990; Wardwell, 1988). Many schools graduated students with dual degrees in naturopathy and chiropractic, without strongly distinguishing one from the other (Wardwell, 1988). In contrast to these "mixers," B.J. Palmer offered a more narrow interpretation of chiropractic. "Straight" DCs, adhering to the Palmer school, regard spinal manipulative therapy as a corrective procedure, in and of itself, for numerous physical ailments (U.S. Department of Health and Human Services, 1990; Wardwell, 1988). Such ailments, for

some straight chiropractors, could include infectious diseases, asthma, allergies, obesity, and diabetes. The labels, "straight" and "mixer," never accurately described the entire population of chiropractors, however, and are used less frequently today (U.S. Department of Health and Human Services, 1990). Unlike the polar opposites of MD and non-MD acupuncture, most DCs defy easy categorization into opposing sides.

Although precise counts of the number of chiropractors happen rarely, and prove difficult, the profession is clearly on the rise. In a recent study, the National Board of Chiropractic Examiners (1993) concluded that there are 46,196 chiropractors in the U.S. Only five years ago, the total was estimated at 39,000 (U.S. Department of Health and Human Services, 1990). In the 1970's, the ACA listed only 32,000 DCs in the country (Congressional Quarterly, 1992). Ten percent of all people in the U.S. used chiropractic in 1991, according to the New England Journal of Medicine (Eisenberg et al., 1993).

#### WILK V. AMERICAN MEDICAL ASSOCIATION

A federal district judge in Illinois ruled in 1987 that the AMA, American College of Surgeons (ACS), and American College of Radiology (ACR) had set out in a planned, conspired effort to destroy chiropractic (Wilk v. AMA, 1987;

Injunctive Order, 1988). The ruling stemmed from a 1976 complaint filed by Chester A. Wilk and three other licensed chiropractors (Wilk v. AMA, 1987, 1983a, 1983b; Wardwell, 1988; NBCE, 1993). The following background to the decision provides insight about the extent of biomedical opposition to chiropractic.

The fiercest interprofessional conflict can be traced to the 1963 formation of the AMA Committee on Quackery to discredit chiropractic (Wilk v. AMA, 1987; Injunctive Order, 1988; Wardwell, 1988; Congressional Quarterly, 1992). The committee advocated "Principle 3" of the AMA's Principle of Medical Ethics, which barred professional association with "unscientific practitioners" (Wilk v. AMA, 1987; Injunctive Order, 1988). The ACS and ACR also issued bylaws similar to Principle 3. In 1966, the AMA officially labeled chiropractic an "unscientific cult" (Wilk v. AMA, 1987; Injunctive Order, 1988). One year later, the AMA barred its members from professional association with chiropractors (Wilk v. AMA, 1987; Injunctive Order, 1988). According to U.S. District Judge Getzendanner's ruling, published by order in the Journal of the American Medical Association (Injunctive Order, 1988):

The AMA's purpose was to prevent medical physicians from referring patients to

chiropractors, to prevent chiropractors from obtaining access to hospital diagnostic services and membership on hospital medical staffs, to prevent medical physicians from teaching at chiropractic colleges or engaging in any joint research, and to prevent any cooperation between the two groups in the delivery of health care services.

The AMA disbanded the Committee on Quackery in 1975 amid controversy and lawsuits (Wilk v. AMA, 1987). In 1977, the AMA permitted referrals to DCs who could show adherence to scientific standards, with one catch: the AMA did not consider chiropractic to adhere to such standards (Injunctive Order, 1988; Wilk v. AMA, 1987). Finally, in 1980, the AMA abandoned Principle 3 altogether (Wilk v. AMA, 1987; Injunctive Order, 1988).

The AMA defended the boycott by arguing that it was based on the best interests of patients (Johnson, 1988; Injunctive Order, 1988; Wilk v. AMA, 1987). Judge Getzendanner disagreed, and ruled that the AMA failed to establish a patient care defense. Instead, she concluded that the AMA violated the Sherman Act, which prohibits restraint of trade (Wilk v. AMA, 1987; Injunctive Order, 1988). Since DCs compete directly with biomedical doctors,

and the boycott had "substantial anti-competitive effects," the judge ruled that "the plaintiffs were injured as a result of the conduct" (Injunctive Order, 1988).

The judge issued a permanent injunctive order, enjoining the AMA from restricting cooperation between its members and DCs. The ACR and the ACS were not subject to the injunction; the ACR paid \$200,000 toward the plaintiffs' legal expenses, and the ACS paid \$200,000 to an interdisciplinary children's center run by a chiropractor (Wardwell, 1988). "We believe that we fully complied with any antitrust requirements," the AMA's general counsel wrote, "when we revised our ethical guidelines in 1977 to permit association with chiropractors" (Johnson, 1988).

The Wilk case leads to two conclusions. First, the AMA cannot legally use anticompetitive measures against DCs. Therefore, chiropractic may take on an expanded role in health care delivery systems in the U.S. Second, chiropractors have reduced the potential threat of the biomedical community toward other forms of AHC, such as acupuncture. The AMA is still free to offer opinions about the effectiveness of chiropractic and other forms of AHC, but, most likely, will exercise extreme caution before adopting another Principle 3.

*OVERVIEW OF STATE LAWS CONCERNING CHIROPRACTIC*

Most state laws and policies do not limit chiropractic to spinal conditions, although no state permits DCs to write prescriptions or perform surgery. In New York, state law explicitly prohibits DCs from treating communicable or infectious diseases, heart ailments, diabetes and several other conditions (FCLB, 1993; Smith, 1993). More frequently, limitations on scope of practice apply to physiotherapy, nutritional counseling, treatment of extremities, use of X-ray machines, or school children examinations. All 50 states and the District of Columbia have licensing requirements for chiropractors (Smith, 1993; ACA, 1991; NBCE, 1993; U.S. Department of Health and Human Services, 1990; Wardwell, 1988).

As with acupuncture, uniform testing requirements do not exist. Licensure candidates must abide by state laws dictating the specific, required sections of the National Board examinations (FCLB, 1993; NBCE, 1993). In addition, most states require additional tests of competency (FCLB, 1993). Some states' laws appear to provide for reciprocal treatment of DCs tested elsewhere, a factor that would enable DCs to relocate more easily. However, the actual policies do not include reciprocity vis-a-vis testing requirements. Perhaps without exception, chiropractors throughout the country must take licensing exams in order to

practice in a new state.

Other important laws concerning chiropractic include insurance equality, licensing and renewal fees, education requirements, and establishment of separate Chiropractic Boards. Medicare and Medicaid cover chiropractic services, but do not cover costs for X-rays conducted by chiropractors (ICA, 1992; Anderson, personal correspondence, 1993b). In 45 states and the District of Columbia, chiropractors have equal standing with biomedical providers for insurance coverage of patients, or "insurance equality" (FCLB, 1993).

Most states require graduation from a fully accredited college. The United States currently has 14 fully accredited chiropractic colleges with the Council on Chiropractic Education (CCE) (FCLB, 1993). Also, the Sherman College of Straight Chiropractic, in South Carolina, is accredited by the Straight Chiropractic Academic Standards Association (SCASA). Straight chiropractic, in its most extreme form, has apparently fallen out of favor with most DCs, however, due to the increasingly blurred distinction between most "straights" and "mixers." Indeed, since summer 1993, SCASA is no longer recognized by the U.S. Department of Education (FCLB, 1993). An additional two chiropractic schools, currently unaccredited, are applying for accreditation with SCASA (FCLB, 1993).

The District of Columbia provides licensing

opportunities for graduates of SCASA accredited schools (FCLB, 1993; District of Columbia Register, 1988).

Maryland, Virginia and North Carolina rely exclusively on CCE accreditation (FCLB, 1993). No chiropractic colleges or universities exist in the study area.

#### *CHIROPRACTIC LAWS AND REGULATIONS IN THE STUDY AREA*

Virginia and the District of Columbia are the only jurisdictions in the country, besides Kansas, to lack separate chiropractic boards (FCLB, 1993). The respective Boards of Medicine, composed mainly of biomedical doctors, have responsibilities for issuing regulations on chiropractic (FCLB, 1993; Department of Consumer and Regulatory Affairs, 1986).

Lack of a separate chiropractic board may also account for difficulties relating to insurance equality<sup>11</sup>: the FCLB (1993) reported that the District lacked insurance equality as recently as 1987, but the law has since changed; Virginia's insurance equality is also in question, or "unknown," according to the 1993-94 FCLB "Official Directory." However, a Department of Health and Human Services (1990) report showed that, in 1987, Virginia did indeed have insurance equality, based on a 1987 FCLB finding. North Carolina and Maryland provide insurance equality for DCs (FCLB, 1993).

Lack of a separate chiropractic board may account for Virginia's restrictions on the titles "Doctor" and "Dr." In John T. Dotti, DC v. Virginia Board of Medicine (1991), Dotti had identified himself on his business card as "Dr. John T. Dotti" of the Tidewater Chiropractic Center. The Court of Appeals found that a chiropractor must simultaneously use the titles "Chiropractor" or "DC," if "Doctor" or "Dr." are used. Otherwise, the court found, Dotti would be improperly offering a "claim of superiority" (John T. Dotti, DC v. Virginia Board of Medicine (1991)).

The implications of the case rest mainly in its symbolism: due to the actions of Boards of Medicine, chiropractors face obstacles to promoting the worth of their profession. The existence of separate chiropractic boards in Virginia and the District would allow chiropractors greater influence over accepted standards of the profession. The level of legal, and possibly, public, acceptance would also be elevated above less legally accepted professions, such as acupuncture.

The implications seem less significant, after reviewing an unrelated ruling in Maryland in 1975. In R.W. Beverungen, Jr. v. Henry A. Briele (1975), the Maryland Court of Appeals found that a chiropractor cannot use the title, "physician," unless he also holds a degree in biomedicine. DCs often call themselves chiropractic

physicians.

With some variations, chiropractic laws and policies remain similar among states, and the study area is no exception. Renewal fees do vary, as demonstrated by Maryland's 1992 increase in the biannual renewal fee from \$50 to \$600, one of the three highest such fees in the country (FCLB, 1993; Badders, 1993). The fee compares with \$125 and \$120 in Virginia and the District, respectively, and an annual fee of \$100 in North Carolina (FCLB, 1993).

Pre-professional education requirements also vary within the study area. North Carolina and Maryland recently changed their laws to require four years of undergraduate training (FCLB, 1993). The District requires two years pre-professional training (FCLB, 1993). Virginia places no such restrictions on candidates for licensure (FCLB, 1993).

Maryland, Virginia and North Carolina do not permit chiropractors to conduct examinations of school children, unlike the District of Columbia (FCLB, 1993). None of the jurisdictions in the study area allows chiropractors to sign death certificates (FCLB, 1993).

The FCLB (1993), using 1992 statistics of active licenses, showed that Maryland has the lowest ratio of chiropractors to population for any state in the country: one licensed chiropractor for every 6,499 people. If only resident (in-state), licensed chiropractors are counted,

Maryland has one chiropractor for every 13,281 people, using my own data [Table 2.2]. There are 360 resident, licensed chiropractors in Maryland. Virginia has 516 chiropractors (1:11,990), and North Carolina has 660 chiropractors (1:10,043). The District of Columbia has 88 active licensees, but only 23 provided the Board of Medicine with District of Columbia addresses. Because so many people commute to and from the District, it is difficult to provide an accurate, in-state ratio.

TABLE 2.2 OVERVIEW OF STATE LAWS AND REGULATIONS CONCERNING CHIROPRACTIC IN 1993

	Separate Board for Chiropractors	Insurance equality	Prerequisites to prac- tice physical therapy	Approximate in- state total of chiropractors
North Carolina	Yes	Yes	Yes	660
Maryland	Yes	Yes	Yes	360
Virginia	No	*	No	516
Washington, DC	No	Yes	Yes	*

\* Data unavailable

Source: FCLB, 1993, and my own data.

### C. Homeopathy

Consider immunizations. A biomedical provider gives you a small dose of a substance that, in a larger dose, would cause disease. Homeopathy differs from immunizations in at least two key ways. First, immunizations are not individually-based. In biomedicine, the same inoculation is supposed to work equally well for everyone, but homeopaths consider the mental, physical and emotional health of each patient before suggesting a specific remedy. Secondly, in classical homeopathy, the materia medica consist of pure substances from animal, vegetable and mineral products, whereas, according to some alternative providers, inoculations often include more than just the active ingredient. Also, one homeopath told me that immunizations are usually based on isopathy, i.e., the exact same substance reportedly can eliminate the disease it can cause. He differentiated immunizations from homeopathy because homeopathy relies on the *Law of Similars*, or like cures like (not same cures same). A homeopath will suggest that a patient take a substance that, if taken in overdose, would produce similar symptoms in a healthy individual.

The substance is diluted into such infinitesimal doses that skeptics claim there is nothing left of the original.

Commenting in a controversial report on Dateline NBC (1993, p.9-10), host Lea Thompson said that an independent, chemical analysis of a remedy revealed that "the bottle contained 85% water, 15% alcohol, and nothing else." In homeopathy, a substance is dynamized and energized through dilution, along with succussion, or vigorous shaking of the diluted solution (Breslow, 1992; Patel, 1987). The process is repeated to gain a higher potency.

Homeopathy has at least two major branches. Classical homeopathy, a highly popular approach, follows the teachings of Samuel Hahnemann, a German physician who founded homeopathy around the turn of the 18th Century (Kaufman, 1988). In classical homeopathy, each remedy is derived from a single substance. Practitioners of complex homeopathy, by contrast, often practice homotoxicology, using combination remedies of several substances. Some practitioners also combine homeopathy with various healing arts. In the Dateline NBC report (1993), a homeopath used a machine to detect allergies and health conditions by applying a stylus to acupuncture points along a patient's feet and hands. Julian Winston (1993), editor of Homeopathy Today, saw some merit in the homeopath's work, but wrote, "He was doing something -- but it wasn't homeopathy." The homeopath had also injected dozens of shots of vitamin B-12 into scars along his patient's body. The procedure was painful to

watch, much less experience, and presented the viewer with a skewed depiction of homeopathy.

#### *HOMEOPATHY IN THE UNITED STATES*

Homeopathy was first introduced in the United States in 1825 along two routes: 1) immigrants from Germany, who had settled in Pennsylvania, spread their knowledge of homeopathy to western and southern U.S.; and 2) U.S. physicians, such as Hans Gram, learned about homeopathy while studying medicine in Europe during this time period. Gram then trained other physicians in the U.S., who introduced homeopathy to New Jersey and New England (Kaufman, 1988; National Center for Homeopathy (NCH), 1992).

As discussed earlier, during the 1820's and 1830's, biomedicine throughout the U.S. was characterized by "heroic medicine," i.e., bloodletting, purges, and life-threatening minerals (Coulter, 1982). Several alternatives to heroic medicine sprang up. For example, Samuel Thomson viewed heat as a remedy to disease (DiBacco, 1993). His followers used steam baths and a vomit inducing herb, sometimes known as Indian tobacco (Coulter, 1982; DiBacco, 1993). A separate group of health care providers, "herb doctors," presented yet another alternative to the growing unpopularity of heroic medicine. Most herb doctors had received no formal medical education, but had learned about health care from

Native Americans, either directly or indirectly. The few medically educated herb doctors were known as "botanics" and merged with the Thomson school in the 1840's. In that decade, homeopathy became the most predominant form of AHC in the U.S. (Coulter, 1982). Many patients found homeopathy to be effective and safe, particularly during the cholera epidemics of 1832 and 1849 (Kaufman, 1988).

It was no coincidence that the 1840's also saw the early beginnings of the American Medical Association (Kaufman, 1988; Coulter, 1982). The AMA staunchly, and successfully, opposed the practice of homeopathy, and enhanced the credibility of biomedicine. Numerous aspects of the AMA's campaign resembled its attack, a century later, on chiropractic. For example, the AMA barred members from consulting with homeopaths (Kaufman, 1988; Coulter, 1982). Meanwhile, during the 1860's and 1870's, most biomedical providers in the U.S. abandoned heroic medicine (Kaufman, 1988).

In 1910, the Carnegie Foundation, in cooperation with the AMA, issued the Flexner Report (Kaufman, 1988; Coulter, 1982; Janiger & Goldberg, 1993). Abraham Flexner, a man who was an educator rather than a physician, evaluated all of the nation's medical schools for accreditation (Coulter, 1982; Kaufman, 1988). Of 22 homeopathic colleges, only four received accreditation (Coulter, 1982; Kaufman, 1988). In

1935, the AMA Council on Medical Education and Hospitals adopted a policy against accrediting hospitals and schools advocating "sectarian medicine" (Kaufman, 1988). Within a year, the last homeopathic college, the Hahnemann Medical College of Philadelphia, ceased teaching homeopathy (Coulter, 1982).

Unlike chiropractic, homeopathy lacked a strong, national organization, and could not successfully campaign against the Flexner Report. Difficulties overcoming internal divisiveness further contributed to the downfall of homeopathy in the U.S. Most homeopaths had abandoned the pure, Hahnemannian approach, and the AMA's attack on homeopathy led to even further splintering. During a brief period in 1946, a group of homeopaths unsuccessfully tried to join the AMA, claiming that "homeotherapeutics" could be considered a limited health care field, much like optometry or podiatry (Kaufman, 1988). It was not until the 1950's that opposing associations within homeopathy fused together. Today, classical, Hahnemannian homeopathy is experiencing a resurgence within the profession (Kaufman, 1988). The New England Journal of Medicine study shows that, like acupuncture, less than one percent of all people in the U.S. used homeopathy in 1991 (Eisenberg et al., 1993).

*HOMEOPATHIC LAWS IN THE UNITED STATES*

Under the Food, Drug and Cosmetic Act of 1938, the FDA allows the manufacture of homeopathic remedies included in the Homeopathic Pharmacopeia of the United States (Anderson, personal correspondence, 1993b; Ullman, 1985; NCH, 1992). The FDA recognizes remedies as over-the-counter drugs, making them available without prescription (Ullman, 1985; Anderson, personal correspondence, 1993b; NCH, 1992). The FDA does not test remedies for effectiveness (Chase, 1983).

Only Arizona, Connecticut and Nevada have separate licensing boards for homeopaths (Anderson, personal correspondence, 1993b; Kaufman, 1988). In all other states, practitioners licensed as health care professionals in other fields may practice homeopathy legally (NCH, 1992; Anderson, personal correspondence, 1993b). Patients seeking homeopathic care must often face barriers to access, due to the low number of practitioners in this country.

The directory of the National Center for Homeopathy (1993) lists approximately 315 homeopaths in the U.S. MDs constitute approximately half of the list. The remaining half consists mainly of naturopaths, acupuncturists, chiropractors, osteopaths, dentists, veterinarians and nurses. Some researchers have estimated the total number of homeopaths in the country to be over 1000 (e.g., Clark, 1993; Congressional Quarterly, 1992). My count includes

five in North Carolina, 10 in Virginia, 10 in Maryland, and three homeopaths in the District of Columbia. The actual number is probably higher, especially considering lay homeopaths in the region.

Lay homeopaths, practitioners with no state licensure in a health care profession, compensate for a lack of access to homeopathic services. Many lay homeopaths limit their practices to family and friends. Others practice without legal sanction, charging for services and building professional practices. Dana Ullman (personal correspondence, 1993), who writes frequently about homeopathy, estimated that there are several hundred such practitioners in the country. I have no way of knowing how many illegal lay homeopaths practice in the study area. My impression, based on contacts with homeopathic study group leaders, is that North Carolina has a dozen or more such providers, while Virginia and Maryland probably have about four or five each. The low number of professionally licensed homeopaths in North Carolina, due to the ban on homeopathy that was lifted recently, most likely explains the proliferation of lay providers in that state.

Nationally, there are approximately 150 homeopathic study groups affiliated with the NCH (1993), including six in North Carolina, 14 in Virginia, four in Maryland, and one in the District. Study groups serve two vital purposes for

homeopathy: first and foremost, to educate people about homeopathy; and, second, to promote political change favoring homeopathy. The study groups provide opportunities for novices, and people more familiar with homeopathy, to learn about homeopathy and its applications.

### IN RE GUESS

After a lengthy court battle, the Supreme Court of North Carolina ruled that homeopathy is illegal, thus making North Carolina the only state in the country to prohibit homeopathy (In re Guess, 1990; see also Homeopathy Today, 1986, 1987, 1990, 1991a, 1991b; Guess, 1988, 1991a, 1991b). The 1990 decision was based on a state law banning the practice of professional health care that does not adhere to "acceptable and prevailing standards. . . irrespective of whether or not a patient is injured thereby" (General Statutes of North Carolina, 1989). Any deviation from prevailing standards could lead to patient harm, according to the ruling, but the state offered no evidence that the homeopath had injured anyone. The U.S. Supreme Court refused to hear the case (Shevin, 1992). In re Guess left the homeopath, Dr. George Guess, with an ultimatum: either refrain from practicing homeopathy, or lose state licensure as an MD. Dr. Guess chose to move his practice from Asheville, North Carolina, to Charlottesville, Virginia,

where he has built a thriving, and legal, homeopathic practice.

North Carolina had censured Dr. Guess for being the state's only openly practicing practitioner of homeopathy. My own research indicates that a few other professional homeopaths practiced during this time, although they probably kept a low profile. The decision had ominous implications for other forms of AHC, including acupuncture and chiropractic (Homeopathy Today, 1992). For example, the decision stated that patients did not have a "fundamental right to receive unorthodox medical treatment" (393 S.E.2d 834, N.C. 1990). In discussing the ruling, Guess told talk show host Phil Donahue that North Carolina "basically said, 'This form of medicine is different, therefore you can't do it'" (Donahue, 1992).

In re Guess prompted an outcry from supporters of AHC. As a result of subsequent lobbying activity, homeopathy was legalized in North Carolina in the summer of 1993, only hours before the first survey mailing (Garloch, 1993). Later in the same summer, North Carolina legalized non-MD acupuncture as well. The link between the two changes in legal status reflects a loosely coordinated effort, using the same lobbyist, focused on North Carolina. The abrupt turnabout toward legal acceptance of AHC in North Carolina

symbolizes a growing movement, crossing professional boundaries, that has the strength to change laws.

Even chiropractic contributes to legal change for homeopathy and acupuncture. Because of the Wilk case, the AMA and other biomedical associations have an increased concern, in North Carolina and other states, that opposition to AHC will lead to lawsuits. The logic works something like this: the AMA nearly destroyed homeopathy with the Flexner Report, so the chiropractors gained from the experience in launching a court battle against the AMA's attacks, and, now, non-MD acupuncturists and homeopaths will have diminished foes in the biomedical community. The AMA and other biomedical organizations now appear reluctant to challenge AHC with the same effort, for fear of being sued.

### Chapter 3 Background Research

The initial phase of this study involved the following research: library research, review of laws, regulations and court cases; contact with practitioners and with members of licensing boards and health care associations; and miscellaneous readings and contacts. Subsequent research also included: gathering lists of providers in the study area; drafting and testing pilot surveys on acupuncture, chiropractic, and homeopathy; and conducting the mail surveys.

#### *GATHERING LISTS OF PROVIDERS*

I obtained rosters of all actively licensed chiropractors in the study area from chiropractic and medical boards (District of Columbia Board of Medicine, 1993a; Maryland Board of Chiropractic Examiners, 1993; North Carolina Board of Chiropractic Examiners, 1993; Virginia Department of Information Technology, 1993a). Obtaining complete lists of acupuncturists required more legwork.

North Carolina did not maintain any listing of acupuncturists for the general public. Some incomplete lists were available elsewhere: the Acupuncture Association of North Carolina, a state organization of non-MD providers,

sent me a "phone list" of members and contacts; the AAMA, a national organization of MD acupuncturists, also sent me a listing of members in North Carolina and other states; the diplomate directory of the NCCA (1993), a national, non-MD organization, added more names to my list; and a listing of graduates of TAI, an acupuncture college in Maryland, also helped.

Most importantly, I went to the Library of Congress to research every yellow pages directory in North Carolina (and Maryland, Virginia, and the District of Columbia) for listings of acupuncturists. I telephoned all acupuncturist listings in North Carolina for verification and complete addresses, unless given on a previously obtained list. Whenever possible, I asked practitioners if they knew of any additional names that should be added to my list of acupuncturists. In the process of verification, several MD and non-MD acupuncturists in North Carolina shared with me their views about the profession, legal barriers, and intraprofessional conflicts.

Boards of Medicine in Maryland, Virginia, and the District of Columbia sent me their respective rosters of acupuncturists (District of Columbia Board of Medicine, 1993b; Maryland Board of Physician Quality Assurance, 1993; Virginia Department of Information Technology, 1993b). I added names off lists from TAI, NCCA, AAMA, and the yellow

pages. A membership list of the American Holistic Medical Association (AHMA), a national organization of alternative providers, also proved useful. The Virginia sample includes unlicensed members of the NCCA, even though the state strongly prohibited non-MD acupuncture.

None of the jurisdictions in the study area maintained rosters of homeopaths. The NCH's 1992 and 1993 directories included nearly all of the names in my sample of homeopaths. The AHMA also added to the list. I also contacted homeopathic study group leaders so that they could request surveys for lay homeopaths with professional practices. Since the lay homeopaths practice without legal sanction, I did not ask study group leaders for names and addresses.

I entered the names of all alternative providers into separate databases by state. Because so many practitioners in the District of Columbia present Maryland or Virginia addresses to the licensing board, most District acupuncturists and chiropractors are included in either the Maryland or Virginia samples.

#### *THE PILOT SURVEYS*

I decided that these surveys should not be computer-coded or too limited in allowing for individual variations in response. Otherwise, my research might be considered too impersonal, a view of biomedicine held by many alternative

providers. The study therefore provides ample opportunity for elaboration and additional comments, despite a common procedure of eliminating open-ended questions from mail surveys.

I drafted separate surveys for acupuncture, chiropractic, and homeopathy, with only minor variations. Ten alternative providers filled out various versions of the pilot surveys, in-person and by mail, all of whom had agreed to participate beforehand. I requested, and received, valuable input from the respondents about improving the study. Each of the respondents also added to my knowledge of the project by discussing AHC or laws toward AHC, sometimes at great length.

The terminology in the surveys differs slightly from this paper. For example, the term "allopathy" is immediately recognizable to alternative providers, and was therefore used instead of the less known "biomedicine." Also, the term "complementary health care" was used on the cover of the survey because many alternative providers prefer the term.

Final revisions were based on suggestions by Don Dillman (1978) in his book, Mail and Telephone Surveys: the Total Design Method. Each survey now was a small booklet, with a map of the study area on the cover, and a title: "Acupuncture in 1993," "Chiropractic in 1993," or

"Homeopathy in 1993" [Appendices A, B, C]. "Acupuncture in 1993" also included the Chinese translations for "Acupuncture Survey" and "Thank you," as written for me by a participant in the pilot survey.

#### *CONDUCTING THE MAIL SURVEYS*

I sampled chiropractors and acupuncturists in Maryland, Virginia, and North Carolina [Tables 3.1, 3.2] in two steps, as follows: first, sorting their addresses by zip code; and, secondly, sampling one out of every N practitioners. A systematic, rather than random, sample within each state ensured geographic representation without the risk of clustering. In some cases, the population size was so small that I decided to contact all practitioners in a given state. For example, each acupuncturist listed in North Carolina, Virginia, and the District of Columbia received a survey, as did each chiropractor listed in the District, due to relatively low numbers. All homeopaths listed in the study area received questionnaires.

Survey mailings took place during the summer of 1993, in four stages: 1) the original survey; 2) a follow-up postcard, one week later; 3) another copy of the same questionnaire, about four weeks after the original mailing; and 4) yet another copy of the questionnaire, about eight weeks after the original mailing. Each survey mailing

involved drafting of a new cover letter to encourage response.

Responses to each questionnaire were edited and coded, and then entered into a statistical software package, Number Cruncher Statistical System (NCSS). Respondents were permitted an unlimited number of responses for open-ended questions. I also transcribed the practitioners' additional comments for future reference. Tables 3.1 through 3.3 and Figures 3.1 and 3.2 show the response rates.

In interpreting the results, chi-square ( $\chi^2$ ) tests were conducted for most questions, using the formula:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

The tests, to be reported throughout this paper, determined if variations among states were statistically significant or merely based on randomness.

TABLE 3.1 ACUPUNCTURE RESPONSE RATES

	North Carolina	Washington, DC	Virginia	Maryland
Original (No.)	52	23	58	231
Mailed (No.)	52	23	58	115
Non-deliverable (No.)	-	3	1	4
Not practicing (No.)	1	2	4	1
Duplicate (No.)	1	1	-	1
Moved (from study area) (No.)	-	-	-	4
Remaining Mailed (No.)	50	17	53	105
Respondents (No.)	37	11	33	63
Respondents (Pct.)	74.0%	64.7%	62.3%	60.0%

TABLE 3.2 CHIROPRACTIC RESPONSE RATES

	Virginia	Maryland	North Carolina	Washington, DC
Original (No.)	516	360	660	24
Mailed (No.)	105	93	96	24
Non-deliverable (No.)	2	1	-	1
Deceased (No.)	-	1	1	-
Retired (No.)	-	-	2	-
Moved (from study area) (No.)	-	-	1	1
Remaining Mailed (No.)	103	91	92	22
Respondents (No.)	79	56	55	13
Respondents (Pct.)	76.7%	61.5%	59.8%	59.1%

**TABLE 3.3 PROFESSIONAL HOMEOPATHY RESPONSE RATES**

	<b>All States</b>
<b>Original (No.)</b>	<b>29</b>
<b>Mailed (No.)</b>	<b>29</b>
<b>Not Practicing (No.)</b>	<b>2</b>
<b>Duplicate (No.)</b>	<b>1</b>
<b>Remaining Mailed (No.)</b>	<b>26</b>
<b>Respondents (No.)</b>	<b>18</b>
<b>Respondents (Pct.)</b>	<b>69.2%</b>

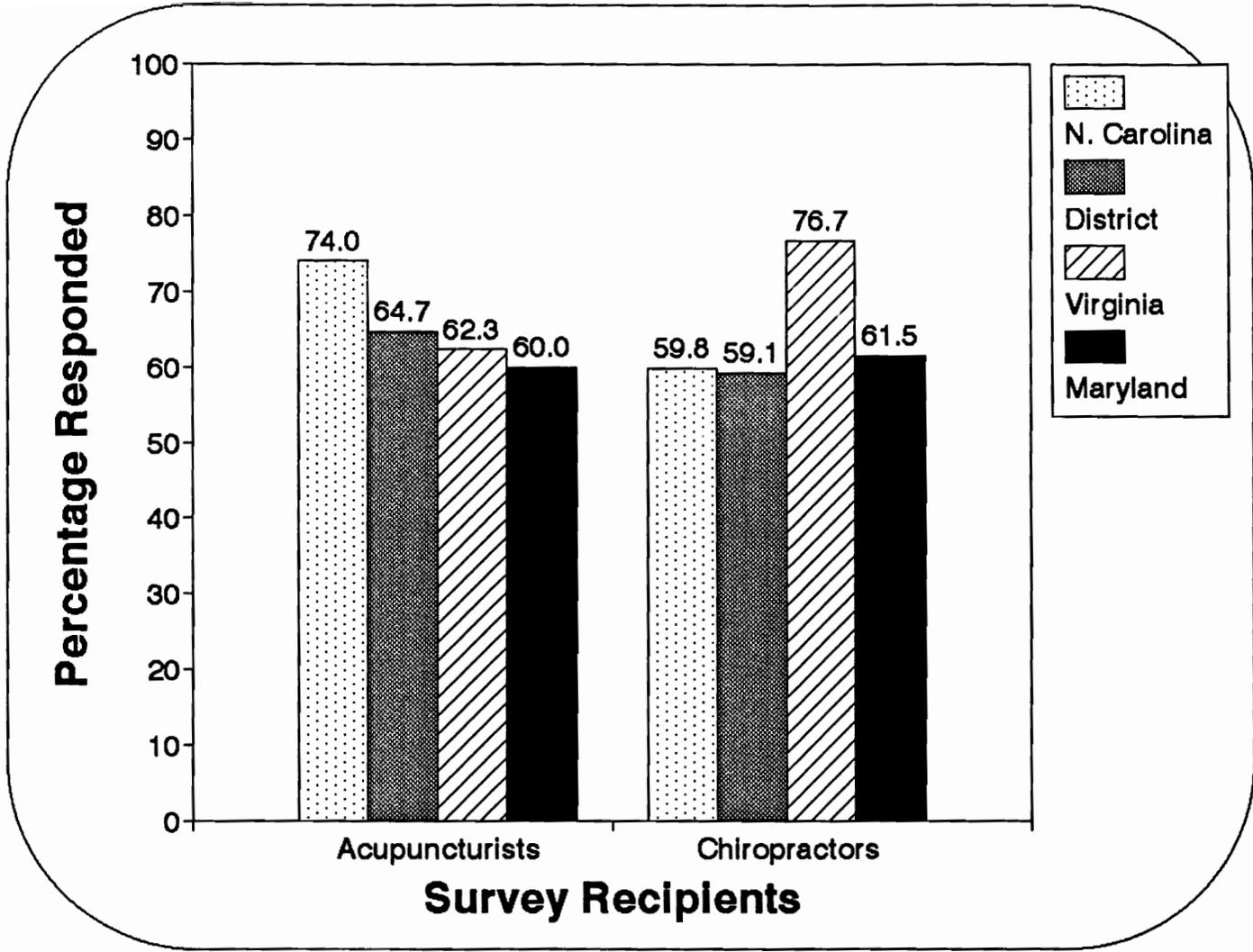


FIGURE 3.1 ACUPUNCTURE AND CHIROPRACTIC RESPONSE RATES

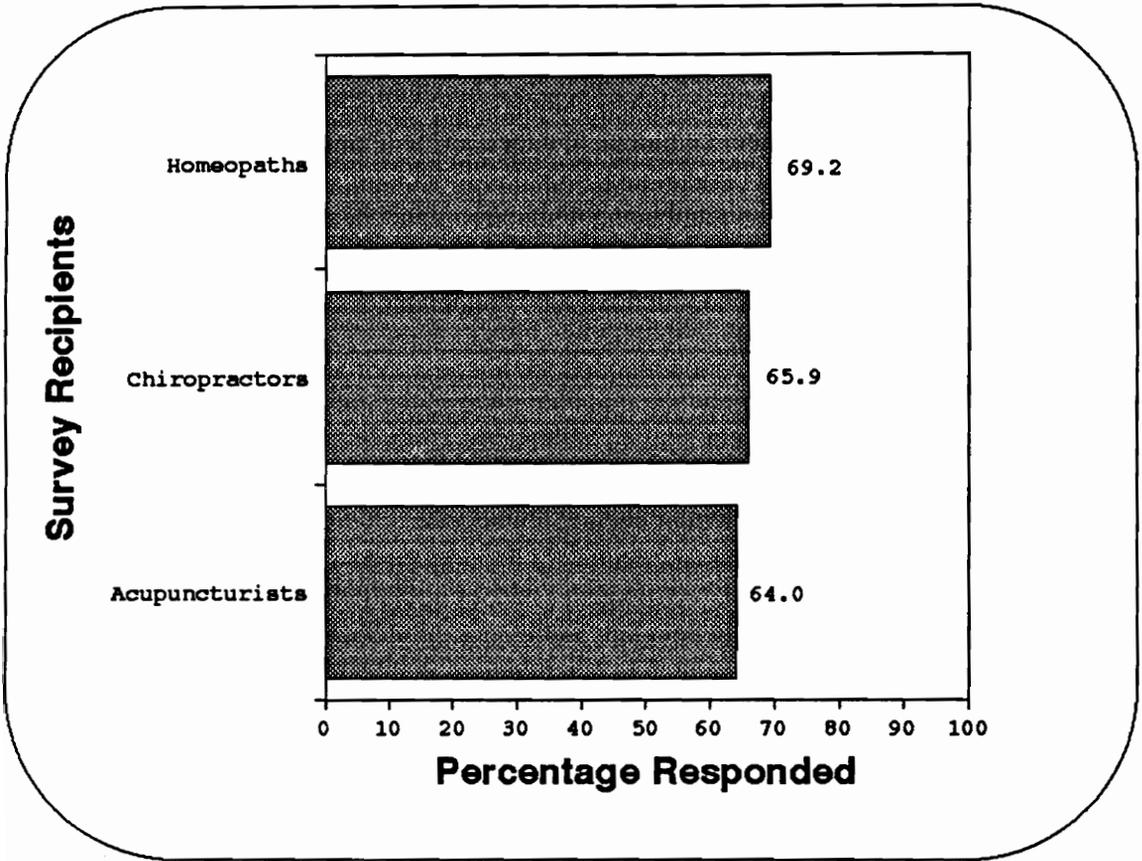


FIGURE 3.2 CUMULATIVE RESPONSE RATES

**PART II**  
**Chapter 4**  
**Acupuncture: the Internal Divide**

Respondents in Maryland and Virginia consistently vary on key survey questions, such as: MD versus non-MD practice; reasons for location of practice; legal tolerance in state of practice; and personal demographics, such as gender and country of birth. My analysis will therefore focus on the contrasts between these two states, while also examining North Carolina. The District of Columbia will be considered, as necessary, mainly for comparative purposes. The population of acupuncturists in the nation's capital is too small for statistical accuracy.<sup>12</sup>

MD acupuncturists constitute 96.4% of Virginia respondents, versus a surprising 4.5% in Maryland [Figure 4.1]. Neither state has any chiropractor acupuncturists, but chiropractors and MD acupuncturists each represent 21.6% of respondents in North Carolina. This and other data illustrate internal divisions within the profession of acupuncture concerning the question: who has the legal and professional right to practice?

*REASONS FOR LOCATION*

A large proportion of acupuncturists in Maryland and the District of Columbia volunteered state laws and policies

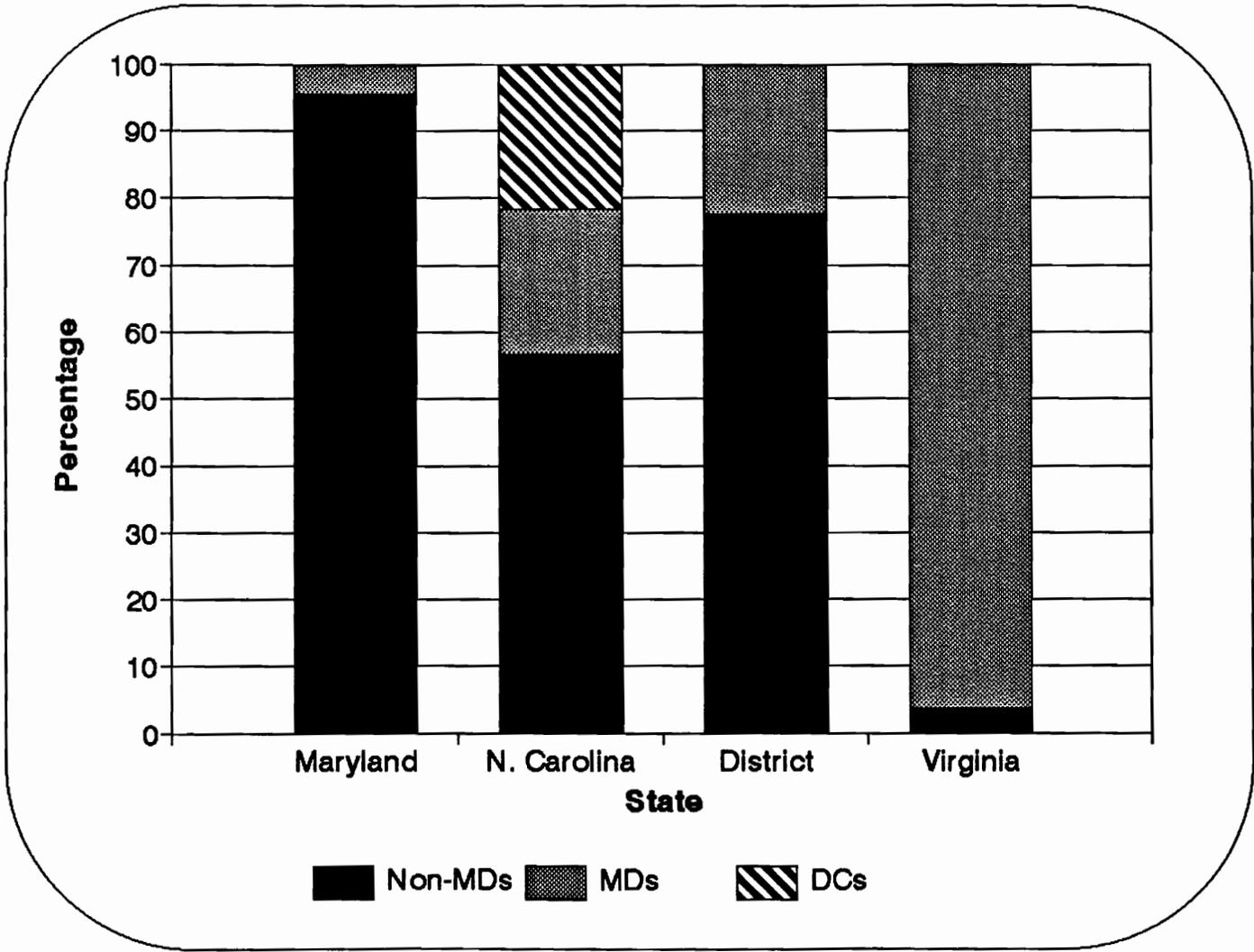


FIGURE 4.1 ACUPUNCTURISTS HOLDING MEDICAL OR OSTEOPATHIC LICENSES

as influences on locational preference. The answer of state laws and policies came in response to the open-ended question: "What factors most influenced your decision to locate your practice" in its current location [Appendix 1A]. In the District of Columbia, as many as nine out of 18 (50.0%) referred to licensure or laws as influences in deciding on a practice location. In Maryland, which has similar laws to the District, 15 of 66 respondents (22.7%) mentioned legal acceptance, i.e., the ability to practice legally, as an issue.

If over one-fifth of respondents in Maryland mentioned state laws and policies without being asked directly to consider their influence, legal constraints must serve as a major issue for acupuncturists choosing a new location in that state. The main reason for the influence: legal tolerance of non-MD practice serves as an impetus for acupuncturists moving to Maryland and the District, a subject to be explored later in more detail.

Compare Maryland and the District with Virginia and North Carolina, two states that, until recently, forbade non-MD practice. None of Virginia's 28 respondents volunteered laws or policies as an issue.<sup>13</sup> Only one of North Carolina's 36 respondents raised the issue of legal acceptance.<sup>14</sup> A simple explanation: many acupuncturists in these two states are more influenced by the locations of

their existing practices in biomedicine, chiropractic, or naturopathy.

For example, in Virginia, location of their existing practice locations was the most frequently mentioned factor influencing location, indicated by nine respondents (32.1%). Six acupuncturists (16.7%) responded likewise in North Carolina. Yet only two respondents cited location of their existing practice (3.0%) in Maryland to the above, open-ended question, and only one volunteered this answer in the District. Based only on this one survey question, the contrast between Maryland and Virginia takes shape as a contrast between MDs and non-MDs.

Maryland and District respondents are more likely to consider laws and policies because so few also practice as biomedical doctors or chiropractors. Virginia and North Carolina responses indicate the importance of such existing practices on locational preference. Residence or hometown also plays a crucial role, especially in Maryland and the District of Columbia [Appendix 1A].

Other survey questions probed more directly for the influence of state laws and policies. Specifically, the question, "How would you evaluate the influence of state acupuncture laws and/or policies in deciding on the location for your current practice?", yielded responses consistent with the previous question. Again, Maryland/the District of

Columbia and Virginia contrast with one another, but North Carolina represents a unique situation [Table 4.1]. Eight acupuncturists (25.0%) in North Carolina reported the response, "strong influence," and 11 (34.4%) reported "no influence at all." Many North Carolina acupuncturists apparently felt concerned about the lack of legalization or even state recognition, while others there were more content with the fact that acupuncture was at least permitted, despite the lack of legal sanction prior to the summer of 1993.

Thirty-five Maryland acupuncturists (55.6%) reported "strong influence," compared to 14 in the District (77.8%) and only three in Virginia (11.1%). State laws and policies played no role whatsoever in locational preference for five acupuncturists in Maryland (7.9%), one in the District, and 12 in Virginia (44.4%). Survey responses indicate that, in states with a greater degree of legal tolerance of acupuncture, state laws and policies are more likely to influence locational preference [Table 4.2, Figure 4.2].

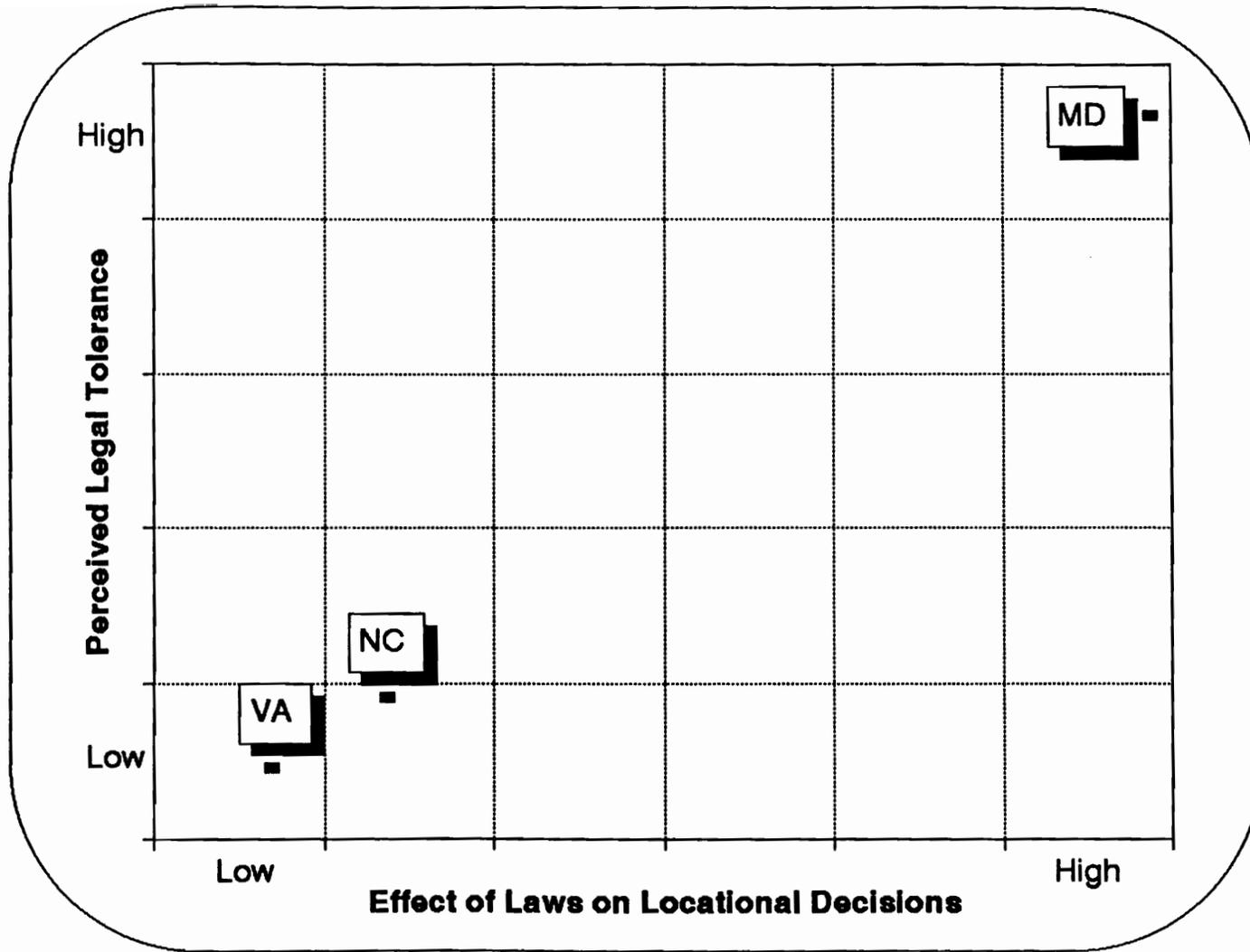


FIGURE 4.2 ACUPUNCTURISTS: RELATION BETWEEN LEGAL TOLERANCE AND LEGAL CONSTRAINTS ON *LOCATION*. X-axis computed from Table 4.1 as ratio of strong or moderate influence: little or no influence, and Y-axis computed from Table 4.2 as ratio of more tolerant: all other responses.

TABLE 4.1 ACUPUNCTURISTS: INFLUENCE OF STATE LAWS AND POLICIES ON LOCATION

		Strong	Moderate	Not much	None
<b>Washington,DC</b> (Pct.)		<b>77.8</b>	<b>16.7</b>	-	<b>5.6</b>
(n = 18)	(No.)	14	3	-	1
<b>Maryland</b> (Pct.)		<b>55.6</b>	<b>19.0</b>	<b>17.5</b>	<b>7.9</b>
(n = 63)	(No.)	35	12	11	5
<b>North Carolina</b> (Pct.)		<b>25.0</b>	<b>15.6</b>	<b>25.0</b>	<b>34.4</b>
(n = 32)	(No.)	8	5	8	11
<b>Virginia</b> (Pct.)		<b>11.1</b>	<b>14.8</b>	<b>29.6</b>	<b>44.4</b>
(n = 27)	(No.)	3	4	8	12

$\chi^2 = 39.3$  (9 df),  $P < 0.05$ , significant

TABLE 4.2 ACUPUNCTURISTS: IN COMPARISON WITH OTHER STATES, IS THE LEGAL ATMOSPHERE IN YOUR STATE MORE OR LESS TOLERANT?

		More	Same	Less	Do Not Know*
<b>Washington,DC</b> (Pct.)		<b>92.3</b>	-	<b>7.7</b>	-
(n = 13)	(No.)	12	-	1	-
<b>Maryland</b> (Pct.)		<b>70.0</b>	<b>10.0</b>	<b>15.0</b>	<b>5.0</b>
(n = 60)	(No.)	42	6	9	3
<b>North Carolina</b> (Pct.)		<b>31.3</b>	<b>18.8</b>	<b>21.9</b>	<b>28.1</b>
(n = 32)	(No.)	10	6	7	9
<b>Virginia</b> (Pct.)		<b>18.5</b>	<b>44.4</b>	<b>22.2</b>	<b>14.8</b>
(n = 27)	(No.)	5	12	6	4

$\chi^2 = 26.6$  (3 df),  $P < 0.05$ , significant

\* column not included in  $\chi^2$  test

Whenever state laws and policies at least moderately influenced the choice of practice location, a survey question probed for the particular legal constraints. In Maryland, 47 acupuncturists raised several issues, such as: legality of acupuncture (42.6%), ability of non-MDs to practice (27.8%), and concerns about licensure (19.1%) [Table 4.3]. Only three (6.4%) mentioned concerns about MD

supervision, and none mentioned the rights of MDs to practice acupuncture.

TABLE 4.3 LAWS OR POLICIES INFLUENCING THE LOCATION OF MARYLAND ACUPUNCTURISTS  
47 total respondents

Response:	No.	Pct.
Legality of acupuncture/ability to practice acupuncture (general)	20	42.6
Ability of non-MDs to practice	14	29.8
Licensure or registration/concerns about licensure	91	9.1
No need to take NCCA/national exam	61	2.8
Independent in practice from MDs	61	2.8
Concerns about physician supervision	3	6.4
Concerns about insurance	3	6.4
Eligibility to practice based on education here	3	6.4
ALL OTHER	2	4.3
NO RESPONSE	3	6.4

Other states are not shown in Table 4.3 because they lacked a statistically reliable sample for this question, for two reasons: small size of the acupuncture population in the District; and the relative lack of influence of legal constraints on locational preference in Virginia and North Carolina. Nonetheless, I can make some limited comparisons between Maryland's responses and the few responses from other states. For example, of Virginia's seven respondents, four volunteered the MD's ability to practice acupuncture, suggesting an obvious contrast with Maryland. Concerns in North Carolina appeared to be rudimentary, with eight of 14 responses (57.1%) indicating general concerns about the legality of acupuncture.

*INSURANCE*

With insurance reform on the national agenda, Maryland seems especially prepared: 20 of 63 respondents (31.7%) receive coverage from HMOs or PPOs, such as Blue Cross/Blue Shield and MDIPA. None of the other states demonstrates similar coverage by managed care programs: HMOs and PPOs do not cover any of the respondents in the District of Columbia, and cover only one in Virginia, and three (8.3%) in North Carolina [Table 4.4].

Fourteen North Carolina acupuncturists (38.9%) reported "no insurance coverage," when asked which organizations cover their patients' health care costs related to their acupuncture practices [Table 4.4]. The percentage is surprisingly low, given the recent illegality of non-MD acupuncture in North Carolina. However, some respondents may have received coverage only after the summer's legal change. In neighboring Virginia, 15 acupuncturists (55.6%) also received no insurance coverage related to acupuncture, compared with only 6.3% in Maryland.

TABLE 4.4 INSURANCE COVERAGE OF ACUPUNCTURISTS

		HMOs or PPOs	No insurance
Maryland	(Pct.)	31.7	6.3
(n = 63)	(No.)	20	4
North Carolina	(Pct.)	8.3	38.9
(n = 36)	(No.)	3	14
Virginia	(Pct.)	3.7	55.6
(n = 27)	(No.)	1	15
Washington,DC	(Pct.)	-	12.5
(n = 16)	(No.)	-	2

Disparities in insurance coverage among states cannot fully explain the influence of insurance laws on locational preference. The question, "How would you evaluate the influence of insurance laws in deciding on the location for your current practice?", yielded a variety of responses, with no statistically significant contrasts among states [Table 4.5]. Insurance laws, as expected, strongly influenced only three acupuncturists in North Carolina (9.1%), and had no influence whatsoever on 17 acupuncturists in that state (51.5%). Maryland, with a proliferation of coverage by managed care programs, reveals only seven acupuncturists (11.5%) to be strongly influenced, and 26 (42.6%) expressed no influence at all. Virginia, a state in which over half of all respondents receive no insurance coverage, has similar findings: five acupuncturists (18.5%) reported "strong influence," and 11 (40.7%) reported "no influence at all."

TABLE 4.5 INFLUENCE OF INSURANCE LAWS ON THE LOCATION OF ACUPUNCTURISTS

	Strong	Moderate	Not much	None
Washington,DC (Pct.) (n = 16) (No.)	25.0 4	6.3 1	31.3 5	37.5 6
Virginia (Pct.) (n = 27) (No.)	18.5 5	11.1 3	29.6 8	40.7 11
Maryland (Pct.) (n = 61) (No.)	11.5 7	11.5 7	34.4 21	42.6 26
North Carolina (Pct.) (n = 33) (No.)	9.1 3	9.1 3	30.3 10	51.5 17

$\chi^2 = 1.6$  (3 df),  $P > 0.05$ , not significant

### MOBILITY

For one of the survey questions, respondents evaluated the following statement: "Other states' acupuncture laws and/or policies affect my ability to relocate my practice to another state." Responses indicate that legal requirements influence acupuncturists in all states in the study area, with statistically significant differences among states [Table 4.6, Figure 4.3]. Even in Virginia, where only five respondents (18.5%) consider the legal atmosphere more tolerant, one third of respondents "agree" that state laws and policies influence mobility, and over one-fifth "somewhat agree." The findings are more pronounced in other states, especially Maryland. Forty-three respondents

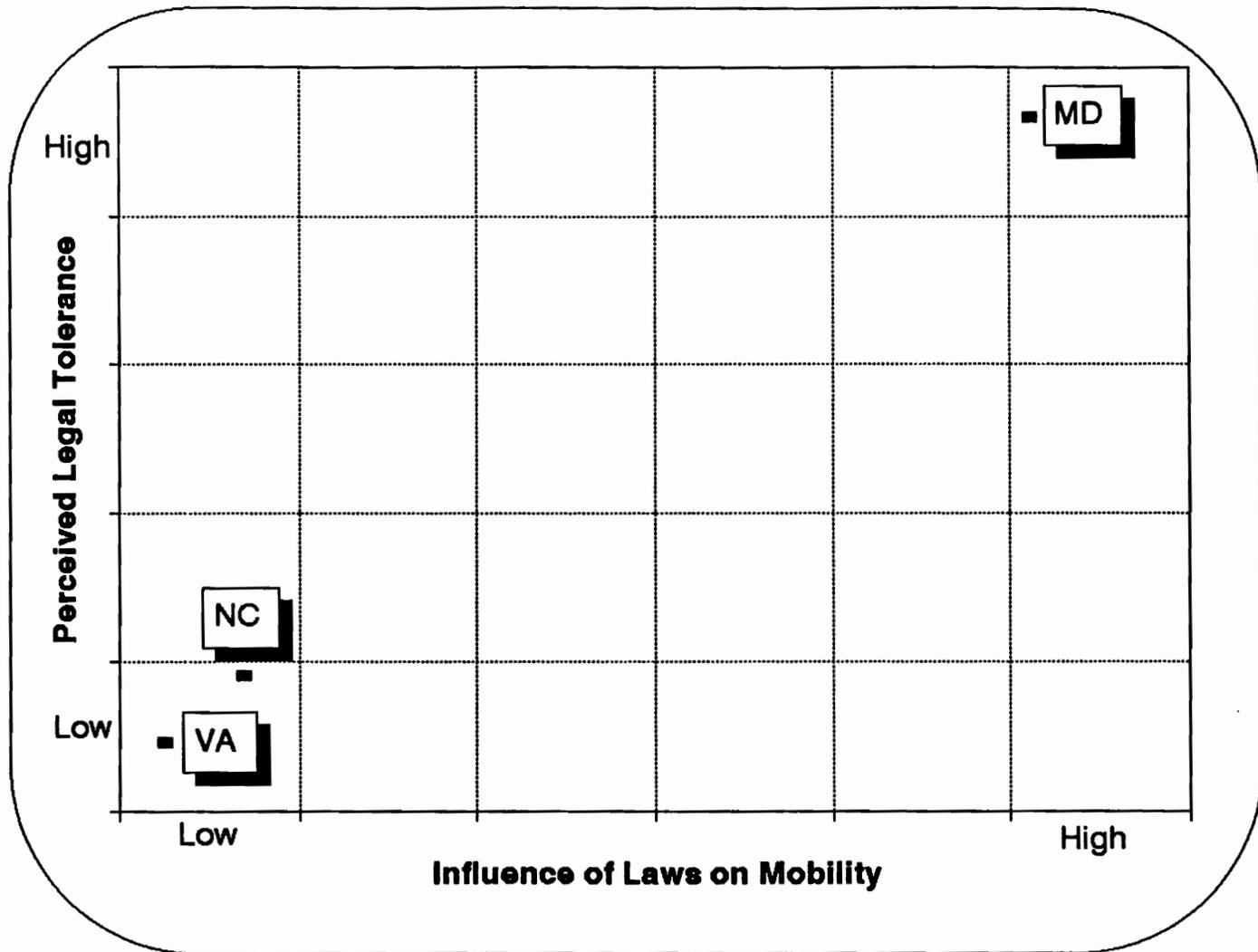


FIGURE 4.3 ACUPUNCTURISTS: RELATION BETWEEN LEGAL TOLERANCE AND LEGAL CONSTRAINTS ON *MOBILITY*. X-axis computed from Table 4.6 as ratio of agree or somewhat agree: all other responses, and Y-axis computed from Table 4.2 as ratio of more tolerant: all other responses.

(67.2%) in Maryland "agree" that legal requirements influence mobility, as do 19 respondents (54.3%) in North Carolina.

TABLE 4.6 OTHER STATES' LAWS OR POLICIES AFFECT MY ABILITY TO RELOCATE MY ACUPUNCTURE PRACTICE TO ANOTHER STATE

		Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree
<b>Maryland</b>	(Pct.)	67.2	18.8	10.9	1.6	1.6
(n = 64)	(No.)	43	12	7	1	1
<b>Washington,DC</b>	(Pct.)	55.6	27.8	5.6	-	11.1
(n = 18)	(No.)	10	5	1	-	2
<b>North Carolina</b>	(Pct.)	54.3	8.6	22.9	8.6	5.7
(n = 35)	(No.)	19	3	8	3	2
<b>Virginia</b>	(Pct.)	33.3	22.2	22.2	7.4	14.8
(n = 27)	(No.)	9	6	6	2	4

$\chi^2 = 12.9$  (3 df),  $P < 0.05$ , significant

Many acupuncturists in Maryland cited the specific state that influences mobility. Of the 32 such responses, 16 acupuncturists mentioned Virginia (50.0%), seven California (21.9%), five North Carolina (15.6%), and four mentioned the District of Columbia (12.5%). Virginia also specifically restricts the mobility of six acupuncturists in the District, and five in Virginia. California's laws and policies restrict the mobility of five North Carolina respondents. Maryland was also mentioned by five acupuncturists in Virginia, concerned about legal obstacles

to MD acupuncture, and four in the District, concerned about licensing requirements.

Appendix 1B shows the relevant, legal concerns of acupuncturists who believed that one or more states restricted mobility. Maryland respondents repeatedly raised certain issues: restrictions on non-MD practice (28.1%), and concerns about the legality of acupuncture (19.3%) in such states as Virginia and North Carolina; having to take the NCCA test (26.3%) or other testing requirements (10.5%) implemented by the District of Columbia and other states; and requirements by some states, such as California, for training in herbal remedies (15.8%).

If, until now, the reader holds an image of acupuncturists as a highly mobile population, the following will erase that impression: in some states, over half of all acupuncturists have practiced their entire careers in one county. Consider Maryland: 42 respondents (65.6%) have practiced acupuncture the same number of years "in total" and "in this county" [Table 4.7]. The same holds true for 14 practitioners in Virginia (52.0%), and 18 in North Carolina (51.4%).

TABLE 4.7 ACUPUNCTURISTS REMAINING IN FIRST COUNTY OF PRACTICE

		Yes	No
<b>Maryland</b>	(Pct.)	65.6	34.4
(n = 64)	(No.)	42	22
<b>Virginia</b>	(Pct.)	52.0	48.0
(n = 25)	(No.)	13	12
<b>North Carolina</b>	(Pct.)	51.4	48.6
(n = 35)	(No.)	18	17

$\chi^2 = 2.5$  (2 df),  $P > 0.05$ , not significant

They remain in their first county mainly because, in general, most acupuncturists have not been practicing a long time. In fact, acupuncturists do tend to relocate as time elapses. Of only 12 in Maryland practicing more than 10 years, four have remained at their original locations. Of six having practiced more than 15 years, only one has yet to relocate. A similar pattern emerges in other states, such as Virginia. Of eight in Virginia practicing more than 10 years, only two have yet to relocate. None of six acupuncturists, practicing more than 15 years in Virginia, have practiced acupuncture "in total" and "in this county" for the same number of years.

In response to the question, "How many years have you practiced acupuncture in total?", only Maryland shows a modest percentage of acupuncturists practicing one year or less [Table 4.8]. Other age groups in Maryland and the other states resemble each other, with minor variation.

Most acupuncturists, throughout the study area, have practiced less than 10 years. Acupuncturists in the District of Columbia and Virginia have practiced longer, but this finding may be attributable, in part, to the relatively small sample sizes there.

Table 4.8 TOTAL YEARS PRACTICING ACUPUNCTURE

		<=1	2-5	6-10	11-20	21-40	
<b>Maryland</b> (n = 64)	(Pct.) (No.)	10.9 7	37.5 24	32.8 21	15.6 10	3.1 2	mean = 7.1
<b>Virginia</b> (n = 25)	(Pct.) (No.)	4.0 1	32.0 8	32.0 8	28.0 7	4.0 1	mean = 10.1
<b>North Carolina</b> (n = 35)	(Pct.) (No.)	- -	42.9 15	28.6 10	28.6 10	- -	mean = 7.4
<b>Washington,DC</b> (n = 17)	(Pct.) (No.)	- -	35.3 6	11.8 2	17.6 3	35.3 6	mean = 15.6

In measuring mobility, one survey question read, "Do you commute to a different state than your place of residence to practice acupuncture?" Most striking, no acupuncturists in North Carolina commute from out of state [Table 4.9]. In the District, eight practitioners (44.4%) commute from Maryland and Virginia, with some commuting as part of an additional practice. A less exaggerated pattern emerges in Maryland, in which 10 acupuncturists (15.4%) responded affirmatively to the above question. Further, six of the 10 agreed that state laws and policies influenced

them to commute across state lines, mainly from Virginia, which prohibited non-MD acupuncture.

TABLE 4.9 COMMUTE TO ANOTHER STATE TO PRACTICE ACUPUNCTURE?

Commuted from:		Yes	No
Washington, DC (n = 18)	(Pct.) (No.)	44.4 8	55.6 10
Maryland (n = 65)	(Pct.) (No.)	15.4 10	84.6 55
Virginia (n = 28)	(Pct.) (No.)	3.6 1	93.1 27
North Carolina (n = 36)	(Pct.) (No.)	- -	100 36

$\chi^2 = 23.8$  (3 df),  $P < 0.05$ , significant

Maryland and the District also differ from other states in terms of the number of practitioners with offices in more than one county or state. Table 4.10 shows that 12 acupuncturists in Maryland (18.5%) and four acupuncturists in the District (22.2%) practice in more than one county, unlike any other state's respondents in the study area. The expansion of practices may be due to a clientele more accepting of AHC in parts of Maryland and the District of Columbia. Economic issues also may play a role. Issues such as affordable start-up costs and the potential demand for services lessen the financial barriers of opening a new or additional practice. Therefore, some acupuncturists may seek to open practices in more than one location.

TABLE 4.10 NUMBER OF COUNTIES CURRENTLY PRACTICED IN BY ACUPUNCTURISTS

		1	2	3
<b>Virginia</b>	<b>(Pct.)</b>	<b>100</b>	<b>-</b>	<b>-</b>
(n = 28)	(No.)	28	-	-
<b>North Carolina</b>	<b>(Pct.)</b>	<b>97.3</b>	<b>2.7</b>	<b>-</b>
(n = 37)	(No.)	36	1	-
<b>Maryland</b>	<b>(Pct.)</b>	<b>81.5</b>	<b>16.9</b>	<b>1.5</b>
(n = 65)	(No.)	53	11	1
<b>Washington,DC</b>	<b>(Pct.)</b>	<b>77.8</b>	<b>22.2</b>	<b>-</b>
(n = 18)	(No.)	14	4	-

Another question probed for the previous practice locations of respondents, thereby revealing variations in mobility patterns within the study area. The reliability of the resulting data is somewhat questionable because numerous acupuncturists provided only partial responses for several possible reasons: placement of the survey question at the end of a long questionnaire; length of time required to report the requested information; and the personal nature of detailing previous practice locations.

The findings identify inter- and intrastate movement within the study area, and uncover differences between Maryland and North Carolina. Of 15 responses for North Carolina acupuncturists who have practiced elsewhere, five relocated from Maryland. By contrast, no acupuncturists in Maryland mentioned North Carolina as their most recent practice location. The contrast makes sense upon considering some of the other states mentioned as most

previous practice locations for North Carolina respondents, specifically California (3) and New Mexico (2). These two states and Maryland have something in common: large numbers of non-MD acupuncturists, resulting in competition within the profession. Particularly in New Mexico, the favorable laws attract so many non-MDs that some acupuncturists leave in search of a state, like North Carolina, with less competition. Other advantages for some acupuncturists relocating to North Carolina may have included less competition, a need for services due to legal restrictions on practice, and no licensure requirements as long as acupuncture remained illegal yet tolerated. Increased competition, and tests of competency, may have inhibited some North Carolina acupuncturists from relocating to Maryland.

Considering the most recent practice location, relocation between states in the study area did not include Virginia, with one exception involving the District of Columbia. The professional dominance of acupuncture by MDs in Virginia contrasts with the professional dominance in other states in the study area by non-MDs. Non-MDs face a hostile climate in Virginia, including the legal barrier of prohibition (until recently), upon moving to the state. MDs face other barriers upon moving to Maryland, the District of Columbia, or North Carolina, such as: increased competition,

testing requirements, or, from an MD standpoint, a professional climate dominated by unskilled practitioners, resulting in the deligitimation of acupuncture.

Intrastate mobility further demonstrates variations in the study area, especially concerning North Carolina and Maryland. Only three of 15 acupuncturists in North Carolina reported relocating from another county within the same state. In Maryland, however, the majority of respondents with previous practice locations reported relocating from another county within the same state. Why the dichotomy between intrastate mobility in Maryland and North Carolina? As illustrated in Appendix 1A, many acupuncturists choose to practice in Maryland because of favorable laws and policies. A number of non-MD acupuncturists may search for specific counties within Maryland, or other legally favorable states, that have a perceived need for acupuncture services. By contrast, North Carolina acupuncturists experience much less competition, with the exception of the Asheville area, due to the low number of practitioners in most of the state.

In each state in the study area, most acupuncturists consider the legal atmosphere in the county of current practice to be either the same as in other counties, or have no opinion [Table 4.11]. Interestingly, 10 acupuncturists (29.4%) in North Carolina reported that the legal atmosphere is more tolerant in their counties of practice. Such a

finding suggests the possibility that, in the absence of legal sanction, some practitioners chose or remained at practice locations in the hopes of not making any waves with law enforcement. In Maryland, 10 acupuncturists (15.9%) consider the legal atmosphere in their counties to be more tolerant, compared with only one in Virginia. However, some survey recipients may have misread the word, "county," as "country," judging by occasional responses of "USA" for county of practice or residence.

Table 4.11 ACUPUNCTURISTS: IN COMPARISON WITH OTHER COUNTIES IN YOUR STATE, IS THE LEGAL ATMOSPHERE IN YOUR COUNTY MORE OR LESS TOLERANT?

		More	Same	Less	Do Not Know*
<b>North Carolina</b>	<b>(Pct.)</b>	<b>29.4</b>	<b>44.1</b>	<b>-</b>	<b>26.5</b>
(n = 34)	(No.)	10	15	-	9
<b>Maryland</b>	<b>(Pct.)</b>	<b>15.9</b>	<b>58.7</b>	<b>3.2</b>	<b>22.2</b>
(n = 63)	(No.)	10	37	2	14
<b>Virginia</b>	<b>(Pct.)</b>	<b>3.7</b>	<b>55.6</b>	<b>7.4</b>	<b>33.3</b>
(n = 27)	(No.)	1	15	2	9

$\chi^2 = 7.4$  (2 df),  $P < 0.05$ , significant

\* column not included in  $\chi^2$  test

### *SOCIAL DEMOGRAPHICS*

An unexpected finding was gender differences among states [Figure 4.4]. Twenty-five acupuncturists (89.3%) in Virginia and 27 (73.0%) in North Carolina are male. The reverse holds true in Maryland, with 24 males (36.4%), and the District of Columbia, with seven males (38.9%). One

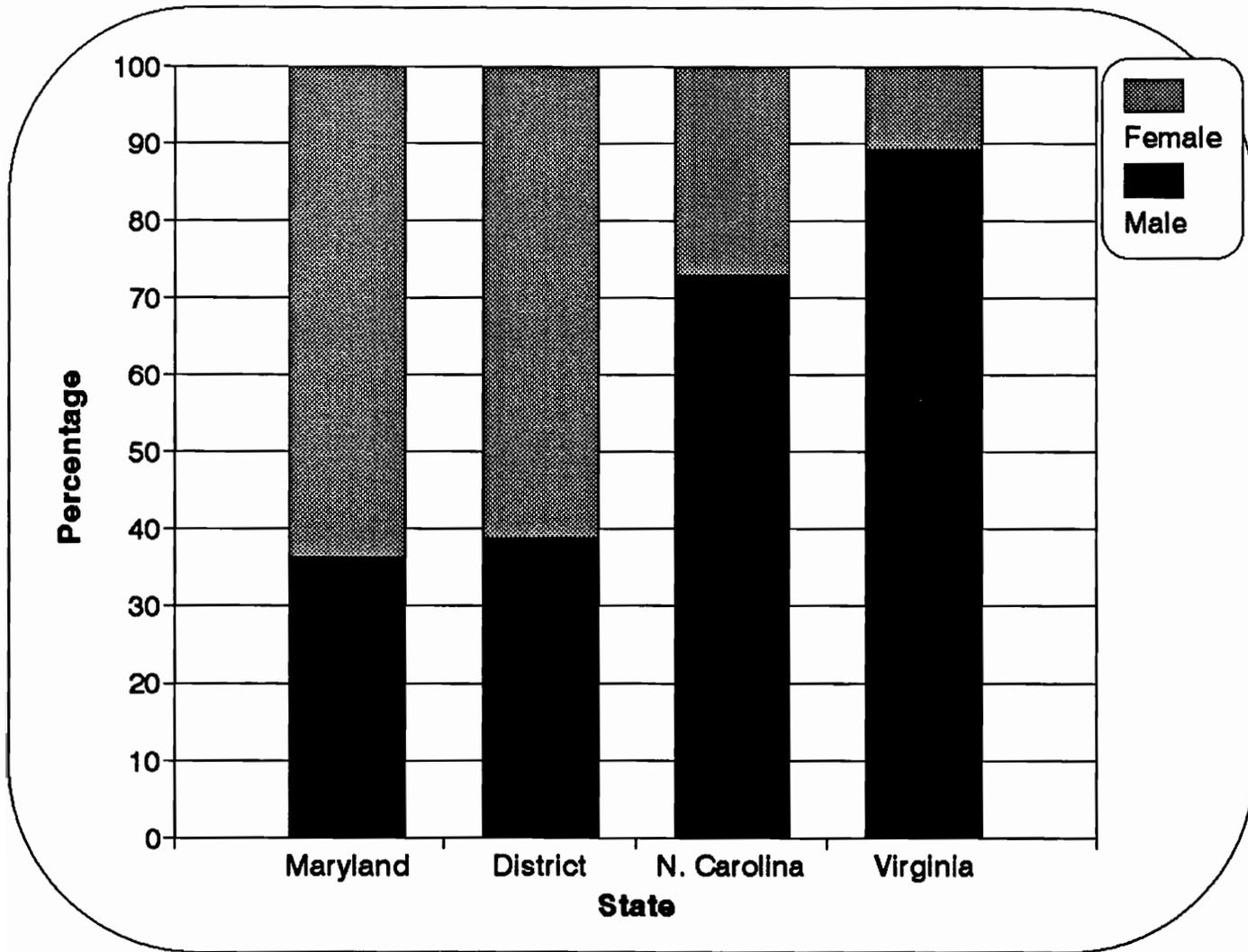


FIGURE 4.4 GENDER OF ACUPUNCTURISTS

explanation: males still dominate many health care professions, as is the case with biomedical doctors and chiropractors. Non-MD acupuncture might attract a number of women who feel excluded from becoming biomedical doctors. The gender differences therefore can be linked to contrasts between MD- and non-MD acupuncture states.

The survey revealed differences in other demographic characteristics, such as country of birth. Only 12 of Virginia's 28 respondents (42.9%) were born in the United States. Most of the remaining 17 were born in Asian countries, including the Philippines (5), China (2), Taiwan (2) and Vietnam (2). Consistent with Virginia, only nine of the District of Columbia's 18 respondents (50.0%) were born in the U.S. The remaining nine were born in China (6), Vietnam (1), Korea (1) and Argentina (1). These findings contrast strongly with North Carolina, in which 33 of 37 respondents (89.2%) were born in the U.S., and with Maryland's 52 of 65 respondents (80.0%) born in the U.S. No clear pattern emerges, but the different findings may be explained, in part, by the age of practitioners in the study area.

Variations in age, oddly enough, may be consistent with the above issue concerning country of birth [Table 4.12]. Virginia may have a slightly older population of acupuncturists than the other states, perhaps because of the

lengthy period of biomedical education. The average age of acupuncturists in Virginia is approximately 50 years old, compared with under 45 years for North Carolina and Maryland. If these contrasts were statistically significant, it would follow that many respondents in Virginia were already familiar with acupuncture before entering the United States. However, other factors need to be considered in understanding variations in country of birth.

Table 4.12 AGE OF ACUPUNCTURISTS

		<=30	31-40	41-50	51-60	60+	Mean
<b>North Carolina</b>	(Pct.)	2.8	25.0	63.9	8.3	-	43.17
(n = 36)	(No.)	1	9	23	3	-	
<b>Maryland</b>	(Pct.)	1.6	29.7	50.0	18.8	-	44.36
(n = 64)	(No.)	1	19	32	12	-	
<b>Virginia</b>	(Pct.)	-	14.3	39.3	28.6	17.9	50.25
(n = 28)	(No.)	-	4	11	8	5	
<b>Washington,DC</b>	(Pct.)	-	16.7	22.2	61.1	-	51.0
(n = 17)	(No.)	-	3	4	11	-	

$\chi^2 = 2.7$  (3 df),  $P > 0.05$ , not significant

Access to acupuncture schools, such as TAI in Maryland, must play at least some role for non-MDs in deciding on becoming acupuncturists. TAI's influence is obvious in Maryland, with 39 respondents (59.1%) indicating an education at the acupuncture college. Even in North

Carolina, seven acupuncturists (18.9%) indicated professional education at TAI.<sup>15</sup>

It makes sense that TAI played no role in the education of any Virginia acupuncturists, since Virginia prohibited non-MD practice. Instead, seven of 28 acupuncturists (25.0%) mentioned post-doctoral education at UCLA, which runs a training course for MDs. At least eight (28.6%) were educated in Asia. By comparison, no North Carolina acupuncturists mentioned education in Asia on the survey, but eight District acupuncturists (44.4%) cited education in Asia. Five of 17 respondents in the District of Columbia (29.4%) also cited education at TAI. The high proportion of Asian-born acupuncturists might be attributable, in part, to the existence of larger Asian communities in the District, northern Virginia, and other areas than in North Carolina (U.S. Bureau of the Census, 1988).

#### *THE ACUPUNCTURE PRACTICE*

Maryland's respondents practice TCM (60.6%), Five Elements (50.0%), Japanese (9.1%), Auricular/detoxification (9.1%), "Worsley" Five Elements (taught at TAI) (7.6%), French or French energetic (6.1%), Korean or Korean hand (6.1%), and other methods (4.5%) [Appendix 1C]. My error in phrasing the question about acupuncture "styles" as "types"

may have misled some respondents, having a limited effect on the validity of the data.<sup>16</sup>

I lack the expertise to explain the differences among the different styles of acupuncture, but one thing is clear: Maryland acupuncturists practice commonly accepted styles. The same cannot be said for some practitioners in Virginia and North Carolina. I showed an anonymous list of all acupuncture styles, given by respondents, to an acupuncturist for his expertise. He appeared flabbergasted by some of the responses. In all states, people did mention commonly accepted styles, such as TCM, Five Elements, Japanese, and auricular acupuncture. A commonly accepted style for MDs and DOs, medical acupuncture, was the leading response in Virginia (28.6%). But Virginia and North Carolina also included several responses that made no sense to the acupuncturist who reviewed the list: in Virginia, six respondents mentioned electrical acupuncture (21.4%), and two respondents mentioned needling; in North Carolina, six respondents also mentioned electrical acupuncture (16.7%), and another six mentioned needling (16.7%). Needling, with or without electrical stimulation, is an integral part of acupuncture, but it is not a separate style or type of acupuncture, the acupuncturist told me.

The individual responses within North Carolina and Virginia often varied so extensively that a sizeable

percentage of responses failed to meet any existing category [Appendix 1C]. Some of the unclassifiable responses in those states include: Gunn technique, laser, Chung Go Ishue, Yang, body acupuncture, meridian, American, eau, and tendiromuscular.

I can explain the split across state lines between Maryland and Virginia/North Carolina in one of two ways: 1) some practitioners do not adhere to specific styles of acupuncture, especially if practitioners devote more time to other forms of health care. Acupuncturists in Virginia, for example, do tend to devote more time to biomedicine; or 2) some practitioners might, at worst, lack adequate training, or, at best, add innovative approaches to the profession. As I showed the acupuncturist the list of anonymous responses, he expressed dismay that one respondent, a North Carolina chiropractor, described his practice as "silver needle acupuncture." The response could not have been inadvertent, since the chiropractor also advertises his practice with such a description.

Let me reiterate that I have no expertise to pass judgment on the effectiveness or safety of acupuncture styles. I cannot help but wonder, though, if Maryland's educational and testing requirements for MD and non-MD acupuncturists lead to a more qualified pool of acupuncturists. Similarly, Virginia might be a better state

to receive acupuncture care, if medical acupuncture is the desired style, due to the number of MD practitioners there.

In addition to practicing acupuncture, Virginia acupuncturists devote time to family practices, pain management, osteopathy, neurology, and other forms of care. Fifteen Virginia acupuncturists (53.6%) devote less than 10% of their practices to acupuncture [Table 4.13]. Only six acupuncturists in Virginia (21.4%) devote more than half of their practices to acupuncture. The reason: most acupuncturists there have primary practices in biomedicine.

North Carolina acupuncturists appear to lack cohesiveness in practicing acupuncture. Many practice other forms of care, such as herbology, chiropractic, homeopathy, zero balancing, craniosacral therapy, energy medicine, or various Chinese forms, such as Qi Gong, or biomedicine. Eighteen of 35 acupuncturists (51.7%) devote more than half of their practices to acupuncture. Only three (8.6%) practice acupuncture as less than 10% of their practices.

Maryland and District of Columbia acupuncturists tend to devote more time to practicing acupuncture [Table 4.13]. This finding helps explain not only the difference in acupuncture styles, but the influence of state acupuncture laws and policies on locational preference. Forty acupuncturists in Maryland (60.6%) devote their entire practices to acupuncture. The actual figure might differ

because some acupuncturists consider herbology to be a part of acupuncture. Overall, 57 Maryland acupuncturists (86.1%) devote more than half of their practices to acupuncture. Such a pattern can be found in the District, too. These findings further confirm the differences between MDs and non-MDs, as MD acupuncturists tend to devote more time to existing biomedical practices than to acupuncture.

Table 4.13 PERCENTAGE OF PRACTICE DEVOTED TO ACUPUNCTURE

		$\leq 10$	11-25	25-50	51-75	76-90	91-100
<b>Maryland</b>	(Pct.)	1.5	3.0	9.1	10.6	15.2	60.6
(n = 66)	(No.)	1	2	6	7	10	40
<b>Washington,DC</b>	(Pct.)	-	5.6	11.1	-	27.8	55.6
(n = 18)	(No.)	-	1	2	-	5	10
<b>North Carolina</b>	(Pct.)	8.6	22.9	17.1	17.1	11.4	22.9
(n = 35)	(No.)	3	8	6	6	4	8
<b>Virginia</b>	(Pct.)	53.6	10.7	14.3	7.1	7.1	7.1
(n = 28)	(No.)	15	3	4	2	2	2

$\chi^2 = 42.3$  (3 df),  $P < 0.05$ , significant

Other forms of care practiced by Maryland and District acupuncturists include herbology, massage, zero balancing, homeopathy, nutrition, energy medicine, nursing, counseling, biomedicine, and psychiatry. State laws toward the most prominently mentioned forms of health care, i.e., herbology, massage, and zero balancing, do not exist in most states at this time.

Table 4.14 shows that roughly one-third of acupuncturists in each state work in group practices. A number of colleagues in group practices devote all or some of their time to non-acupuncture forms of care, such as massage, psychotherapy, craniosacral therapy, and homeopathy. Acupuncturists, in short, truly represent the eclectic and complementary nature of AHC.

TABLE 4.14 ACUPUNCTURISTS: GROUP OR SOLO PRACTICE?

		Group	Solo	Other
<b>Washington, DC</b>	(Pct.)	<b>47.1</b>	<b>52.9</b>	-
(n = 17)	(No.)	8	9	-
<b>Virginia</b>	(Pct.)	<b>40.0</b>	<b>60.0</b>	-
(n = 25)	(No.)	10	15	-
<b>North Carolina</b>	(Pct.)	<b>35.3</b>	<b>61.8</b>	<b>2.9</b>
(n = 34)	(No.)	12	21	1
<b>Maryland</b>	(Pct.)	<b>29.7</b>	<b>64.1</b>	<b>6.3</b>
(n = 64)	(No.)	19	41	4

$\chi^2 = 2.2$  (3 df),  $P > 0.05$ , not significant

### DISCUSSION

Legal requirements strongly influence the locational behavior of acupuncturists in states, such as Maryland and the District of Columbia, with favorable laws and policies toward non-MD practice. This finding helps explain why Maryland has the highest number of acupuncturists per capita of any state in the study area. Virginia acupuncturists

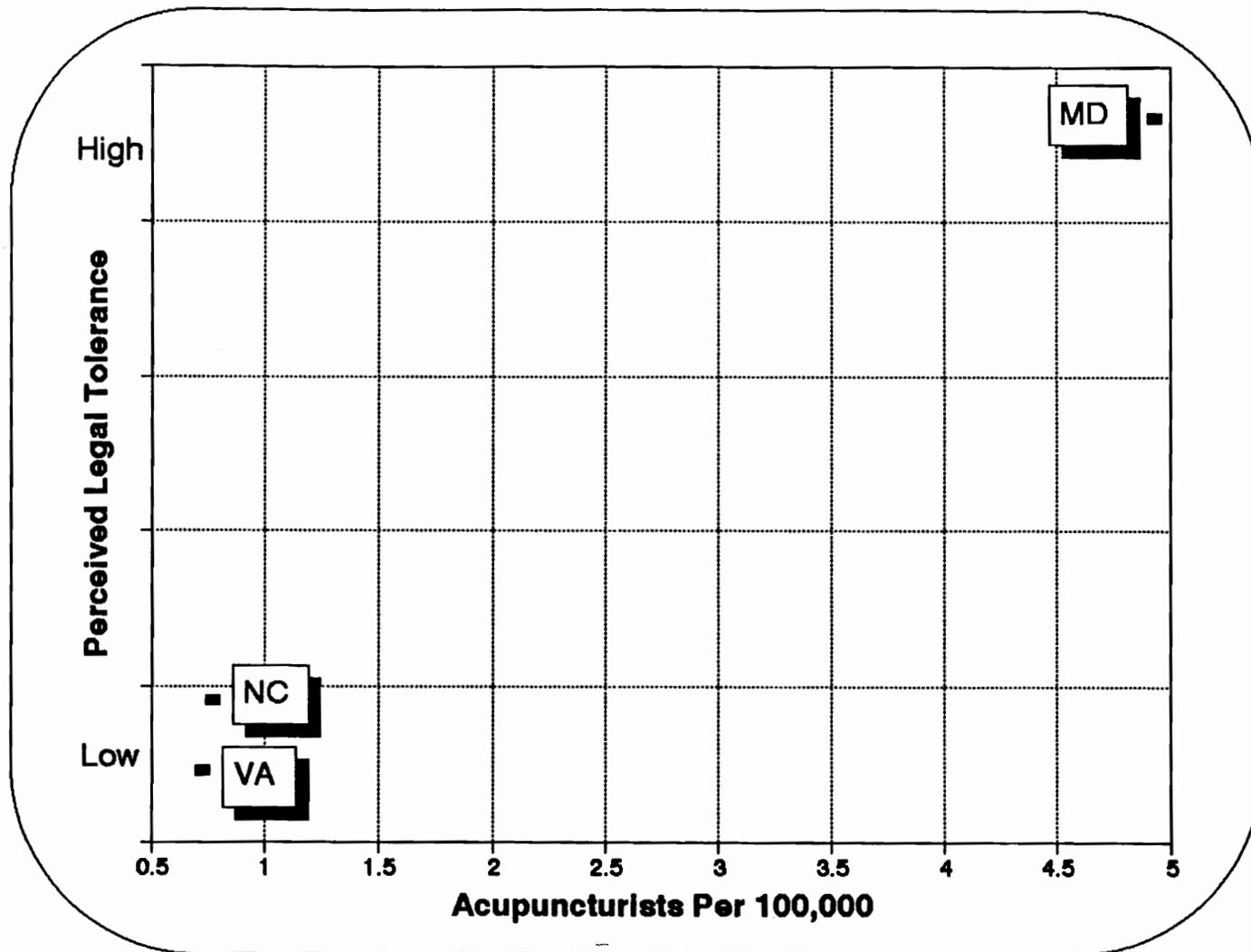


FIGURE 4.5 RELATION BETWEEN LEGAL TOLERANCE AND ACUPUNCTURISTS PER 100,000. X-axis computed from data in Table 2.1, and Y-axis computed from Table 4.2 as ratio of more tolerant: all other responses.

revealed a greater tendency to practice acupuncture in the location of existing, biomedical practices. It is more difficult to make inferences about the unique case of North Carolina, in which non-MD practice proliferated despite prohibitive laws and policies. All states in the study area do indeed show at least some relation between legal tolerance and locational behavior [Figure 4.5].

A non-MD acupuncturist in Maryland offered an insightful comment that aids in understanding the relation:

The "location" of a practice is not always the location of the established office. "Have needles will travel" is the theme of many practitioners who feel free to treat in states other than their home office state. Thus, the laws may have an influence on where the home office is located but may have little/no bearing on the freedom one feels to treat in non-licensed states.

A District of Columbia acupuncturist told me that he travels to nearby states, too, including Virginia, upon request from patients, despite legal restrictions (e.g., Virginia Regulations, 1992). Financial and time constraints inhibit longer travel, so the location of the home office

impacts the aforementioned acupuncturists' access to patient bases.

For some acupuncturists, language is a major obstacle to gathering a patient base. States do require that acupuncturists and other health care professionals demonstrate an ability to communicate in the English language (e.g., District of Columbia Register, 1989; Maryland Board of Medical Examiners, 1983). Nonetheless, I think that the survey could have benefitted from translation into Chinese, Japanese, Korean, or other Asian languages. For example, an unlicensed acupuncturist in Virginia, registered with the NCCA, called to tell me that she could not understand the English in the questionnaire, and needed to get a dictionary. The acupuncturist called back later to say that she had obtained a Chinese-English dictionary, but she does not practice acupuncture at this time, so she should not fill out the questionnaire. I agreed with her. A few acupuncturists, with limited capabilities in English, may have responded without giving the same degree of thought to the survey.

English-speaking and non-English speaking practitioners face legal barriers, even in more tolerant states. For example, a number of non-MD respondents complained about Maryland's supervision law, which requires acupuncture patients to have a prior, biomedical examination

and referral. "It undermines the public's confidence in an acupuncturist's ability & heightens the stature of doctors," a Maryland, non-MD acupuncturist commented on the survey. Non-MDs expressed concerns about delays in treatment, and limitations on the patient's access to care. Few respondents mentioned the supervision law as a factor influencing locational preference.

Instead, practitioners in all states frequently mentioned legality, ability of non-MDs or MDs to practice, and concerns about licensure. With Virginia's acupuncture laws changing to allow non-MD acupuncture, I am certain that some practitioners from neighboring states will seek licensure in Virginia. For example, a non-MD acupuncturist, who commutes from Virginia to Maryland, told me that when the law changes, "I'm going to give the neurologist [who practices acupuncture] a run for his money." "I'd love to be able to practice acupuncture in Virginia when the law changes," another Maryland acupuncturist commented.

The influx of practitioners causes reasonable alarm for some MD acupuncturists, concerned about quality of care and competition. Many acupuncturists in Virginia object to the legal change. A DO wrote on the survey:

I am concerned about upcoming changes in the VA laws which will allow nonphysicians to practice

acupuncture. Specifically, the nonphysicians lobbyist groups have tried to restrict physicians practice of acupuncture. This arrogance could adversely affect patients under their care.

A Virginia MD explained his concerns this way:

Acupuncture is a medical modality of treatment, as is surgery, medications, and physical therapy, respiratory therapy. It is not a complete independent system. It is part of and belongs in the medical treatment modalities.

No evidence suggests that Virginia will emulate Maryland's slant toward non-MD acupuncture. Virginia's medical board, perceived to be hostile by many non-MDs, may prove an insurmountable obstacle for some practitioners. MDs still have an advantage in licensure because of less stringent educational requirements. Required referrals for non-MDs may also create major difficulties for acupuncturists wishing to practice in Virginia. It is possible that fewer MDs in Virginia than in Maryland are open-minded to providing such referrals. For example, an MD acupuncturist in Virginia told me that the biomedical

community viewed him with disdain for choosing to practice acupuncture.

In North Carolina, the legalization of non-MD acupuncture may, in fact, lead to a short-term reduction in the number of acupuncturists. Professionalization brings standards, so the least qualified practitioners will need to seek additional training. If North Carolina can surmount a reputation for being particularly hostile to alternative providers, the state will experience an eventual gain in the number of non-MD acupuncturists.

Stringent licensure requirements certainly burden MD and non-MD acupuncturists, in any state. As long as such requirements do not interfere with access to health services, the patient stands to benefit. The registration requirements interfere in Maryland, since MDs in neighboring states argue that the requirements limit relocation. Besides, Maryland acupuncture is overwhelmingly dominated by non-MDs. Patients also lacked access to non-MD acupuncture in Virginia, due to prohibitive laws and policies.

In summary, contrasts in state laws and policies reflect a division within the profession into two competing groups: MDs and non-MDs. One group of providers has more educational training in biomedicine, the other in acupuncture. The conflict between groups depends on numerous issues, such as perceived quality of care, patient

safety, and the credibility of the profession. The continuing division fosters state laws and policies that favor or disfavor MDs or non-MDs. In turn, the legal constraints lead to deepening rifts within the profession.

**Chapter 5****Chiropractic: a Limited and Full Health Care Profession**

Much of the preceding chapter on acupuncture focuses on contrasts among states. The present chapter on chiropractic also examines important variations. For example, legal constraints influence the locational preference of DCs more so in some states than in others. This chapter also takes another perspective, focusing at times on common ground among chiropractors throughout states in the study area. Issues such as mobility, personal demographics, and length of practice reveal only limited variation from sample to sample of chiropractors. Therefore, many generalizations about DCs in one state can apply to DCs throughout the study area.

Maryland, Virginia, and North Carolina serve as the main foci for this chapter. The District of Columbia, which has relatively few chiropractors, will be considered, again, for comparative purposes.<sup>17</sup>

***REASONS FOR LOCATION***

Before the questionnaire probed directly for the effect of legal constraints, several chiropractors raised the issue in response to a general, open-ended question about locational decisions: "What factors most influenced

your decision to locate your practice" in its current location. Of North Carolina's 56 respondents, as many as nine (19.1%) volunteered legal acceptance in response to the question, a percentage comparable to some of the findings in the previous section [Appendix 2A]. In Maryland, six of 56 respondents (10.7%) also mentioned state laws and policies without being asked directly. Only two of 79 respondents in Virginia (2.5%) mentioned legal acceptance as an issue influencing practice location.<sup>18</sup>

A sizeable number of Virginia and Maryland chiropractors cited the need for chiropractic services, or the competitive benefits thereof, as a factor in choice of location. Of Virginia's 79 respondents, 21 (26.6%) volunteered the need for services, as did 13 of 56 DCs (23.2%) in Maryland. In Virginia and Maryland, chiropractors might perceive a trend toward increased utilization of their services, resulting in a need for services. Also, fewer chiropractors practice per capita in these two states than in North Carolina [see Chapter 2]. Only four of 56 DCs in North Carolina (7.1%) volunteered the importance of the need for services.

Concerns about competition or legal matters obviously cannot explain the full picture of why DCs choose certain practice locations. Residence or hometown contributed to locational preferences throughout the study area. Other

frequently mentioned responses include proximity to cities or towns, population demographics, and, especially in North Carolina, the outdoors (21.4%) and the climate (17.9%). Referral needs reportedly did not affect the locational preference of chiropractors in the study area. In fact, a study published in the American Journal of Public Health (Shekelle & Brook, 1991) showed that less than 1% of all patient visits to chiropractors result from referrals by MDs, DCs, or other health care providers. However, the current percentage of referred patient visits is probably higher because the American Journal of Public Health study was conducted before the Wilk ruling against the AMA.

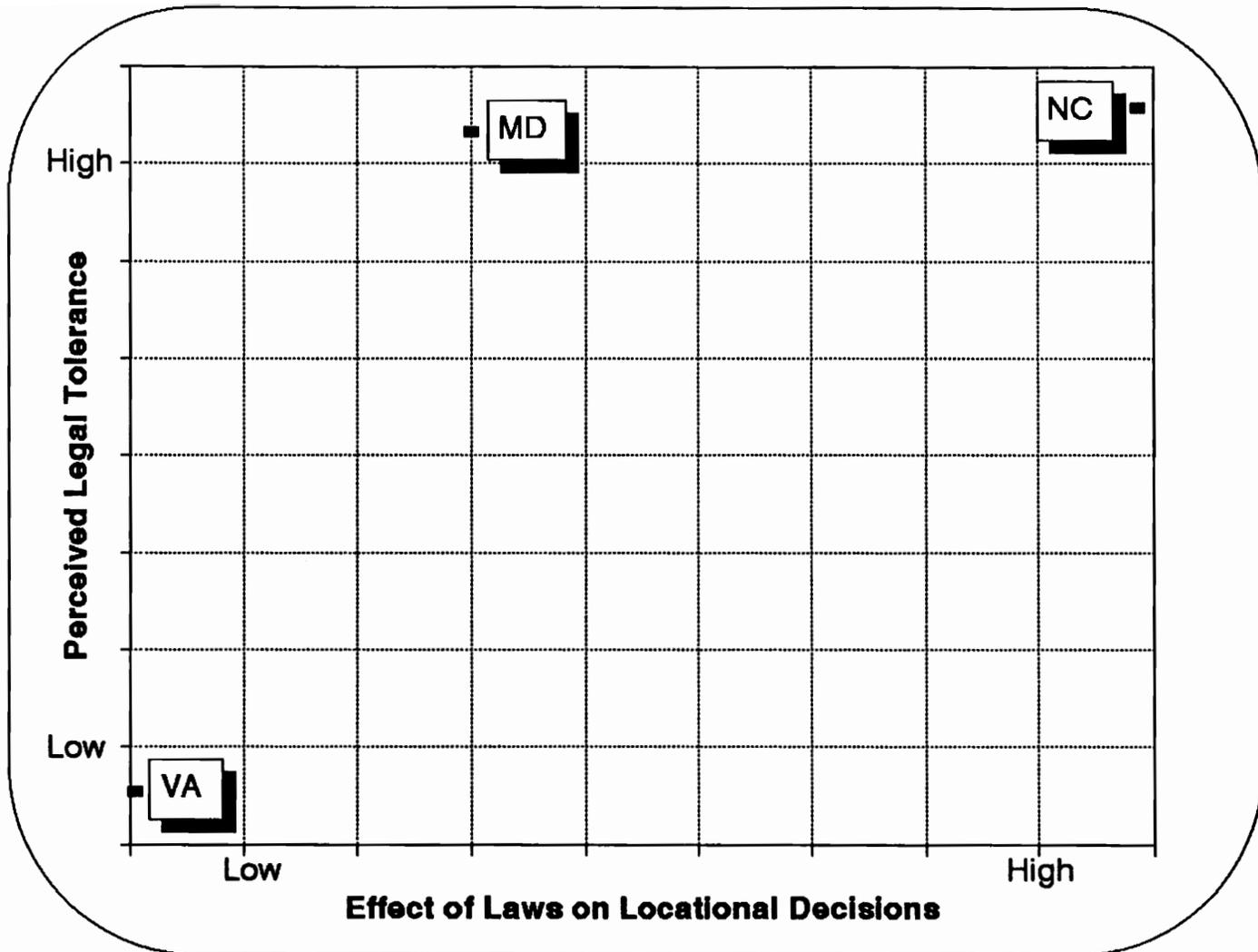
A more direct question, "How would you evaluate the influence of state chiropractic laws and/or policies in deciding on the location for your current practice?", yielded findings consistent with the previous, general question on locational behavior. Nineteen respondents in Maryland (34.5%), and 16 respondents in North Carolina (29.6%), circled "strong influence," compared with only six such responses (8.1%) in Virginia [Table 5.1]. State laws and policies reportedly did not influence locational preference at all for 21 respondents in Virginia (28.4%), nine respondents in Maryland (16.4%), and two respondents in North Carolina (3.7%).

TABLE 5.1 CHIROPRACTORS: INFLUENCE OF STATE LAWS AND POLICIES ON LOCATION

		Strong	Moderate	Not much	None
<b>Maryland</b>	(Pct.)	<b>34.5</b>	<b>20.0</b>	<b>29.1</b>	<b>16.4</b>
(n = 55)	(No.)	19	11	16	9
<b>North Carolina</b>	(Pct.)	<b>29.6</b>	<b>40.7</b>	<b>25.9</b>	<b>3.7</b>
(n = 54)	(No.)	16	22	14	2
<b>Washington,DC</b>	(Pct.)	<b>10.0</b>	<b>30.0</b>	<b>30.0</b>	<b>30.0</b>
(n = 10)	(No.)	1	3	3	3
<b>Virginia</b>	(Pct.)	<b>8.1</b>	<b>29.7</b>	<b>33.8</b>	<b>28.4</b>
(n = 74)	(No.)	6	22	25	21

$\chi^2 = 28.3$  (9 df),  $P < 0.05$ , significant

Laws and policies do not vary widely throughout the study area, but perceptions of legal tolerance do contrast noticeably among certain states, with statistical significance. To illustrate, chiropractors in North Carolina and Maryland reveal more favorable views toward legal tolerance than in Virginia and the District of Columbia [Table 5.2, Figure 5.1]. The former states have separate chiropractic boards, the latter do not. In other words, on a regulatory level, chiropractors have less autonomy in Virginia and the District, impacting perceptions of legal tolerance. In states with a greater degree of perceived legal tolerance, such as North Carolina or Maryland, laws and policies are more likely to be factors in choosing a location.



**FIGURE 5.1 CHIROPRACTORS: RELATION BETWEEN LEGAL TOLERANCE AND LEGAL CONSTRAINTS ON LOCATION.** X-axis computed from Table 5.1 as ratio of strong or moderate influence: little or no influence, and Y-axis computed from Table 5.2 as ratio of more tolerant: all other responses.

TABLE 5.2 CHIROPRACTORS: IN COMPARISON WITH OTHER STATES, IS THE LEGAL ATMOSPHERE IN YOUR STATE MORE OR LESS TOLERANT?

	More	Same	Less	Do Not Know*
<b>North Carolina</b> (Pct.)	46.2	38.5	7.7	7.7
(n = 52) (No.)	24	20	4	4
<b>Maryland</b> (Pct.)	45.5	36.4	7.3	10.9
(n = 55) (No.)	25	20	4	6
<b>Virginia</b> (Pct.)	13.3	34.7	40.0	12.0
(n = 75) (No.)	10	26	30	9
<b>Washington,DC</b> (Pct.)	9.1	27.3	45.5	18.2
(n = 11) (No.)	1	3	5	2

$\chi^2 = 41.1$  (6 df),  $P < 0.05$ , significant

\* column not included in  $\chi^2$  test

Whenever state laws and policies at least moderately influenced the choice of practice location, a survey question probed for the particular legal constraints. Respondents in Maryland, Virginia, and North Carolina frequently mentioned scope of practice and insurance [Appendix 2B]. Three respondents in Maryland (10.0%), and six respondents in North Carolina (15.4%), cited strong laws or policies that eliminate unqualified practitioners. Why would some chiropractors want stringent laws, such as educational and testing requirements? Two possible reasons: first, a qualified pool of practitioners can only reduce charges of quackery by critics, and lend credibility to chiropractic among the general public; and, secondly, some chiropractors might seek to reduce competition by promoting rigorous standards that apply to anyone seeking licensure.

None of the Virginia or District of Columbia chiropractors volunteered legal stringency as a pull factor.

### *INSURANCE*

Insurance laws are on the minds of many chiropractors, as illustrated by several open-ended responses [Appendices 2B, 2C, 2D], comments received on questionnaires, and responses to the following survey question, "How would you evaluate the influence of insurance laws in deciding on the location for your current practice?" Fifteen respondents in Maryland (28.8%) and nine respondents in North Carolina (16.7%) evaluated insurance laws as a "strong influence," as did 10 respondents in Virginia (13.2%) [Table 5.3]. Insurance laws reportedly had no influence at all on the locational preferences of 16 respondents in Maryland (30.8%), 25 respondents in Virginia (32.9%), and seven respondents in North Carolina (13.0%). These findings do not show any statistically significant differences among states.

TABLE 5.3 INFLUENCE OF INSURANCE LAWS ON THE LOCATION OF CHIROPRACTORS

		Strong	Moderate	Not much	None
<b>Maryland</b>	(Pct.)	<b>28.8</b>	<b>15.4</b>	<b>25.0</b>	<b>30.8</b>
(n = 52)	(No.)	15	8	13	16
<b>North Carolina</b>	(Pct.)	<b>16.7</b>	<b>35.2</b>	<b>35.2</b>	<b>13.0</b>
(n = 54)	(No.)	9	19	19	7
<b>Virginia</b>	(Pct.)	<b>13.2</b>	<b>30.3</b>	<b>23.7</b>	<b>32.9</b>
(n = 76)	(No.)	10	23	18	25
<b>Washington,DC</b>	(Pct.)	<b>8.3</b>	<b>8.3</b>	<b>33.3</b>	<b>50.0</b>
(n = 12)	(No.)	1	1	4	6

$\chi^2 = 16.7$  (9 df),  $P > 0.05$ , not significant

Chiropractors in the study area expressed particular concerns about insurance equality [Appendix 2C]. General concerns about insurance coverage, caps on payments, and workers' compensation figured less prominently. Managed care was mentioned by three respondents, in total. That number may rise, if states restructure health care according to the Clinton plan.

Some states might have easier transitions in impending reforms than other states. For example, samples from all states except North Carolina show that at least 60% of chiropractors are covered by HMOs or PPOs [Table 5.4]. Only 20 respondents in North Carolina (36.4%) circled coverage by HMOs or PPOs. However, respondents in each state complained that managed care programs only cover services by referral from biomedical providers, who usually act as gatekeepers in managed care programs. HMOs and PPOs mentioned by

respondents include Blue Cross/Blue Shield, MDIPA, Travelers, and Keycare.

TABLE 5.4 COVERAGE OF CHIROPRACTORS BY HMOS OR PPOS

	Pct.	No.
Washington, DC (n = 12)	66.7	8
Maryland (n = 55)	65.5	36
Virginia (n = 80)	60.0	48
North Carolina (n = 55)	36.4	20

$\chi^2 = 11.6$  (3 df),  $P < 0.05$ , significant

#### MOBILITY

A surprising number of DCs in the study area have practiced chiropractic for the same number of years "in total" as "in this county", with no statistically significant differences among states [Figure 5.2]. In Maryland, 28 chiropractors (50.0%) remain at their original practice locations. In Virginia, 43 respondents (52.6%) have not relocated. Similarly, 24 North Carolina chiropractors (45.3%) remain sedentary. These findings resemble data in the acupuncture survey, but differ in two key ways. First, the average chiropractor in the study area has been practicing longer than the average acupuncturist. Among Maryland and North Carolina practitioners, for example, DCs have practiced "in total" an average of approximately 11 and 12 years respectively, compared with

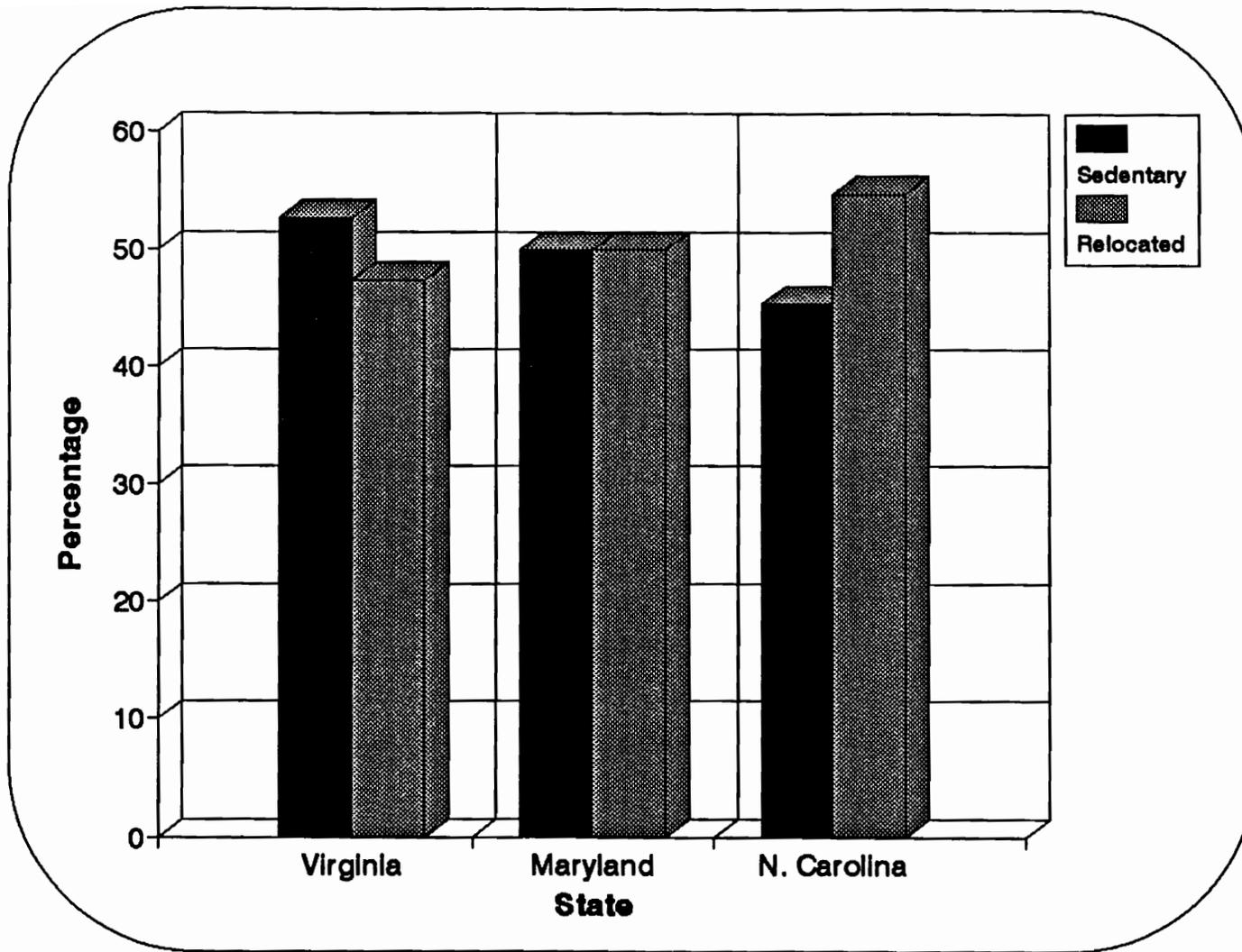


FIGURE 5.2 RELOCATION STATUS OF CHIROPRACTORS

only about seven years for each of the states' acupuncturists [Table 5.5]. Secondly, most chiropractors do not tend to relocate as time elapses.

For example, in Maryland, eight of 10 chiropractors, practicing at least 10 years, have not relocated. Of 21 having practicing at least 15 years, 14 (66.7%) have not relocated. In Virginia, 17 of 35 DCs (48.6%) remain sedentary after having practiced at least 10 years, and six of 14 (42.9%) have not relocated after having practiced at least 15 years. North Carolina also shows a similar pattern, i.e., the mobility of DCs who have practiced longer is similar to the mobility of the chiropractic population as a whole. It follows that other factors, besides time, must play a significant role in the relocation status of many chiropractors.

TABLE 5.5 TOTAL YEARS PRACTICING CHIROPRACTIC

		<=1	2-5	6-10	11-20	21-40	
<b>North Carolina</b>	(Pct.)	1.9	32.1	22.6	30.2	13.2	mean = 11.9
(n = 53)	(No.)	1	17	12	16	7	
<b>Maryland</b>	(Pct.)	-	30.4	35.7	25.0	8.9	mean = 11.0
(n = 56)	(No.)	-	17	20	14	5	
<b>Virginia</b>	(Pct.)	5.3	26.3	31.6	30.3	6.6	mean = 9.8
(n = 76)	(No.)	4	20	24	23	5	
<b>Washington,DC</b>	(Pct.)	9.1	18.2	63.6	9.1	9.1	mean = 7.4
(n = 11)	(No.)	1	2	7	1	1	

Legal issues, such as concerns about reciprocity or insurance equality, may impede mobility. However, unlike acupuncture, laws and policies among states do not vary strongly. Other issues need further examination in understanding relocation status -- in particular, many DCs and their patients hold differing views over the identity of chiropractic. This issue may impede mobility because a community's acceptance of the broad range of chiropractic is a gradual process. Many chiropractors must slowly build a practice by gaining more and more adherents to chiropractic as a full health care profession. In many cases, it can be especially difficult financially for these DCs to build new patient bases. Chiropractic's identity conflict can therefore lead to a lack of mobility for many DCs.

To understand the contrasting perceptions of chiropractic between many patients and DCs, consider the following: chiropractors in the study area overwhelmingly view the profession as a parallel system to biomedicine, acupuncture, and other forms of care. For example, one survey question read, "Should chiropractic be used for . . ." and then listed several categories. The survey did not propose a definition for chiropractic, so some practitioners may have answered for ancillary therapies, such as physiotherapy or nutritional counseling, in addition to spinal manipulative therapy. Nonetheless, the responses

show a profession whose identity often contrasts with the public's views about the scope of chiropractic.

In Maryland, Virginia, and North Carolina, approximately 75% or more believed that chiropractic should be used for "strengthening immunity" [Table 5.6]. Another category, "neonatal care," resulted in similar data [Table 5.6]. Also, over 80% of all DCs in the study area believed that chiropractic should be used for "prenatal care" [Table 4].<sup>19 20</sup> Despite the relative unity of the profession, chiropractic does have dissenters in its ranks, who argue that chiropractic should only be used for musculoskeletal problems.

TABLE 5.6 SHOULD CHIROPRACTIC BE USED FOR ...

		Strengthening immunity?*			Neonatal care?***			Prenatal Care?****		
		Yes	No	Not sure+	Yes	No	Not sure+	Yes	No	Not sure+
Virginia	(Pct.)	82.1	6.4	11.5	81.8	11.7	6.5	84.4	9.1	6.5
	(No.)	64	5	9	63	9	5	65	7	5
Maryland	(Pct.)	77.6	10.2	12.2	75.0	14.6	10.4	89.8	8.2	2.0
	(No.)	38	5	6	36	7	5	44	4	1
North Carolina	(Pct.)	74.5	9.8	15.7	78.8	7.7	13.5	86.3	9.8	3.9
	(No.)	38	5	8	41	4	7	44	5	2
Washington,DC	(Pct.)	66.7	8.3	25.0	66.7	25.0	8.3	72.7	27.3	-
	(No.)	8	1	3	8	3	1	8	3	-

\*  $\chi^2 = 2.0$  (3 df),  $P > 0.05$ , not significant

\*\*  $\chi^2 = 1.8$  (3 df),  $P > 0.05$ , not significant

\*\*\*  $\chi^2 = 2.3$  (3 df),  $P > 0.05$ , not significant

+ column not included in  $\chi^2$  test

Additional data support the notion that many DCs do not view chiropractic as a limited health care profession. A recent survey conducted by the NBCE (1993, p.59-61) revealed the most frequently seen conditions by chiropractors. On a daily basis, chiropractors routinely saw patients with vertebral subluxations and headaches. Some of the "often seen" conditions (once or twice a week, in descending order of frequency), such as osteoarthritis, high or low blood pressure, allergies, and obesity might surprise some readers. Certain "sometimes seen" conditions (once or twice a *month*, in descending order of frequency), including osteoporosis, carpal tunnel syndrome, asthma/emphysema, ear infections, pregnancy, acne, and diabetes, further reveal the breadth of contemporary chiropractic.

The identity conflict between patients and providers can constrain locational preference. At any location, many chiropractors must overcome skepticism on two levels. On one level, people in existing patient bases may or may not accept chiropractic as a full health care profession, to be utilized for arthritis, high blood pressure, asthma, or other conditions. On another level, several chiropractors told me that new patients usually view DCs only as limited providers for musculoskeletal problems. Until diverging views between many chiropractors and potential patients are

reconciled, a number of chiropractors will be less likely to move away from existing practices toward locations with relatively uncertain patient bases. Also, the financial costs of opening new practices, not to mention the money already invested in existing practices, serve as strong incentives to remain in the same location.

Certainly, other factors help explain why many chiropractors spend their entire careers in one county. For example, chiropractors might wish to stay in the same locations because of long-lasting friendships with other DCs and patients, or ties to other DCs and the community. Indeed, similar relationships exist for other health care professionals, such as among MDs and patients. Responses in Appendix 2A on reasons for location are also applicable, e.g., "Hometown/Residence," "Like the area," or "State laws and policies."

Legal requirements do influence the mobility of chiropractors, according to survey findings. One agree-or-disagree statement dealt specifically with the impact of legal requirements on mobility: "Other states' laws and/or policies affect my ability to relocate my practice to another state." In Virginia, 43 chiropractors (55.8%) agreed and 16 (20.8%) disagreed [Figure 5.3]. Results in Maryland and North Carolina reflected no statistically significant variation. Substantial portions in each state,

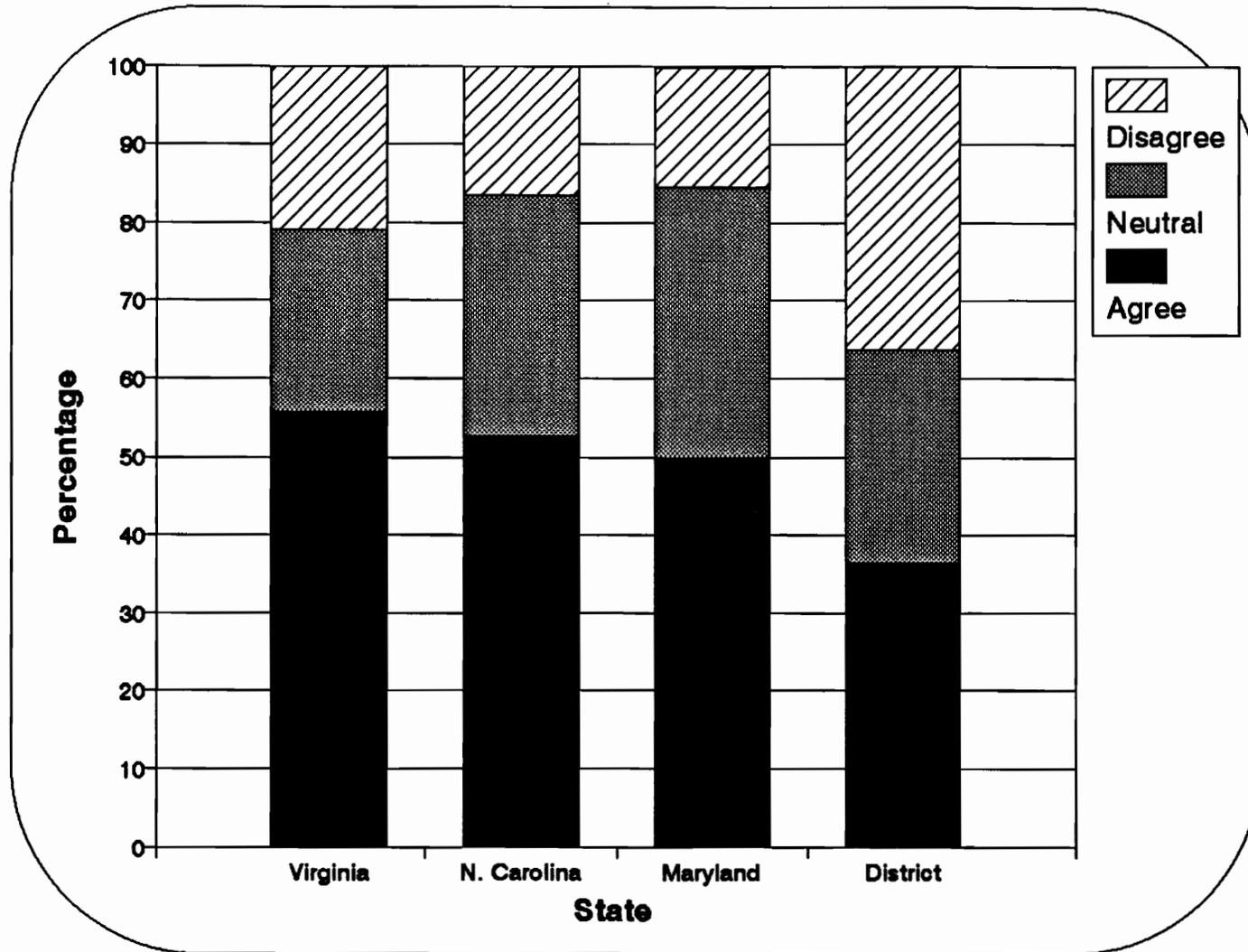


FIGURE 5.3 CHIROPRACTORS: OTHER STATES' LAWS OR POLICIES AFFECT MY ABILITY TO RELOCATE MY PRACTICE TO ANOTHER STATE

roughly one-quarter to one-third, were neutral in evaluating the above statement. These results seem less dramatic, and therefore less important, when considered in context.

To illustrate: a follow-up question probed for the extent to which legal constraints impacted mobility. Roughly one of three DCs in the study area, who had agreed with the previous statement, indicated a strong influence on mobility. The overwhelming majority perceived only a minor impact of legal constraints, for several possible reasons, including: the equal or greater importance of other issues, such as economic considerations and insurance coverage; or, as noted in the margins of several survey responses, many chiropractors simply have no plans to move, and therefore the legal atmosphere in other states does not influence their locational behavior. The fact that state laws and policies strongly influenced, or even prevented, relocation for some chiropractors does demonstrate a significant finding, laden with the caveat mentioned above.

Whenever legal requirements at least moderately affected the ability to relocate, a follow-up question probed for which particular laws or policies constrain mobility. Respondents in each state volunteered similar responses, such as testing requirements, scope of practice, reciprocity, and insurance equality [Appendix 2D]. Insurance equality only influenced the mobility of four

Virginia DCs (9.3%), compared with six DCs in North Carolina (19.4%), and nine DCs in Maryland (33.3%). The Virginia finding might be explained by the uncertain nature of insurance equality there. Such interstate variations also spell the need to explore the issue of mobility in greater detail with a larger sample.

A few respondents cited specific states that influence mobility. Of the 14 such responses in Virginia, four DCs cited Maryland, four North Carolina, four Florida, three Michigan, and two New York. Maryland and North Carolina DCs also cited both neighboring and distant states. In neighboring states, the lack of uniform testing requirements, coupled with concerns about reciprocity, often limit movement from one state to another.

A few respondents in the study area have dual practices, such as a chiropractor who practices in Maryland and Virginia, and another who practices in North Carolina and Virginia. Few respondents commute across state lines to practice chiropractic. Over 90% of chiropractors in Maryland, Virginia, and North Carolina practice in the same state in which they reside [Table 5.7]. Only three DCs in Maryland (5.8%) and Virginia (3.8%), and one in North Carolina, cross state lines to practice. The District of Columbia represents a special situation, with a workforce

consisting largely of chiropractors who commute from neighboring Maryland and Virginia.

TABLE 5.7 COMMUTE TO ANOTHER STATE TO PRACTICE CHIROPRACTIC?

Commuted from:	Yes	No
Washington, DC (Pct.) (n = 12) (No.)	66.7 8	33.3 4
Maryland (Pct.) (n = 55) (No.)	5.5 3	94.5 52
Virginia (Pct.) (n = 80) (No.)	3.3 3	96.3 77
North Carolina (Pct.) (n = 56) (No.)	1.8 1	98.2 55

$\chi^2 = 65.8$  (3 df),  $P < 0.05$ , significant

The most previous location, for respondents who have practiced elsewhere, usually included one of two variables: either DCs relocated from within the same state, or, in most cases, relocated from a non-abutting state. Movement of practices between states in the study area was rare, perhaps due to minor differences in legal constraints, insurance coverage, potential patient demographics, or, simply, advances in automobile and air travel that enable people to move long distances. A snapshot should help clarify the mobility patterns of DCs in the study area. In North Carolina, 10 DCs relocated from within the same state, three from neighboring Georgia, one from neighboring South Carolina, and 13 from non-abutting states, including two

from Washington, one from Australia, Kansas, Florida, New York, Pennsylvania, Massachusetts, Ohio, Illinois, Delaware, Minnesota, and New Mexico. North Carolina is indicative of other states, in that many DCs relocated from distant states.

No particular counties or cities stand out as previous practice locations, with a few major exceptions in Maryland. Consider the counties some DCs moved away from. Of 11 DCs who relocated from within the state, five relocated from Baltimore County or City, and three relocated from Anne Arundel County, which includes Annapolis. Only one relocated from Montgomery County, near the District of Columbia. Yet the Baltimore area and Montgomery County include approximately 20 to 25% each of all respondents in Maryland, with a slightly lower percentage in Anne Arundel. Why have more DCs been moving away from Baltimore and Annapolis than from Montgomery County? The answer is symptomatic of general trends in the Maryland population as a whole: Montgomery County has been expanding in population due to economic development and proximity to the District of Columbia. The chiropractors are merely responding to general trends of growth, which result in comparable percentages of DCs in the Baltimore area and Montgomery County.

Previous research in medical geography, conducted by Gesler (1988), suggests that the location of chiropractic practices in North Carolina is negatively associated with rurality and positively associated with higher incomes. This was the case even though Gesler's study also found that these chiropractors tend to locate their practices in more rural and less affluent areas than MDs. To state the obvious: many DCs choose to practice in population centers in order to gain a large patient base. The higher the income level, the more DCs might earn in building financially successful practices. Also, the short supply of biomedical doctors in many rural areas leads to less competition.

The enforcement of state laws and policies does not reveal noticeable differences among states in the study area. When asked to evaluate legal tolerance in the county of current practice, over 70% in each state circled, "about the same," or "do not know." To a limited degree, some chiropractors do perceive differences within states [Table 5.8]. However, the responses may be due to error, if some providers considered "county" to read "country."

**TABLE 5.8 CHIROPRACTORS: IN COMPARISON WITH OTHER COUNTIES IN YOUR STATE, IS THE LEGAL ATMOSPHERE IN YOUR COUNTY MORE OR LESS TOLERANT?**

		More	Same	Less	Do Not Know
<b>North Carolina</b>	(Pct.)	12.7	52.7	12.7	21.8
(n = 55)	(No.)	7	29	7	12
<b>Maryland</b>	(Pct.)	9.1	72.7	1.8	16.4
(n = 55)	(No.)	5	40	1	9
<b>Virginia</b>	(Pct.)	1.3	60.3	10.3	28.2
(n = 78)	(No.)	1	47	8	22

### *SOCIAL DEMOGRAPHICS*

Chiropractic data lend some credence to the existence of social variations among states. A lower percentage of Maryland and District of Columbia DCs is married, and a slightly greater percentage is single, than in North Carolina or Virginia.

The survey did not ask for the ethnic composition of chiropractors, but a recent study by the NBCE (1993) indicates that white, non-Hispanics represent 95.5% of all U.S. chiropractors, as well as 86.5% of all chiropractic patients in the country.<sup>21</sup>

Fifty-one respondents in North Carolina (91.1%) and 63 respondents in Virginia (79.7%) are male [Table 5.9]. In Maryland, only 39 DCs (69.6%) in the sample are male, a statistically significant contrast. According to the NBCE findings, 86.7% of all chiropractors in the country are male. The NBCE study also showed that 59.3% of chiropractic patients in the country are female.

The average chiropractor, according to my survey results, is approximately 40 years old, regardless of the state of practice [Table 5.10]. The distribution of practitioners among age groups does not call attention to any important variations among states.

TABLE 5.9 GENDER OF CHIROPRACTORS

		Male	Female
<b>North Carolina</b>	<b>(Pct.)</b>	<b>91.1</b>	<b>8.9</b>
(n = 56)	(No.)	51	5
<b>Virginia</b>	<b>(Pct.)</b>	<b>79.7</b>	<b>20.3</b>
(n = 79)	(No.)	63	16
<b>Washington,DC</b>	<b>(Pct.)</b>	<b>75.0</b>	<b>25.0</b>
(n = 12)	(No.)	9	3
<b>Maryland</b>	<b>(Pct.)</b>	<b>69.6</b>	<b>30.4</b>
(n = 56)	(No.)	39	17

$\chi^2 = 8.15$  (3 df),  $P < 0.05$ , significant

TABLE 5.10 AGE OF CHIROPRACTORS

		<=30	31-40	41-50	51-60	60+	
<b>North Carolina</b>	<b>(Pct.)</b>	<b>13.0</b>	<b>51.9</b>	<b>16.7</b>	<b>13.0</b>	<b>5.6</b>	<b>mean = 40.9</b>
(n = 54)	(No.)	7	28	9	7	3	
<b>Washington,DC</b>	<b>(Pct.)</b>	<b>-</b>	<b>58.3</b>	<b>33.3</b>	<b>8.3</b>	<b>-</b>	<b>mean = 39.7</b>
(n = 12)	(No.)	-	7	4	1	-	
<b>Maryland</b>	<b>(Pct.)</b>	<b>20.0</b>	<b>50.9</b>	<b>20.0</b>	<b>-</b>	<b>9.1</b>	<b>mean = 38.9</b>
(n = 55)	(No.)	11	28	11	-	5	
<b>Virginia</b>	<b>(Pct.)</b>	<b>16.5</b>	<b>51.7</b>	<b>27.8</b>	<b>10.1</b>	<b>1.3</b>	<b>mean = 38.9</b>
(n = 79)	(No.)	13	35	22	8	1	

$\chi^2 = 1.7$  (3 df),  $P > 0.05$ , not significant

In an unrelated finding, hardly any chiropractors were born outside of the U.S.A. In North Carolina, for example, all 56 respondents indicated that they were born in this country. I did not ascertain the specific state of birth, due to an error in the placement of a follow-up question.

#### *THE CHIROPRACTIC PRACTICE*

The prevalence of group versus solo practices hardly varies among states. In Virginia, 24 DCs (32.0%) have group practices, compared with 14 DCs in Maryland (26.4%), and 13 DCs in North Carolina (24.1%). Colleagues practiced chiropractic and, in some cases, massage, acupuncture, nutrition, biomedicine, or other forms of care.

Maryland chiropractors are slightly more likely to practice other forms of care in addition to chiropractic, such as physiotherapy and nutritional counseling. Such adjunctive therapies may or may not fall within the definition of chiropractic, depending on the views of individual chiropractors. In talking with chiropractors and reviewing comments on surveys, I learned that DCs do not all agree on a common definition for chiropractic. Many DCs strictly limit the definition to spinal manipulation and adjustment. Still others incorporate ancillary therapies in the definition of chiropractic. In North Carolina, to

mention an extreme example, one respondent even referred to acupuncture as part of chiropractic.

Five North Carolina chiropractors, including the one just mentioned, practice acupuncture in addition to chiropractic. Four of the five consider legal constraints toward acupuncture as an influence on locational preference. If the data are extrapolated to the entire population, it is possible that upwards of 35 chiropractors provide at least some acupuncture services in North Carolina. At present, no listing or compilation of listings can provide an accurate count of chiropractor acupuncturists.

#### *DISCUSSION*

Among chiropractors, no simple relation has emerged to relate state laws and policies to the number of practitioners per capita (Figure 5.4). In the study area, Maryland has the lowest ratio of licensed chiropractors per capita (1:10,216) and North Carolina has the highest ratio (1:6,499) (FCLB, 1993). Yet data from both states indicate extremely similar findings on several issues, such as perceptions of legal tolerance and the influence of legal requirements on locational behavior. Therefore, issues other than legal requirements inhibit some chiropractors from moving to Maryland. A few possible economic variables include concerns about insurance coverage for potential

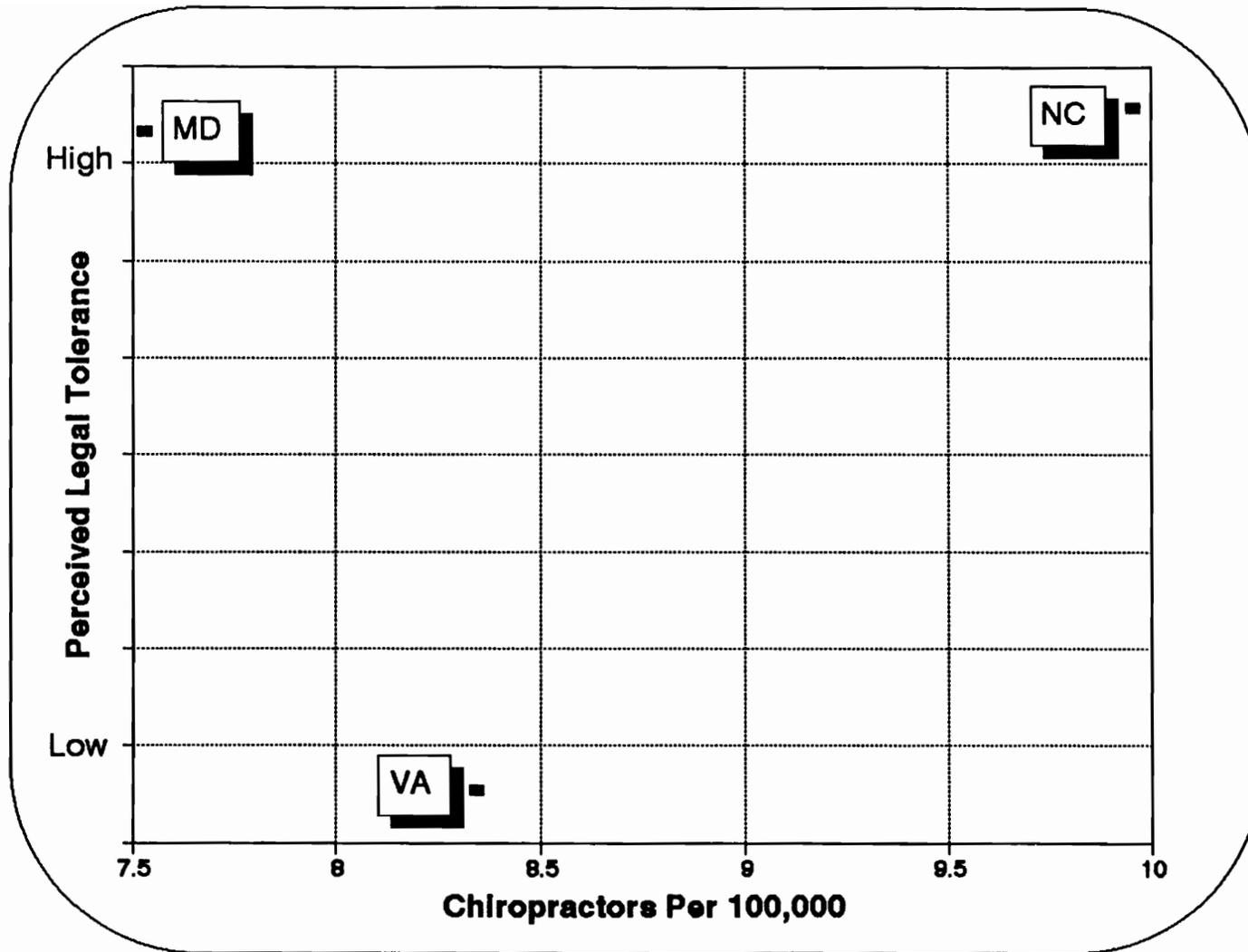


FIGURE 5.4 RELATION BETWEEN LEGAL TOLERANCE AND CHIROPRACTORS PER 100,000. X-axis computed from data in Table 2.2, and Y-axis computed from Table 5.2 as ratio of more tolerant: all other responses.

patients, cost of malpractice insurance, costs associated with opening a practice, income level of the population, and state taxes. Size of the population centers and educational background of potential patients may also play a role. However, the survey does not provide enough information for analysis of these possible factors.

By comparison, neighboring Virginia has a larger population of chiropractors than Maryland, but comparatively few of Virginia's respondents regarded the legal atmosphere as more tolerant than in other states. Numerous chiropractors in the state did consider laws and policies as a moderate influence on locational decisions, but only two actually volunteered legal issues as an influence.

With so few contrasts in state laws and policies, one important distinction arises within the study area: Maryland and North Carolina have separate chiropractic boards, and the other states do not. It is no small coincidence that DCs in Maryland and North Carolina perceive greater legal tolerance than DCs in Virginia and the District of Columbia, two jurisdictions whose regulations are overseen by Boards of Medicine. It is also no small coincidence that issues relating to legal tolerance disproportionately influence the locational behavior of DCs in Maryland and North Carolina.

Concerns about insurance and insurance equality contribute to the relative attractiveness of states for

chiropractic professionals. Such concerns surfaced throughout the study area as influences on locational behavior. Many DCs appeared eager to share their views on insurance coverage.

One Virginia chiropractor explained that, in focusing on laws and not on economic concerns, the survey "missed the point" of why people choose certain practice locations:

What a person is looking for is that part or small area of the city or county they are going to practice in that has the highest per capita income, the largest stable, not transient population (regardless of their income level) and the greatest longevity [of the population] at their jobs. These people have two things: disposable income (because chiropractic isn't covered by all insurances) and generally a better quality insurance than a transient population would have.

It would be interesting, in examining the scope of chiropractic, to learn more about patterns of utilization. A study conducted by the Rand Corporation (Shekelle and Brook, 1991) showed that 82% of all chiropractic patient visits are repeat visits. The Rand data reveal that

patients visit chiropractors a mean of 11.5 times per year and a median of seven times per year. Such figures may not be indicative of the study area for two reasons. First, Rand focused on six urban and rural locations in the country, none of which was in the study area. Secondly, the researchers found significant variations in utilization patterns among locations in their study area.

Through repeat visits, many patients eventually view chiropractic as appropriate health care for a broad range of conditions, such as diabetes, obesity, or pregnancy. I have been in chiropractic offices that have pamphlets readily available recommending chiropractic for pregnancy, nutrition, high blood pressure, and other conditions. Patients may naturally become more receptive to the full range of chiropractic after being satisfied with the care of their DC.

Patients who visit chiropractors repeatedly within a year must have at least some means to pay for expanded care, whether through out-of-pocket expenditures or insurance. A closer look at the insurance industry, regarding variations in requirements for coverage, could add greatly to understanding the accessibility and utilization of chiropractic. In general, subsequent studies should examine the issue of affordability in more detail.

A Maryland chiropractor commented on the impact of insurance coverage on access to chiropractic: "We have to turn a great number of patients away because their health insurance (especially HMOs + corporate-based plans) does not include chiropractic coverage." In North Carolina, a chiropractor provided the following written thoughts about the problems inherent in insurance coverage for chiropractic care:

In my location it is very difficult to obtain access to HMO's + PPO's. I have been told "we have a chiropractor we refer to" but no name is given when requested. My patients who belong to these plans have difficulty obtaining chiropractic care, most of them pay cash to see me. Why cash? Because they are refused referral to a chiropractor by their health plan's Dr.

Many DCs understandably criticize referral requirements. Another North Carolina chiropractor argued, "There should not be 'medical gatekeepers' directing patients with regard to chiropractic. Not all MDs understand what chiropractic physicians do."

Something similar can be said for lawmakers, patients, and even for chiropractors who disagree over the scope of

chiropractic: not all of them share the same views of what chiropractors do. Through a better understanding of chiropractic and its spatial characteristics, researchers can better understand the profession's uncertain status as a limited health care profession, as well as the financial and competitive constraints involved in building a patient base. This chapter therefore serves as an exploratory underpinning for future research.

**Chapter 6**  
**Homeopathy: After the Decline**

This chapter examines the findings of a small survey of homeopaths and thus provides a basis for comparing the position of these therapists with acupuncturists and chiropractors. The results are indicative of homeopaths in general, and come at a time when many advocates of homeopathy claim a resurgence of the profession in this country. These results do not meet the same statistical requirements as in previous chapters, due to the small population of homeopaths in the study area.

Table 6.1 shows the breakdown of practitioners among states. Two Maryland homeopaths hold additional practices in the District of Columbia, and another who works in Maryland also practices in Indiana. Virginia's respondents include two dentists, otherwise absent among respondents in the study area. The survey also includes six veterinary homeopaths. The total number of survey participants is 18, including one respondent who sent in a partially completed questionnaire.

TABLE 6.1  
 PROFESSIONAL HOMEOPATHIC RESPONDENTS BY STATE  
 (n = 18)\*

	No. surveyed:
Virginia	6
Maryland	5
District of Columbia	5
North Carolina	4

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\* some respondents practice in more than one state

Recall for a moment the chapter on acupuncture. Acupuncturists, generally speaking, can be divided into opposing camps of MDs and non-MDs. The reader may logically, but incorrectly, assume that similar tension threatens the future of homeopathy, since homeopaths also come from differing educational backgrounds. For example, the 18 professional providers in the homeopathy study include six veterinarians, five biomedical doctors, three PhDs, two naturopaths, two dentists, two nurses, and one chiropractor.<sup>22</sup> Approximately three unlicensed homeopaths also participated in the study. Yet I found no evidence that the wide variety of educational backgrounds leads to any major internal conflict.

I have two explanations for the lack of serious conflict between MD, naturopathic, nurse, lay, and other homeopaths. First, homeopathy has made major progress in recent years in overcoming internal conflicts, despite a history of sharp divisions over acceptable and unacceptable

procedures, such as classical versus complex homeopathy. Such progress can be attributed, at least in part, to the work of the National Center for Homeopathy and other organizations seeking to promote homeopathy in the U.S. Secondly, because of the near absence of homeopaths in the study area, homeopaths often work with each other to provide access to care. For example, lay homeopaths often take advantage of the opportunity to learn from professional homeopaths. A professional homeopath even remarked to a local study group I attended that many lay homeopaths serve a useful purpose in providing needed access to care.

To illustrate difficulties in access, from my own location in Blacksburg, Virginia, I would need to travel two to three hours by car in order to visit the nearest professional homeopath. A number of patients in the area contact a provider in California, who practices homeopathy over the telephone for chronic and acute care. Others rely mainly on homeopathic study groups to learn more about acute care for themselves and their families.

#### *LOCATION AND MOBILITY*

Nearly half of all respondents located their practices near their hometowns or residences [Table 6.2]. Responding to a direct question, state laws and policies strongly or moderately influenced five of 16 respondents. One North

Carolina homeopath, who had been practicing before and during the state ban on homeopathy, cited the attraction of a few existing practices in naturopathy and homeopathy: "I felt that if they were [legally] ok -- I would be as well." Ironically, one of the homeopaths mentioned as legally safe was later ordered, in a ruling by the North Carolina Supreme Court, to stop practicing homeopathy. After the order, which followed an eight year court battle, he moved his practice to Virginia.

TABLE 6.2  
HOMEOPATHS: FACTORS MOST INFLUENCING LOCATION  
(n = 18)

Responses:	No. surveyed:
Near hometown, residence, or family	8
Close to mountains	3
Community interest in holistic health	3
Group practice with other holistic providers	2
Concerns about laws and policies	2
Lifestyle/living standards	2
Near cities; size	2
Close to clientele	2
Location of university/universities	2
ALL OTHER	4
NO RESPONSE	4

Only two of 18 homeopaths, both dentists, have not relocated from their original practices. The longest practice in one location is 25 years, by a homeopath who has been practicing for 60 years. The median length of practice is 10 years. Homeopaths have practiced in their respective counties for a median length of six years, with four out of

18 respondents having practiced one year or less in their current counties.

If the homeopathy findings are at all indicative of other providers with similar, educational backgrounds, such as biomedical veterinarians, general practitioners, dentists and nurses, then most primary care providers may have relatively mobile populations, in comparison with chiropractors and acupuncturists. However, it requires a leap of some magnitude to assume that, if a finding is true for homeopaths, it must also be true for biomedical providers. Also, these results do not indicate any unusual mobility trends that might distinguish homeopaths from the general public.

All homeopathy respondents except two listed the county of residence as well as the county of practice. Without exception, homeopaths held practices in the same counties in which they lived. Of 13 respondents indicating the last county of practice, five relocated from another county within the same state; five relocated across state lines between the District, Maryland, or Virginia; two had never held previous practices; and one relocated from abroad. The five remaining homeopaths offered no response, either because the information was too personal, or, more likely, because the question on previous practices was near the end of the survey.

Eleven out of 18 respondents believed that state laws and/or policies toward homeopathy influence their ability to relocate to another state. In explaining restrictions on mobility, homeopaths volunteered concerns about laws and policies affecting naturopathy, nutrition, and veterinary homeopathy, as well as North Carolina's recent ban on homeopathy. Four homeopaths specifically mentioned North Carolina as a state whose laws affect mobility. Most states have no laws toward homeopathy, so mobility often depends on the ability to be licensed, or legally accepted, in another health care profession, such as biomedicine, naturopathy, and chiropractic.

Insurance laws played an insignificant role for most homeopaths, with only two indicating a moderate or strong influence on locational preference. One respondent wrote, "If insurance would pay I would move my practice to that place or location." Nine respondents reported no insurance coverage for their services, and two offered no response. No homeopaths reported receiving coverage from HMOs, but two reported at least occasional coverage from PPOs. Medicare also covers homeopathic services for three practitioners, even though Medicare does not officially cover homeopathy. "I am reimbursed for my services as a physician, not as a homeopath," one practitioner wrote.

*PRACTICE AND SOCIAL DEMOGRAPHICS*

The range of therapies practiced and utilized by homeopaths in the study lends weight to the claim that homeopathy is "complementary" health care. Thirteen respondents practice other forms of health care besides homeopathy, two do not, and three supplied no response. Most common non-homeopathic therapies, among survey respondents, include nutrition (4), biomedicine (4), herbal medicine (3), naturopathy (2), dentistry (2), and acupuncture (2) [Table 6.3]. The same number of respondents (13 out of 15) seek other forms of care, besides homeopathy, for themselves or their families. Table 6.4 shows non-homeopathic care sought by homeopaths or their families, including chiropractic (9), biomedicine (3), osteopathy (3), and naturopathy (2). The comparatively large number of homeopaths utilizing chiropractic care could mean one of two things: either homeopaths suffer spinal related injuries en masse, or, in the case of at least some homeopaths, they utilize chiropractic as a full, not limited, health care profession. The link between homeopathy and other AHCs strengthens its practitioners' legal interests in promoting medical pluralism.

TABLE 6.3  
OTHER FORMS OF CARE PRACTICED BY HOMEOPATHS  
(n = 13)

Responses:	No. surveyed:
Nutrition	4
Biomedicine	4
Herbal medicine	3
Naturopathy	2
Dentistry	2
Acupuncture	2
Chiropractic	1
Hydrotherapy	1
Stress	1
Biofeedback	1
Anthroposophic	1
Glandular	1
NO RESPONSE	1

TABLE 6.4  
OTHER FORMS OF CARE SOUGHT BY HOMEOPATHS OR THEIR FAMILIES  
(n = 13)

Responses:	No. surveyed:
Chiropractic	9
Biomedicine	3
Osteopathy	3
Naturopathy	2
Acupuncture	1
NO RESPONSE	1

In response to the question, "Approximately what percentage of your practice is devoted to homeopathy?", the mean response was 70.6%, and the median 85%. Eight respondents devote at least 90% of their practices to homeopathy, and only three devote less than 50% of their practices to homeopathy. Two did not respond to the question.

When asked the percentage of patient visits conducted by telephone, the mean response was 23.7%, and the median only 10%. Two veterinarians reported more than 90% of their practices are conducted by telephone. No other homeopaths in the study area conduct more than half of their patient visits by telephone. Three participants did not respond, perhaps due the controversial nature of the question. The responses can be misinterpreted easily to indicate that homeopaths conduct business much like 1-900 lines. In reality, two issues need mentioning. First, one homeopath volunteered that he conducts patient visits by telephone for "follow-up only." Perhaps several other homeopaths do the same. Secondly, as mentioned above, patients often drive hours in order to visit a homeopath. The obstacle of distance may preclude more in-person visits.

Sixteen respondents indicated the specific type of homeopathy practiced. All reported "classical homeopathy," and two also reported "homotoxicology." One of the latter identified "electroacupuncture voll," a controversial machine used for diagnosis. The fact that all respondents practice classical, Hahnemannian homeopathy demonstrates unity in the profession, although it is possible that some practitioners may adhere to stricter definitions of "classical" homeopathy than others.

The age of practitioners represents another example of intraprofessional similarities. Of 17 homeopaths reporting their ages, 14 are between the ages of 40 and 50. The oldest homeopath is 88, and the youngest is 30. The median age is 42, and the mean, not including the outlier of 88, is 42.8. Obviously, many homeopaths grew up in the 1960's, and questioned the status quo in biomedical health care. In questioning commonly accepted procedures, most homeopaths oppose forced immunizations because of concerns about effectiveness and safety. The possibility of raising children free of immunizations, antibiotics, and other seemingly invasive care presents a major benefit from the perspective of many practitioners and patients.

Professional homeopaths have credentials to practice other forms of professional health care, due to the need for licensure and education in another health care field. Several homeopaths received training in professional health care at some of the most prestigious universities in the country, such as Georgetown, Cornell, and Stanford. Also, three survey respondents received their educations abroad, in Western European countries like Belgium, Switzerland, and France, where homeopathy is more popular.

Homeopaths listed birthplaces such as New York (4), the District of Columbia (2), Virginia (2), and foreign countries (3). It is possible that New York serves as a

node for the diffusion of many homeopaths and other health care professionals to other states. Perhaps the large population of New York, combined with the high cost of living there, leads some providers to seek other locations in which to practice. Unfortunately, for comparative purposes, the acupuncture and chiropractic surveys did not produce accurate findings on the same question.

Respondents in the homeopathy study include 10 males and seven females, with no gender or other personal data for the one incomplete questionnaire. A survey question about marital status did not produce any distinctive findings, with 12 homeopaths reporting being married, four single, and one divorced. Also, 12 respondents have solo practices, four have group practices, and two did not disclose their types of practice.

#### *LAY HOMEOPATHS*

I had the opportunity to discuss the influence of legal constraints with a lay homeopath. She told me that she selected a particular county of practice based on the tolerance of authorities toward unlicensed homeopathy. Her knowledge of homeopathy appeared to rival the knowledge of professional homeopaths, due at least in part to participation in training courses taught by professional homeopaths. She was not a survey participant because,

through a change of addresses or NCH listings, I had not contacted her study group.

I received six surveys from lay homeopaths, contacted through correspondence with homeopathic study group leaders. Three of the surveys might be from the intended group of lay homeopaths, i.e., unlicensed homeopaths with professional practices, but I have no way of verifying such anonymous information. The remaining three respondents misunderstood the intention of the questionnaire, and do not have practices in homeopathy.

The intended respondents indicated a moderate or strong influence of legal matters on locational behavior. All three were female, between ages 39 and 44, practicing classical homeopathy. They chose their practice locations based on the location of their residences. To protect the anonymity of lay homeopaths, I will not disclose the states or counties of practice.

#### *DISCUSSION*

A larger sample of homeopaths needs to be considered in future research, encompassing most or all of the United States. Only then can researchers test this chapter's tentative findings, specifically that most homeopaths have relocated from their original counties of practice, are in their forties, and practice classical homeopathy.

Comparative studies with Germany, France, or other post-industrial countries might enhance an understanding of why homeopathy has lost recognition and popularity among the general public in the U.S.

Although homeopathy no longer poses a competitive threat to biomedicine in this country, a few respondents commented about problems with the biomedical community. One homeopath wrote:

I have a clinic in the lower level of my home, due to need for a low profile so minimum harrassment will occur - my colleagues have been severely harrassed by AMA.

Another homeopath expressed concern about media tactics intended to depict homeopathy in a bad light:

I have been deceived by a conventional Physician who is no longer practicing medicine. He came to me as a patient with a fake name with an accomplice posing as his nephew, who was equipped with a hidden camera.

A popular television news program aired the camera footage "without any reference to context," according to the homeopath.

North Carolina's recent prohibition of health care that does not meet "acceptable and prevailing standards" has led several respondents to consider legal constraints before choosing a state in which to practice. The change in North Carolina's homeopathy laws is not likely to cause an influx of practitioners, due to the deserved reputation for intolerance toward AHC there.<sup>23</sup> Homeopaths did not mention any perceived differences between the legal frameworks toward homeopathy in Maryland, Virginia and the District of Columbia, but some respondents expressed concerns about laws toward other forms of health care.

Despite concerns about North Carolina's prohibition, locational preferences of homeopaths are often determined by issues that have, at one time or another, affected everyone's locational preferences: family, hometowns, and schools or universities. Is that surprising? In a way, yes. For a health care profession whose providers have been derided by the media and biomedical providers as quacks, homeopaths have decidedly unspectacular spatial characteristics. One can only expect that the next hidden camera investigation of homeopathy will reveal. . . a

doctor, a patient, and, other than a different approach from  
biomedicine, nothing out of the ordinary.

**Chapter 7**  
**Conclusions and Implications**

*THE PROPOSITION*

AHC involves numerous and unique forms of health care. The levels of legal acceptance, types of therapies, and locational behavior of providers do not remain constant from one form of AHC to another. Survey findings also vary by particular profession and state of current practice, enabling researchers to explore a range of possible explanations for geographical characteristics. In general, my study supports a conclusion that legal constraints do influence the locational behavior of alternative providers, but analyses of specific categories of AHC paint a more complex picture by raising a spectrum of issues.

Certain issues surface repeatedly as influences on locational preferences of alternative providers, regardless of the particular AHC profession. For example, family considerations, the location of a hometown or residence, and the potential demand for services are important variables for acupuncturists, chiropractors, and homeopaths. In general, state laws and policies also influence the location and mobility of alternative providers, to at least a limited degree.

Legal constraints lead to varying spatial patterns within AHC by creating, in many cases, barriers to movement even between neighboring states. For example, most Maryland acupuncturists, who are non-MDs, could not legally practice in Virginia until earlier this year. Most Virginia acupuncturists, who are MDs, also face restrictive legal barriers, such as educational and licensing requirements, upon moving to Maryland. However, general statements about the location and mobility of acupuncturists usually do not hold true for chiropractors, homeopaths, and other providers. Each group, and sometimes, sub-group, of alternative providers has distinct geographies, due to contrasting levels of legal acceptance, demographic variables, economic considerations, and other issues.

Concerning acupuncture, I postulated that state laws and policies strongly influence the choice of practice location for non-MDs in search of legal status. The results of my study support such an assertion, and also demonstrate internal conflicts that threaten to destroy the profession, i.e., contrasting educational requirements for MDs and non-MDs, and differing perceptions over what constitutes legitimate health care. Spatially, MD acupuncturists appear less influenced by acupuncture laws and policies than non-MDs, the location of existing biomedical practices being more important. The geographical characteristics of non-MD

acupuncturists, however, reveal a greater influence of laws and policies.

Concerning chiropractic, survey data support my assertion, from the introductory chapter, that legal constraints do not dramatically impact the locational preferences of DCs. However, DCs do express strong concerns over variations in insurance equality and the lack of uniform testing requirements. As a result, state laws and policies influence the mobility of chiropractors. The limited mobility seems, in the case of chiropractic, symbolic of a profession that has an identity conflict with the general public: most of the public tend to think that DCs serve as limited providers, but many DCs consider themselves full health care providers. Time spent building a practice and winning new adherents might be wasted by relocating to another county or state, and starting the process anew.

Now consider homeopathy. As anticipated in the introductory chapter, survey results show that North Carolina's prohibition of homeopathy until recently has impeded practitioners from moving there. Beyond this finding, no legal differences concerning homeopathy separate states from one another in the study area, i.e., Maryland, Virginia, the District of Columbia and now North Carolina permit, but do not license or register, professional

homeopathy. With legal status, and the absence of laws and policies toward homeopathy in all but a handful of states, homeopaths face few legal restrictions on locational preference.

#### *THE MODEL*

The contrasting spatial characteristics can be explored in further detail by postulating a dynamic model of AHC acceptance [Figure 7.1]. This model includes at least three transitional phases, referred to here as levels A, B, and C. Hypothetically, a newly introduced form of AHC eventually evolves from outlaw status to full legal complementarity with biomedicine. Each passing level of legal acceptance corresponds with variations in locational behavior.

Acupuncture is best represented by Level A, an introductory phase demonstrated by two key characteristics: the recent introduction of the profession in the U.S., and deep internal divisions. First of all, the profession is gaining gradual legal acceptance as it becomes more established in the U.S. As noted in Chapter 2, acupuncture was apparently introduced in this country as recently as the 1930's, and did not expand beyond "an underground phenomenon" until the 1970's (Kaplan, 1991, p.7). Secondly,

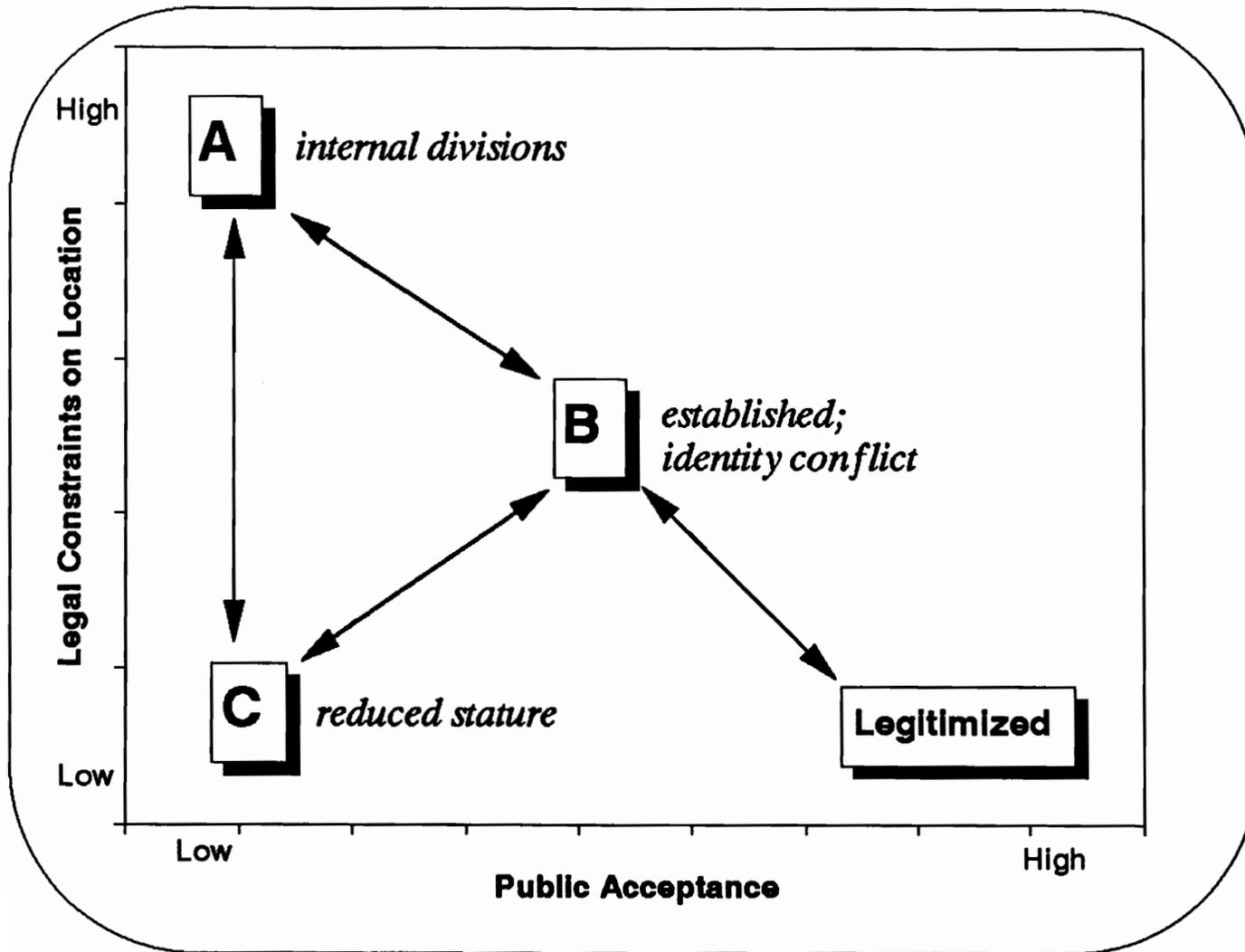


FIGURE 7.1 MODEL OF THE PROGRESSION OF AHCs.

referring to disunity, the profession is faced with internal conflicts, exacerbated (or, conversely, resolved) by the progress of a sub-group of providers toward legitimation, particularly on the legal front. Future forms of AHC in the U.S. must cope with similar legal and internal issues, although not necessarily with the same intensity of dispute. In Level A, state laws and policies have a strong bearing on the locational behavior of alternative providers in search of legal status.

Chiropractic is in Level B. DCs have, in large part, overcome the destructive internal divisions of Level A, but still have identity conflicts. Chiropractic does not yet hold full legal complementarity with biomedicine. The profession stands today as an established, and seemingly entrenched, form of AHC. Indeed, chiropractic is the main alternative competitor to biomedicine. Some variations in state chiropractic laws and policies at this level do exist, particularly concerning scope of practice and insurance equality. These and other issues influence the locational behavior of many DCs to a minor extent compared with Level A. From here, chiropractic could move in one of three directions: decline in popularity and legal acceptance; increased stature as a parallel system to biomedicine; or, like osteopathy, fusion with biomedicine. Such a fusion effectively would end chiropractic's alternative status, as

happened with osteopathy. However, like osteopathy, chiropractic would then be subsumed and dominated by biomedicine.

Now consider Level C, representing the aftermath of a decline in a previously established profession, such as homeopathy. Homeopathy has, at different stages in history, exhibited trends currently characteristic of acupuncture and chiropractic, including: internal conflicts amid initial popularity and growing legal acceptance (Level A: acupuncture), and, in general, legal and public acceptance as a legitimate alternative to biomedicine (Level B: chiropractic). Legal constraints can influence locational preference in rare cases, such as prohibitive policies. Otherwise, the spatial distribution of providers does not show any distinct relationship with state laws and policies. Because of the Wilk case (1987) and the resulting diminished opposition from biomedicine, Level B AHCs will likely have less pressure toward Level C or A than previously.<sup>24</sup>

Alternative providers at all "levels" obviously undergo legal and public setbacks, so the reality is not as straightforward as the model. Admittedly, I risk oversimplification by limiting analysis to the health systems discussed in this project. However, the model provides a framework for understanding the path toward legal

acceptance, as well as for making interprofessional comparisons.

#### *POLICY IMPLICATIONS*

Policymakers, public health officials, and academic researchers have largely considered health care the exclusive domain of biomedicine, without examining accessibility and utilization patterns of AHC. Relatively unexplored and crucial issues affecting alternative health services include legal acceptance, legitimation, scope of practice, and the unity or divisiveness within AHC professions. This study calls attention to these and other legal and social issues that help shape the accessibility and availability of acupuncture, chiropractic, homeopathy, and, by inference, other forms of AHC. Because of the documented utilization of AHC in this country, AHC issues should be included in the national debate over health care reform.

Ironically, state licensure, which increases the stature of acupuncture, chiropractic, and, in a few states, homeopathy, can also threaten the future of such professions. For example, the diversity inherent in acupuncture can in some cases be synthesized to one dominant ideology or theory, such as medical acupuncture, TCM, or branches thereof, governing licensure requirements. The

result can be stifling to practitioners who may have to learn new therapies, such as herbology, before being allowed to practice acupuncture.

Legitimation can exist independently of state licensure or registration. In North Carolina, non-MD acupuncturists continued to practice, find patient bases, and even dominate over MD acupuncturists in total number of resident acupuncturists, despite legal prohibition. The actual legitimation of AHC cannot take place exclusively at the state, national, or international level. Instead, communities view providers with respect or disdain based on views at the local level, not merely the views of policymakers and state legislators (Last, 1990). Nonetheless, insurance companies and the state play decisive roles in legitimizing AHC.

Without legal sanction, and without sanction of insurance companies, many alternative providers must base practices on out-of-pocket expenditures of their patients. One drawback to insurance coverage for chiropractors (and biomedical providers) is that insurance companies all too often dictate "appropriate" and "inappropriate" care. Especially in the case of MDs and DOs, a third party payor dictates what to consider scientifically valid, regardless of individual fluctuations in care. Progress in testing the scientific validity of AHC, such as the studies conducted

through NIH, can lead to a similar narrowing of accepted procedures based only on proven science. AHC therefore runs the risk of becoming depersonalized, if diagnoses and therapies are eventually decided, or overly influenced, by insurance companies. The cost of legitimation may even, in some cases, outweigh the benefits.

Recent events depict a pattern of increased legal acceptance for AHC, e.g., Virginia and North Carolina's de jure approval of non-MD acupuncture, and North Carolina's somewhat abrupt reversal of policy toward homeopathy. The legal progress of AHC is enhanced by organized lobbying efforts, growing public acceptance, and the Wilk case's<sup>25</sup> resonance among biomedical opponents to AHC. In addition, any attempt to take away the rights of patients and providers to seek alternative care has been greeted by staunch opposition. One recent example is the organized effort, even in the U.S. Senate, against the FDA's proposed restrictions on vitamin supplements (Weisskopf, 1993). The only means to reverse the trend favoring AHC is through an assault on the validity of AHC, but fear of being sued ties the hands of the biomedical community.

#### *CONJECTURE*

There are some convergences between AHC and biomedicine. The nutrition and exercise movements, now

adopted by biomedicine, can be linked to long-standing advice on health in the AHC movement. Also, numerous MDs today consider the mind and body as inseparable components in health, a major tenet of many alternative providers. There are also convergences between different forms of AHC, such as acupuncture and chiropractic, when one provider practices both.

A comparison between acupuncture and chiropractic is instructive. As mentioned earlier, chiropractic has an image in this country as a limited health care profession, mainly used for back pain. Similarly, acupuncture has an identity for many people in the U.S. as exclusively, or mainly, a therapy for pain relief. However, acupuncture is not destined to be classified by the general public or lawmakers as a limited health care profession. Acupuncturists cite the promise of broader applications in areas like detoxification from drug dependence, mental health, and chronic conditions. If states, insurance companies, and the general public further recognize the potential for acupuncture, Asian health systems may eventually reach or exceed a similar level of legal acceptance to chiropractic's established status.

*MEDICAL GEOGRAPHY*

This paper considered some of the key questions in medical geography (see Meade, Florin & Gesler, 1988, p. 6-8): "Why is a phenomenon distributed in a particular way?"; "Why are facilities and businesses located where they are?"; and "Why do people move in certain directions for certain distances?" I would like to add an additional question to the list: What influence does policy have on the spatial characteristics of health care providers?

Generally speaking, medical geography can be divided into two subcategories: the ecology and distribution of diseases; and health services research, focusing on accessibility and utilization. By examining the accessibility of health services, this study is rooted in the latter tradition. Other geographical work on health services includes Shannon and Dever's Health Care Delivery: Spatial Perspectives (1974); Eyles and Woods' The Social Geography of Medicine and Health (1983); and Joseph and Phillips' Accessibility and Utilization (1984). These and other works in medical geography employ a range of approaches, such as cartographic, modeling, behavioral, welfarist, and structuralist (Jones and Moon, 1987).

Within health services research, several geographers have sought to understand the locational decisions of health care providers. Joseph and Bantock (1984) reported on the

trend of MDs to locate away from rural areas, which results in limited access to health care in many communities. Gober and Gordon (1980) examined the dichotomy between MD location in profitable areas and the need for services in communities of lower socio-economic status. Even more related to my thesis is Gesler's paper (1988), which examined the locational behavior of chiropractors in North Carolina. My research builds on the tradition of all of these works by considering key variables such as location, mobility, accessibility, and the individual decisions of practitioners. Joseph and Phillips (1984, see p. 61-91) provide a useful listing of locational studies in health services research, as does Earickson et al. (1989, see p. 434).

Although medical geography can be traced at least as far back as John Snow's famous map of cholera in London in 1854, health services research has only been around 30 or 40 years. Explorations into AHC within health services research have even more recent origins, dating back only about 15 years. Within that brief time, most of the research into AHC has focused on less developed countries, e.g., Good (1987), and Stock (1981). AHC in the U.S. has been a neglected topic, with some notable exceptions, such as the works of Gesler (1988), Caplan and Scarpaci (1989), and Anyinam (1990). I have three possible explanations for

the scarcity of geographical research into AHC in the U.S.: first, there are only a few hundred medical geographers in the country; secondly, the relevant subfield of medical geography, health services research, has not been around long enough to realize its full potential; and, third and perhaps most importantly, academic researchers are only now becoming more aware that, in this country, the general public exercises a broad range of choices in health care, depending on circumstances. Reminders of the utilization of AHC can be found in the publication of the New England Journal of Medicine study (Eisenberg et al., 1993), and the creation of the Office of Alternative Medicine at NIH.

The scope of research in medical geography is broad, and its frame of reference includes not just geography, but anthropology, sociology, epidemiology, biostatistics, public policy, and numerous other disciplines. The fusion of various disciplines within and beyond medical geography serves as its greatest strength and potential. Future research can cross the divide between the physical and social sciences, leading to broader understandings of all aspects of AHC. In addition, recent innovations in automated mapping and geographic information systems (GIS) make geographers particularly well-suited to conducting in-depth research of AHC. GIS, for example, can overlay and generate new data about issues such as the location of

alternative services, routing of patient transport, and AHC's reported capabilities in combating disease. Medical geographers, whether they focus mainly on the ecology of diseases, health services research, or both, have a tremendous amount to contribute to studying AHC.

#### *CLOSING COMMENTS*

My own (biomedical) doctor had an interesting comment about health care. He said that, in the U.S., insurance companies focus so exclusively on 'science' that they forget that health care is also an art. I agree. The future of AHC, like the future of biomedicine, depends on the fusion of hard, cold science with indistinct, unexplainable art, in order to individualize care. That AHC may (or may not) fall closer to one end of the spectrum is no vice. Instead, it points the way to possible lessons for biomedicine, acupuncture, chiropractic, and homeopathy regarding patient care, belief systems, merging therapies of one health care profession with another, and debate over the following, elusive question: What constitutes legitimate health care? It also points the way to further in-depth studies to ascertain the political, social, and scientific underpinnings of AHC, as well as the variations of types of therapies.

The geographical, interdisciplinary approach used here has proved useful in exploring state laws and policies by raising numerous issues influencing accessibility. The series of surveys have also proved useful in gathering and analyzing new data. These successes, and my suggestions for future research in previous chapters, should help researchers conduct follow-up projects. A larger study, possibly at the national scale, is needed to provide more reliable conclusions. Any such study will doubtless raise an array of issues at least as vast as those raised in this study.

1. In the New England Journal of Medicine study, Eisenberg et al. (1993) included self-help groups and commercial weight-loss programs as types of AHC. These two types of therapies were utilized, respectively, by 2% and 4% of respondents. The inclusion of such therapies is highly debatable, but underscores the difficulty involved in deeming particular therapies "unconventional." Even relaxation techniques (13%) and massage (7%) are not always viewed by patients as "unconventional," so the inclusion of such therapies in the study should not go unnoticed. In the same issue, Campion (1993, p.282) remarked that "judgments are blurred" unavoidably between AHC and biomedicine.

2. The first documentary, The Mystery of Qi, was based on Moyers' interviews with Dr. David Eisenberg about Chinese health care. Eisenberg was also the principal author of the New England Journal of Medicine article concerning the prevalence of AHC in the U.S.

3. This term also includes acupuncture practiced by people who are not osteopaths (DOs). The more commonly used term, "non-physician acupuncture," confounds some acupuncturists, who consider themselves to be physicians in Chinese medicine.

4. French hepatologists held a press conference in 1976 to absolve the liver of responsibility for many diseases. Since then, it has become "unfashionable" to blame a wide array of diseases on the liver, according to Lynn Payer, author of Medicine and Culture (1988).

5. The District of Columbia became the first jurisdiction in the country to permit non-MD acupuncture, in 1972, albeit under severe restrictions. Acupuncturists could not receive compensation directly from patients, but served as salaried employees of biomedical doctors. Bowing to pressure from the biomedical community, the law was changed to prohibit non-MD acupuncture in 1974 (McRae, 1980).

6. Additionally, the status of MD acupuncturists is "undetermined" in five states, and "no information" was provided to the National Acupuncture Foundation (1993, p. 104-105) for three states.

7. An equivalent of licensure can come in the form of registration or certification, in some states. For example, Maryland registers non-MD acupuncturists, who then hold the title, "R.Ac." (registered acupuncturist).

8. The conflict between MDs and non-MDs resulted in a landmark court case in 1980. Forty-six plaintiffs claimed that Texas laws and regulations interfered with the availability of acupuncture services. Texas had prohibited non-MD practice, while requiring no minimum qualifications for MD acupuncturists. A federal district court found that the effective unavailability of names of qualified providers significantly burdened the right of patients to seek acupuncture. According to the ruling, patients have the right to obtain acupuncture and other health services, under the right to privacy (Andrews v. Ballard, 1980; McRae, 1982).

Andrews found provisions of the Texas Medical Practice Act and of the medical board rules unconstitutional, but prescribed no alternative approach to laws and regulations. The case has had little or no influence on state laws and policies, even in Texas. The scope of Andrews is limited to the rights of patients, not the rights of providers. The case does not guarantee that non-MDs have a right to practice acupuncture, but sets a valuable precedent for plaintiffs wishing access to acupuncture and other forms of AHC (McRae, 1982).

9. Moxibustion is the term used for burning herbs to apply heat.

10. The reader might find it interesting that the Asheville acupuncturist, mentioned earlier, now serves as one of the members of the Acupuncture Licensing Board.

11. A report by the federal government substitutes the following words for the more popularly used "insurance equality": "equal standing for payment with all other eligible health care providers in any health insurance sold to the public" (U.S. Department of Health and Human Services, 1990, XV-2).

12. In the study area, some respondents skipped questions, and therefore "n" (number of respondents for a particular question) may not equal the number of survey respondents in total.

13. In Appendix 1A:  $\chi^2 = 26.44$  (3 df),  $P < 0.05$ , significant contrasts over the reported influence of state laws and policies.

14. In North Carolina, one of the returned surveys includes only partial responses, and thus, for much of the data, "n" is at least one less than 37.

15. Some respondents provided only partial answers on educational background, so the actual figures for education at TAI, UCLA, or Asian schools is most likely higher.

16. I used the term "type," rather than "style," of acupuncture. However, acupuncturists have personally told me that the question was easily understandable. The overwhelming majority of responses and interstate variations support this view.

17. As in the previous chapter, the number of respondents for each question will be delineated by "n," which may be less than the number of survey respondents in total.

18. In Appendix 2A:  $\chi^2 = 8.2$  (3 df),  $P < 0.05$ , significant contrasts over the reported influence of state laws and policies.

19. The survey did not ask practitioners if they actually broke the law by practicing obstetrics. Instead, the question probed only for the opinions of practitioners.

20. Several respondents decided not to answer such controversial questions, for at least two possible reasons. First, some respondents may have been concerned that the findings could be used to misrepresent chiropractic. Secondly, some respondents may have felt constrained by the available choices of "yes," "no," and "not sure."

21. The NBCE study used several methods to determine the ethnic origin of patients. For the purpose of this study, I am only interested in the raw data. On a 4-point scale, white-non-Hispanics represented a 3.46. I divided 3.46 by 4 to find the appropriate percentage.

22. Some homeopaths hold multiple degrees in professional health care, and thus the total count of degrees surpasses the number of practitioners.

23. The Guess case showed North Carolina to be biased not just against homeopathy, but against AHC in general. As noted in Chapter 2, the ruling stated that patients did not have a "fundamental right to receive unorthodox medical treatment" (393 S.E.2d 834, N.C. 1990).

24. The most striking example of biomedicine's influence on the delegitimation of AHCs is the Flexner Report on accreditation of universities, discussed in Chapter 2. As a result of the report, most homeopathic universities ceased teaching homeopathy, thereby diminishing the stature of the profession.

25. In Wilk v. AMA, a federal judge ruled that the AMA had violated the Sherman Antitrust Act by engaging in anticompetitive acts to destroy chiropractic. The case is discussed in Chapter 2.

**APPENDICES**

**APPENDIX A  
ACUPUNCTURE IN 1993**

**[Questionnaire]**

# 針灸調查

## ACUPUNCTURE IN 1993

**A survey about the location of its practitioners,  
with regard to state laws and policies.**

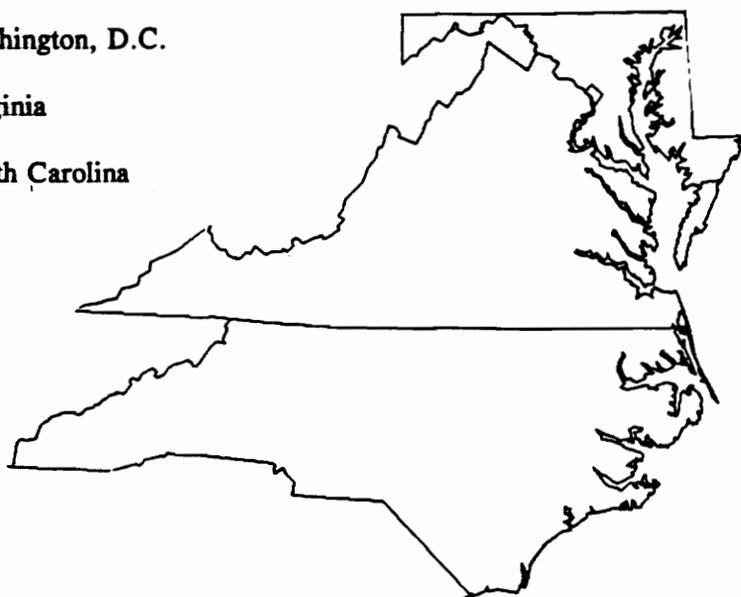
This effort is part of a study on the practice of complementary health care in. . .

Maryland

Washington, D.C.

Virginia

North Carolina



Please answer all questions, unless otherwise noted. If a response falls within a shaded area, please skip to the specified question. If you wish to make clarifications, please use the space in the margins or a separate sheet of paper.

Return to:  
Department of Geography  
Virginia Tech  
Blacksburg, Virginia 24061

A. One of the most important parts of this study has to do with the location of acupuncture practices. So, please answer a couple of questions about your location.

A-1 In what state do you currently practice acupuncture?  
(Circle the number of your answer)

- 1 MARYLAND
- 2 VIRGINIA
- 3 NORTH CAROLINA
- 4 OTHER . . . (specify) \_\_\_\_\_

A-2 In what county do you currently practice acupuncture?  
(Specify your answer)

\_\_\_\_\_

A-3 What factors most influenced your decision to locate your practice there? (Specify)

B. Next, we would like to learn about the influence, or lack of influence, of state acupuncture laws and policies on your location.

B-1 How would you evaluate the influence of state acupuncture laws and/or policies in deciding on the location for your current practice? (Circle number of your answer)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE GO TO
- 4 NO INFLUENCE AT ALL - QUESTION B-3 -

B-2 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

B-3 Please evaluate the following statement: "Other states' acupuncture laws and/or policies affect my ability to relocate my practice to another state." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 NEITHER AGREE NOR DISAGREE
- 4 SOMEWHAT DISAGREE GO TO
- 5 DISAGREE - QUESTION B-7 -

B-4 Are you referring to a specific state in the above question?  
(Circle number)

- 1 YES. . . Which state(s)? \_\_\_\_\_
- 2 NO

B-5 How do the other states' acupuncture laws or policies affect your ability to relocate your practice to another state? (Circle number)

- 1 PREVENT RELOCATION
- 2 STRONGLY LIMIT RELOCATION
- 3 SOMEWHAT LIMIT RELOCATION
- 4 OTHER. . . (specify) \_\_\_\_\_

B-6 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

B-7 Do you commute to a different state than your place of residence in order to practice acupuncture? (Circle number)

- 1 YES
- 2 NO GO TO QUESTION B-9a

B-8 Please evaluate the following statement: "I commute to the other state because it has a more tolerant legal atmosphere towards acupuncture." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 NEITHER AGREE NOR DISAGREE
- 4 SOMEWHAT DISAGREE
- 5 DISAGREE

B-9a In comparison with other states, do you consider the legal atmosphere towards acupuncture in the state in which you currently practice to be. . . (Circle number)

- 1 MORE TOLERANT
- 2 ABOUT THE SAME
- 3 LESS TOLERANT
- 4 DO NOT KNOW

B-9b In comparison with other counties in the state, do you consider the legal atmosphere towards acupuncture in the county in which you currently practice to be. . . (Circle number)

- 1 MORE TOLERANT
- 2 ABOUT THE SAME
- 3 LESS TOLERANT
- 4 DO NOT KNOW

B-10 Please evaluate the following statement: "Within this state, some counties have a more flexible legal atmosphere than other counties towards acupuncture." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 DO NOT KNOW
- 4 SOMEWHAT DISAGREE GO TO
- 5 DISAGREE QUESTION C

B-11 How would you evaluate the influence of legal variations in deciding on the county for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE GO TO  
 4 NO INFLUENCE AT ALL \* QUESTION C \*

B-12 In particular, which variations are you referring to in the above question? (Describe their impact on you)

C. Now, we would like to learn about the influence, or lack of influence, of insurance laws on your location.

C-1 Which of the following insurance organizations covers any health care costs related to your current practice in acupuncture? (Circle all appropriate responses.)

- 1 HMO. . . (specify) \_\_\_\_\_
- 2 MEDICARE/MEDICAID \_\_\_\_\_
- 3 PPO. . . (specify) \_\_\_\_\_
- 4 OTHER INSURANCE \_\_\_\_\_
- 5 NO INSURANCE COVERAGE
- 6 NO COMMENT

C-2 How would you evaluate the influence of insurance laws in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE GO TO  
 4 NO INFLUENCE AT ALL \* QUESTION D \*

C-3 In particular, which insurance laws are you referring to in the above question? (Describe their impact on you)

D. Next, we would like to ask you some questions about other forms of health care besides acupuncture. Again, we are interested in learning about the influence, or lack of influence, of state laws and policies on your location.

D-1 What type of practice do you have? (Circle number)

- 1 GROUP. . . How many in the practice? \_\_\_\_\_

2 SOLO  
 3 HMO \* GO TO QUESTION D-5 \*  
 4 OTHER. . . (specify) \_\_\_\_\_

D-2 Do your colleagues practice some form(s) of health care, such as allopathy or chiropractic, that differ from those in your own practice? (Circle number)

1 YES. . . Which form(s)? \_\_\_\_\_

2 NO GO TO QUESTION D-5 <

D-3 How would you evaluate the influence of state laws and/or policies towards the form(s) of care in question D-2 in deciding on the location for your current practice? (Circle number)

1 STRONG INFLUENCE

2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE GO TO QUESTION D-5 <

4 NO INFLUENCE AT ALL

D-4 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-5 Do you practice only acupuncture, or do you also practice other forms of health care? (Circle number)

1 ALSO OTHER FORMS. . . (specify) \_\_\_\_\_

2 ONLY ACUPUNCTURE GO TO QUESTION D-6 <

D-6 How would you evaluate the influence of state laws and/or policies towards the form(s) of care in question D-5 in deciding on the location for your current practice? (Circle number)

1 STRONG INFLUENCE

2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE GO TO QUESTION D-6 <

4 NO INFLUENCE AT ALL

D-7 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-8 In seeking health care, do you or your immediate family use non-acupuncture forms of health care, such as allopathy or chiropractic? (Circle number)

1 YES. . . Which form(s)? \_\_\_\_\_

2 NO GO TO QUESTION D-11 <

D-9 How would you evaluate the influence of state laws and/or policies towards the form(s) of health care in question D-8 in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE  
 2 MODERATE INFLUENCE  
 3 NOT MUCH OF AN INFLUENCE GO TO  
 4 NO INFLUENCE AT ALL QUESTION D-11

D-10 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-11 How would you evaluate the influence of health requirements for school children in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE  
 2 MODERATE INFLUENCE  
 3 NOT MUCH OF AN INFLUENCE GO TO  
 4 NO INFLUENCE AT ALL QUESTION E

D-12 In particular, which requirement(s) are you referring to in the above question? (Describe their impact on you)

E. For statistical purposes, we would like to ask a few additional questions about the practice of acupuncture.

E-1. Approximately what percentage of your practice is devoted to acupuncture? (Specify)

\_\_\_\_\_ %

E-2 What type(s) of acupuncture do you practice? (Specify)

\_\_\_\_\_

E-3 Do you feel that acupuncture should be used for primary care? (Circle number)

- 1 YES  
 2 NO  
 3 NOT SURE

F. Finally, we would like to ask some questions about yourself to help interpret the results.

F-1 Your sex: (circle number)

- 1 MALE  
 2 FEMALE

F-2 Your . . . age: \_\_\_\_\_ marital status: \_\_\_\_\_

F-3 In what country were you born? (Circle number)

- 1 USA. . . What state? \_\_\_\_\_  
 2 OTHER. . . (specify) \_\_\_\_\_

F-4 In what county and state do you currently reside? (Specify)

county: \_\_\_\_\_ state: \_\_\_\_\_

F-5 Please list all states in which you are actively licensed or equivalent to practice professional health care, as well as the date(s) of licensure or equivalent. (Specify)

State                      License                      Year of Licensure

F-6 Besides those listed in the above question, do you hold any other active licenses in professional health care? (Circle number)

- 1 YES. . . Which license(s)? \_\_\_\_\_  
 2 NO

F-7 Please list all degrees and training in professional health care, including where you received the training, and the date(s) of graduation or equivalent. (Specify)

<u>Degree</u> <u>or Other Training</u>	<u>University</u> <u>or Program</u>	<u>Location</u>	<u>Year</u>
---	--	-----------------	-------------

F-8 How long have you practiced acupuncture: in total? \_\_\_\_\_

in this state? \_\_\_\_\_ in this county? \_\_\_\_\_

F-9 Beginning with your most recent practice, at what locations have you practiced acupuncture or other forms of professional health care? (Specify)

County/State                      From (Year)                      To (Year)

F-10 May we contact you for further information about your responses? (Circle number)

- 1 YES. . . How may we contact you?  
 2 NO

Is there anything else that you would like to add about laws or policies, or about factors influencing your location? If so, please make your comments here or on a separate sheet of paper.

Also, we are interested in learning more about issues affecting access to health care. Any comments about access that you think will help in future efforts will be greatly appreciated.

---

謝謝

*Thank you for your participation. If you would like a copy of the findings, please print your name and address on the back of the return envelope. We will make sure that you receive a copy.*



**APPENDIX B  
CHIROPRACTIC IN 1993**

**[Questionnaire]**

## CHIROPRACTIC IN 1993

**A survey about the location of its practitioners,  
with regard to state laws and policies.**

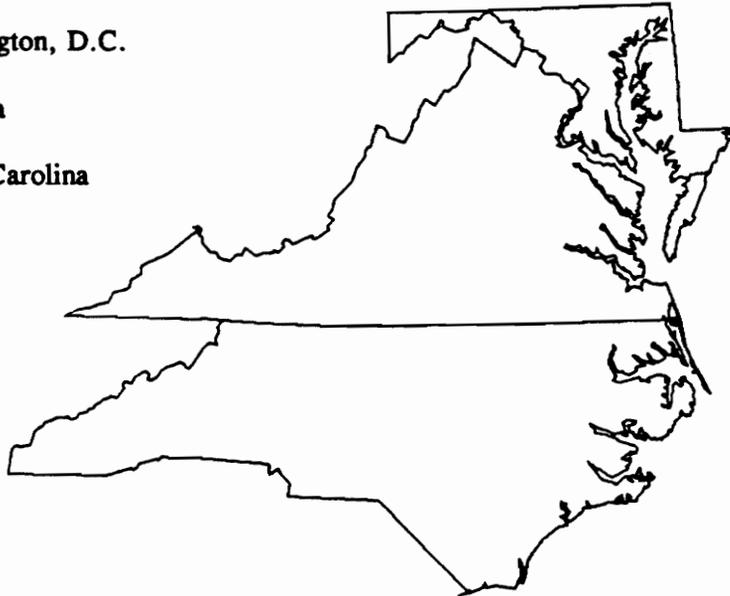
This effort is part of a study on the practice of complementary health care in. . .

Maryland

Washington, D.C.

Virginia

North Carolina



Please answer all questions, unless otherwise noted. If a response falls within a shaded area, please skip to the specified question. If you wish to make clarifications, please use the space in the margins or a separate sheet of paper.

Return to:  
Department of Geography  
Virginia Tech  
Blacksburg, Virginia 24061

A. *One of the most important parts of this study has to do with the location of chiropractic practices. So, please answer a couple of questions about your location.*

A-1 In what state do you currently practice chiropractic?  
(Circle the number of your answer)

- 1 MARYLAND
- 2 VIRGINIA
- 3 NORTH CAROLINA
- 4 OTHER . . . (specify) \_\_\_\_\_

A-2 In what county do you currently practice chiropractic?  
(Specify your answer)

\_\_\_\_\_

A-3 What factors most influenced your decision to locate your practice there? (Specify)

B. *Next, we would like to learn about the influence, or lack of influence, of state chiropractic laws and policies on your location.*

B-1 How would you evaluate the influence of state chiropractic laws and/or policies in deciding on the location for your current practice? (Circle number of your answer)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE GO TO
- 4 NO INFLUENCE AT ALL QUESTION B-3

B-2 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

B-3 Please evaluate the following statement: "Other states' chiropractic laws and/or policies affect my ability to relocate my practice to another state." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 NEITHER AGREE NOR DISAGREE
- 4 SOMEWHAT DISAGREE GO TO
- 5 DISAGREE QUESTION B-3

B-4 Are you referring to a specific state in the above question?  
(Circle number)

- 1 YES. . . Which state(s)? \_\_\_\_\_
- 2 NO

**B-5** How do the other states' chiropractic laws or policies affect your ability to relocate your practice to another state? (Circle number)

- 1 PREVENT RELOCATION
- 2 STRONGLY LIMIT RELOCATION
- 3 SOMEWHAT LIMIT RELOCATION
- 4 OTHER. . . (specify) \_\_\_\_\_

**B-6** In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

**B-7** Do you commute to a different state than your place of residence in order to practice chiropractic? (Circle number)

- 1 YES
- 2 NO → GO TO QUESTION B-9a ←

**B-8** Please evaluate the following statement: "I commute to the other state because it has a more tolerant legal atmosphere towards chiropractic." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 NEITHER AGREE NOR DISAGREE
- 4 SOMEWHAT DISAGREE
- 5 DISAGREE

**B-9a** In comparison with other states, do you consider the legal atmosphere towards chiropractic in the state in which you currently practice to be. . . (Circle number)

- 1 MORE TOLERANT
- 2 ABOUT THE SAME
- 3 LESS TOLERANT
- 4 DO NOT KNOW

**B-9b** In comparison with other counties in the state, do you consider the legal atmosphere towards chiropractic in the county in which you currently practice to be. . . (Circle number)

- 1 MORE TOLERANT
- 2 ABOUT THE SAME
- 3 LESS TOLERANT
- 4 DO NOT KNOW

**B-10** Please evaluate the following statement: "Within this state, some counties have a more flexible legal atmosphere than other counties towards chiropractic." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 DO NOT KNOW
- 4 SOMEWHAT DISAGREE
- 5 DISAGREE → GO TO QUESTION C ←

B-11 How would you evaluate the influence of legal variations in deciding on the county for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE GO TO  
 4 NO INFLUENCE AT ALL • QUESTION C •

B-12 In particular, which variations are you referring to in the above question? (Describe their impact on you)

C. Now, we would like to learn about the influence, or lack of influence, of insurance laws on your location.

C-1 Which of the following insurance organizations covers any health care costs related to your current practice in chiropractic? (Circle all appropriate responses.)

- 1 HMO. . . (specify) \_\_\_\_\_
- 2 MEDICARE/MEDICAID \_\_\_\_\_
- 3 PPO. . . (specify) \_\_\_\_\_
- 4 OTHER INSURANCE \_\_\_\_\_
- 5 NO INSURANCE COVERAGE
- 6 NO COMMENT

C-2 How would you evaluate the influence of insurance laws in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE GO TO  
 4 NO INFLUENCE AT ALL • QUESTION D •

C-3 In particular, which insurance laws are you referring to in the above question? (Describe their impact on you)

D. Next, we would like to ask you some questions about other forms of health care besides chiropractic. Again, we are interested in learning about the influence, or lack of influence, of state laws and policies on your location.

D-1 What type of practice do you have? (Circle number)

- 1 GROUP. . . How many in the practice? \_\_\_\_\_

2 SOLO  
 3 HMO GO TO QUESTION D-3  
 4 OTHER. . . (specify) \_\_\_\_\_

D-2 Do your colleagues practice some form(s) of health care, such as allopathy or acupuncture, that *differ* from those in your own practice? (Circle number)

1 YES. . . Which form(s)? \_\_\_\_\_

2 NO GO TO \_\_\_\_\_

QUESTION D-5 -

D-3 How would you evaluate the influence of state laws and/or policies towards the form(s) of care in question D-2 in deciding on the location for your current practice? (Circle number)

1 STRONG INFLUENCE

2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE

GO TO

4 NO INFLUENCE AT ALL

QUESTION D-5 -

D-4 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-5 Do you practice only chiropractic, or do you also practice other forms of health care? (Circle number)

1 ALSO OTHER FORMS. . . (specify) \_\_\_\_\_

2 ONLY CHIROPRACTIC

GO TO QUESTION D-8 -

D-6 How would you evaluate the influence of state laws and/or policies towards the form(s) of care in question D-5 in deciding on the location for your current practice? (Circle number)

1 STRONG INFLUENCE

2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE

GO TO

4 NO INFLUENCE AT ALL

QUESTION D-8 -

D-7 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-8 In seeking health care, do you or your immediate family use *non-chiropractic* forms of health care, such as allopathy or acupuncture? (Circle number)

1 YES. . . Which form(s)? \_\_\_\_\_

2 NO GO TO \_\_\_\_\_

QUESTION D-11 -

D-9 How would you evaluate the influence of state laws and/or policies towards the form(s) of health care in question D-8 in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE GO TO
- 4 NO INFLUENCE AT ALL QUESTION D-11

D-10 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-11 How would you evaluate the influence of health requirements for school children in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE GO TO
- 4 NO INFLUENCE AT ALL QUESTION E

D-12 In particular, which requirement(s) are you referring to in the above question? (Describe their impact on you)

E. For statistical purposes, we would like to ask an additional question about the practice of chiropractic in general.

E-1 Do you feel that chiropractic should be used for any of the following?

			(Circle your answer)		
1	Strengthening immunity. . . . .	YES	NO	NOT SURE	
2	Primary care. . . . .	YES	NO	NOT SURE	
3	Prenatal care . . . . .	YES	NO	NOT SURE	
4	Neonatal care . . . . .	YES	NO	NOT SURE	

F. Finally, we would like to ask some questions about yourself to help interpret the results.

F-1 Your sex: (circle number)

- 1 MALE
- 2 FEMALE

F-2 Your . . . age: \_\_\_\_\_ marital status: \_\_\_\_\_

F-3 In what country were you born? (Circle number)

- 1 USA. . . What state? \_\_\_\_\_
- 2 OTHER. . . (specify) \_\_\_\_\_

F-4 In what county and state do you currently reside? (Specify)

county: \_\_\_\_\_ state: \_\_\_\_\_

F-5 Please list all states in which you are actively licensed to practice professional health care, as well as the date(s) of licensure. (Specify)

<u>State</u>	<u>License</u>	<u>Year of Licensure</u>
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F-6 Besides those listed in the above question, do you hold any other active licenses in professional health care? (Circle number)

- 1 YES. . . Which license(s)? \_\_\_\_\_
- 2 NO

F-7 Please list all degrees and training in professional health care, including where you received the training, and the date(s) of graduation or equivalent. (Specify)

<u>Degree or Other Training</u>	<u>University or Program</u>	<u>Location</u>	<u>Year</u>
-------------------------------------	----------------------------------	-----------------	-------------

F-8 How long have you practiced chiropractic: in total? \_\_\_\_\_

in this state? \_\_\_\_\_ in this county? \_\_\_\_\_

F-9 Beginning with your most recent practice, at what locations have you practiced chiropractic or other forms of professional health care? (Specify)

<u>County/State</u>	<u>From (Year)</u>	<u>To (Year)</u>
---------------------	--------------------	------------------

F-10 May we contact you for further information about your responses? (Circle number)

- 1 YES. . . How may we contact you?
- 2 NO

Is there anything else that you would like to add about laws or policies, or about factors influencing your location? If so, please make your comments here or on a separate sheet of paper.

Also, we are interested in learning more about issues affecting access to health care. Any comments about access that you think will help in future efforts will be greatly appreciated.

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*Thank you for your participation. If you would like a copy of the findings, please print your name and address on the back of the return envelope. We will make sure that you receive a copy.*



**APPENDIX C  
HOMEOPATHY IN 1993**

**[Questionnaire]**

## HOMEOPATHY IN 1993

**A survey about the location of its practitioners,  
with regard to state laws and policies.**

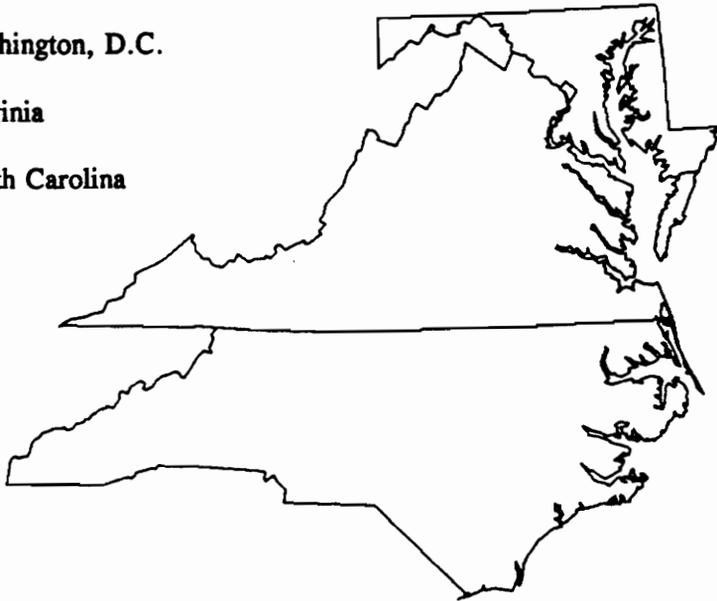
This effort is part of a study on the practice of complementary health care in. . .

Maryland

Washington, D.C.

Virginia

North Carolina



Please answer all questions, unless otherwise noted. If a response falls within a shaded area, please skip to the specified question. If you wish to make clarifications, please use the space in the margins or a separate sheet of paper.

Return to:  
Department of Geography  
Virginia Tech  
Blacksburg, Virginia 24061

**A.** *One of the most important parts of this study has to do with the location of homeopathic practices. So, please answer a couple of questions about your location.*

**A-1** In what state do you currently practice homeopathy? (Circle the number of your answer)

- 1 MARYLAND
- 2 VIRGINIA
- 3 NORTH CAROLINA
- 4 OTHER . . . (specify) \_\_\_\_\_

**A-2** In what county do you currently practice homeopathy? (Specify your answer)

\_\_\_\_\_

**A-3** What factors most influenced your decision to locate your practice there? (Specify)

**B.** *Next, we would like to learn about the influence, or lack of influence, of state homeopathy laws and policies on your location.*

**B-1** How would you evaluate the influence of state homeopathy laws and/or policies in deciding on the location for your current practice? (Circle number of your answer)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE GO TO
- 4 NO INFLUENCE AT ALL -> QUESTION B-3 -

**B-2** In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

**B-3** Please evaluate the following statement: "Other states' homeopathy laws and/or policies affect my ability to relocate my practice to another state." (Circle number)

- 1 AGREE
  - 2 SOMEWHAT AGREE
  - 3 NEITHER AGREE NOR DISAGREE
  - 4 SOMEWHAT DISAGREE
  - 5 DISAGREE
- GO TO  
QUESTION B-7

**B-4** Are you referring to a specific state in the above question? (Circle number)

- 1 YES. . . Which state(s)? \_\_\_\_\_
- 2 NO

**B-5** How do the other states' homeopathy laws or policies affect your ability to relocate your practice to another state? (Circle number)

- 1 PREVENT RELOCATION
- 2 STRONGLY LIMIT RELOCATION
- 3 SOMEWHAT LIMIT RELOCATION
- 4 OTHER. . . (specify) \_\_\_\_\_

**B-6** In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

**B-7** Do you commute to a different state than your place of residence in order to practice homeopathy? (Circle number)

- 1 YES
  - 2 NO
- GO TO QUESTION B-9a

**B-8** Please evaluate the following statement: "I commute to the other state because it has a more tolerant legal atmosphere towards homeopathy." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 NEITHER AGREE NOR DISAGREE
- 4 SOMEWHAT DISAGREE
- 5 DISAGREE

**B-9a** In comparison with other *states*, do you consider the legal atmosphere towards homeopathy in the *state in which you currently practice* to be. . . (Circle number)

- 1 MORE TOLERANT
- 2 ABOUT THE SAME
- 3 LESS TOLERANT
- 4 DO NOT KNOW

**B-9b** In comparison with other *counties* in the state, do you consider the legal atmosphere towards homeopathy in the *county in which you currently practice* to be. . . (Circle number)

- 1 MORE TOLERANT
- 2 ABOUT THE SAME
- 3 LESS TOLERANT
- 4 DO NOT KNOW

**B-10** Please evaluate the following statement: "Within this state, some *counties* have a more flexible legal atmosphere than other counties towards homeopathy." (Circle number)

- 1 AGREE
- 2 SOMEWHAT AGREE
- 3 DO NOT KNOW
- 4 SOMEWHAT DISAGREE                      GO TO
- 5 DISAGREE                                      - QUESTION C -

**B-11** How would you evaluate the influence of legal variations in deciding on the *county* for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE                      GO TO
- 4 NO INFLUENCE AT ALL                              - QUESTION C -

**B-12** In particular, which variations are you referring to in the above question? (Describe their impact on you)

C. Now, we would like to learn about the influence, or lack of influence, of insurance laws on your location.

C-1 Which of the following insurance organizations covers any health care costs related to your current practice in homeopathy? (Circle all appropriate responses.)

- 1 HMO. . . (specify) \_\_\_\_\_
- 2 MEDICARE/MEDICAID \_\_\_\_\_
- 3 PPO. . . (specify) \_\_\_\_\_
- 4 OTHER INSURANCE \_\_\_\_\_
- 5 NO INSURANCE COVERAGE
- 6 NO COMMENT

C-2 How would you evaluate the influence of insurance laws in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE      GO TO
- 4 NO INFLUENCE AT ALL      > QUESTION D <

C-3 In particular, which insurance laws are you referring to in the above question? (Describe their impact on you)

D. Next, we would like to ask you some questions about other forms of health care besides homeopathy. Again, we are interested in learning about the influence, or lack of influence, of state laws and policies on your location.

D-1 What type of practice do you have? (Circle number)

- 1 GROUP. . . How many in the practice? \_\_\_\_\_
- 2 SOLO
- 3 HMO      > GO TO QUESTION D-3 <
- 4 OTHER. . . (specify) \_\_\_\_\_

D-2 Do your colleagues practice some form(s) of health care, such as allopathy or chiropractic, that differ from those in your own practice? (Circle number)

- 1 YES. . . Which form(s)? \_\_\_\_\_
- 2 NO      GO TO
- > QUESTION D-5 <

D-3 How would you evaluate the influence of state laws and/or policies towards the form(s) of care in question D-2 in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE      GO TO
- 4 NO INFLUENCE AT ALL      \* QUESTION D-3 \*

D-4 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-5 Do you practice only homeopathy, or do you also practice other forms of health care? (Circle number)

- 1 ALSO OTHER FORMS. . . (specify) \_\_\_\_\_
- 2 ONLY HOMEOPATHY      \_\_\_\_\_
- 3 GO TO QUESTION D-5-4

D-6 How would you evaluate the influence of state laws and/or policies towards the form(s) of care in question D-5 in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE      GO TO
- 4 NO INFLUENCE AT ALL      \* QUESTION D-6 \*

D-7 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-8 In seeking health care, do you or your immediate family use non-homeopathic forms of health care, such as allopathy or chiropractic? (Circle number)

1 YES. . . Which form(s)? \_\_\_\_\_

2 NO. . . GO TO \_\_\_\_\_

QUESTION D-9

D-9 How would you evaluate the influence of state laws and/or policies towards the form(s) of health care in question D-8 in deciding on the location for your current practice? (Circle number)

1 STRONG INFLUENCE

2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE . . . GO TO \_\_\_\_\_

4 NO INFLUENCE AT ALL . . . QUESTION D-10

D-10 In particular, which laws or policies are you referring to in the above question? (Describe their impact on you)

D-11 How would you evaluate the influence of health requirements for school children in deciding on the location for your current practice? (Circle number)

1 STRONG INFLUENCE

2 MODERATE INFLUENCE

3 NOT MUCH OF AN INFLUENCE . . . GO TO \_\_\_\_\_

4 NO INFLUENCE AT ALL . . . QUESTION D-12

D-12 In particular, which requirement(s) are you referring to in the above question? (Describe their impact on you)

E. We are also interested in learning about homeopathic study groups.

E-1 Do you currently belong to a homeopathic study group? (Circle number)

1 YES

2 NO GO TO QUESTION F

E-2 What factors most influenced your decision to join the study group? (Specify)

E-3 How would you evaluate the location of the study group as an influence in deciding on the location for your current practice? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE
- 4 NOT AN INFLUENCE AT ALL

E-4 How would you evaluate the goal of political change as an influence in deciding to join the study group? (Circle number)

- 1 STRONG INFLUENCE
- 2 MODERATE INFLUENCE
- 3 NOT MUCH OF AN INFLUENCE
- 4 NOT AN INFLUENCE AT ALL

F. For statistical purposes, we would like to ask a few additional questions about your practice.

F-1 What type(s) of homeopathy do you practice? (Circle all appropriate responses)

- 1 CLASSICAL HOMEOPATHY
- 2 HOMOTOXICOLOGY
- 3 ELECTROACUPUNCTUREVOLL
- 3 OTHER. . . (specify) \_\_\_\_\_

F-2 Approximately what percentage of your:

1 Practice is devoted to homeopathy (specify). . . . \_\_\_\_\_ %

2 Patient visits are done by telephone (specify). . . . \_\_\_\_\_ %

G. Finally, we would like to ask some questions about yourself to help interpret the results.

G-1 Your sex: (circle number)

- 1 MALE  
2 FEMALE

G-2 Your . . . age: \_\_\_\_\_ marital status: \_\_\_\_\_

G-3 In what country were you born? (Circle number)

- 1 USA. . . What state? \_\_\_\_\_  
2 OTHER. . . (specify) \_\_\_\_\_

G-4 In what county and state do you currently reside? (Specify)

county: \_\_\_\_\_ state: \_\_\_\_\_

G-5 Please list all states in which you are actively licensed to practice professional health care, as well as the date(s) of licensure. (Specify)

<u>State</u>	<u>License</u>	<u>Year of Licensure</u>
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G-6 Besides those listed in the above question, do you hold any other active licenses in professional health care? (Circle number)

- 1 YES. . . Which license(s)? \_\_\_\_\_  
2 NO

G-7 Please list all degrees and training in professional health care, including where you received the training, and the date(s) of graduation or equivalent. (Specify)

<u>Degree</u> <u>or Other Training</u>	<u>University</u> <u>or Program</u>	<u>Location</u>	<u>Year</u>
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G-8 How long have you practiced homeopathy: *in total?* \_\_\_\_\_  
*in this state?* \_\_\_\_\_ *in this county?* \_\_\_\_\_

G-9 Beginning with your most recent practice, at what locations  
have you practiced homeopathy or other forms of professional  
health care? (Specify)

<u>County/State</u>	<u>From (Year)</u>	<u>To (Year)</u>
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G-10 May we contact you for further information about your  
responses? (Circle number)

- 1 YES. . . How may we contact you?
- 2 NO

Is there anything else that you would like to add about laws or policies, or about factors influencing your location? If so, please make your comments here or on a separate sheet of paper.

Also, we are interested in learning more about issues affecting access to health care. Any comments about access that you think will help in future efforts will be greatly appreciated.

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*Thank you for your participation. If you would like a copy of the findings, please print your name and address on the back of the return envelope. We will make sure that you receive a copy.*



## APPENDIX 1: ACUPUNCTURISTS

### 1A. FACTORS MOST INFLUENCING THE LOCATION OF ACUPUNCTURISTS

Responses:	Maryland		Virginia		North Carolina		Washington, DC	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Affordability	2	3.1%	-	-	1	2.8%	-	-
Chance, karma	1	1.5	2	7.1%	1	2.8	-	-
Close to mountains or water; scenic	1	1.5	1	3.6	2	5.6	-	-
Demographics, population	4	6.1	3	10.7	4	11.1	2	11.1%
Distance from or proximity to urban areas	3	4.5	1	3.6	2	5.6	-	-
Family in area	8	12.1	-	-	7	19.4	-	-
Friends in area/community	7	10.6	2	7.1	4	11.1	1	5.6
Good location, especially for access, transportation	4	6.1	-	-	-	-	-	-
Joined existing practice/affiliation with practice	4	6.1	2	7.1	-	-	1	5.6
Laws or policies/licensure requirements, licensure, legislative climate	15	22.7	-	-	1	2.8	9	50.0
Liberal atmosphere towards acupuncture	1	1.5	-	-	2	5.6	-	-
Like the area, wanted to live here	4	6.1	-	-	5	13.9	1	5.6
Location of my existing or primary practice	2	3.0	9	32.1	6	16.7	1	5.6
Residence/hometown/I live here or nearby	30	45.5	6	21.4	8	22.2	4	22.2
Schools for children	1	1.5	1	3.6	1	2.8	-	-
Underserved/need for acupuncturists	6	9.1	2	7.1	4	11.1	2	11.1
Went to school here or near here	3	4.5	1	3.6	-	-	1	5.6
ALL OTHER	5	7.6	1	3.6	3	8.3	-	-
NO RESPONSE	2	3.0	1	3.6	1	2.8	2	11.1
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>66</b>		<b>28</b>		<b>36</b>		<b>18</b>	

**1B. LAWS OR POLICIES INFLUENCING THE MOBILITY OF ACUPUNCTURISTS**

Responses:	Maryland		Virginia		North Carolina		Washington, DC	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Exam requirements	6	10.5%	-	-	3	13.6%	1	6.7%
Herbal training requirements	9	15.8	-	-	2	9.1	-	-
Hours of training; education requirements	1	1.8	2	13.3	1	4.5	2	13.3
Independence of practice	2	3.5	1	6.7	-	-	-	-
Lack of licensure or recognition	3	5.3	1	6.7	4	18.2	-	-
Legality of acupuncture	11	19.3	-	-	2	9.1	1	6.7
Licensure requirements (general)	2	3.5	3	20.0	1	4.5	2	13.3
MDs only allowed to practice acupuncture	16	28.1	-	-	5	22.7	3	20.0
MD supervision	3	5.3	-	-	3	13.6	1	6.7
NCCA Test	15	26.3	-	-	3	13.6	2	13.3
Problems for MD acupuncturists/control of boards by non-MDs	-	-	4	26.7	2	9.1	-	-
Reciprocity	3	5.3	1	6.7	-	-	-	-
Scope of practice	2	3.5	-	-	1	4.5	-	-
ALL OTHER	2	3.5	1	6.7	2	9.1	1	6.7
NO RESPONSE	4	7.0	4	26.7	2	9.1	2	13.3
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>57</b>		<b>15</b>		<b>22</b>		<b>15</b>	

**1C. STYLE OF ACUPUNCTURE**

Responses:	Maryland		Virginia		North Carolina		Washington, DC	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Auricular/detoxification	6	9.1%	5	17.9%	3	8.3%	2	11.1%
Electrical acupuncture	-	-	6	21.4	6	16.7	1	5.6
Five elements (no mention of eight principles)	33	50.0	2	7.1	7	19.4	7	38.9
French energetic/French	4	6.1	4	14.3	2	5.6	-	-
Japanese	6	9.1	1	3.6	6	16.7	1	5.6
Korean hand/Korean	4	6.1	1	3.6	3	8.3	-	-
Medical	-	-	8	28.6	1	2.8	1	5.6
Needle	-	-	2	7.1	6	16.7	1	5.6
Traditional Chinese Medicine (TCM); traditional or Chinese; five elements and eight principles	40	60.6	6	21.4	20	55.6	8	44.4
"Worsley" five element	5	7.6	-	-	1	2.8	-	-
ALL OTHER	3	4.5	6	21.4	9	25.0	3	16.7
NO RESPONSE	4	6.1	4	14.3	1	2.0	2	11.1
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>66</b>		<b>28</b>		<b>36</b>		<b>18</b>	

## APPENDIX 2: CHIROPRACTORS

### 2A. FACTORS MOST INFLUENCING THE LOCATION OF CHIROPRACTORS

Responses:	Maryland		Virginia		North Carolina		Washington, DC	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Affordability (general)	-	-	3	3.8	3	5.4	-	-
Available office or position	2	3.6%	5	6.3	4	7.1	1	8.3
Beauty of area	-	-	5	6.3	-	-	-	-
Clean	-	-	4	5.1	-	-	-	-
Close to family or spouse's family	8	14.3	9	11.4	5	8.9	2	16.7
College town	-	-	2	2.5	-	-	-	-0
Demographics, population	8	14.3	8	10.1	4	7.1	2	16.7
Friendly people or town	3	5.4	5	6.3	-	-	-	-
Growth of area/economy	2	3.6	8	10.1	6	10.7	-	-
Hometown or residence	14	25.0	8	10.1	13	23.2	1	8.3
Inherited practice	2	3.6	-	-	3	5.4	-	-
Large population density/urban	4	7.1	6	7.6	-	-	1	8.3
Laws or policies towards chiropractic	6	10.7	2	2.5	9	16.1	2	16.7
Lifestyle/quality of life	2	3.6	4	5.1	2	3.6	-	-
Like the area/wanted to live here	5	8.9	2	2.5	6	10.7	2	16.7
Location/proximity to city or town	7	12.5	15	19.0	5	8.9	2	16.7
Need for services/underserved	13	23.2	21	26.6	4	7.1	2	16.7
Outdoors/close to water or mountains	2	3.6	11	13.9	12	21.4	-	-
Population income/affluence	4	7.1	3	3.8	-	-	-	-
Practice for sale or rent	-	-	-	-	4	7.1	-	-
Schools/education	5	8.9	4	5.1	2	3.6	-	-
Size (general)	-	-	-	-	5	8.9	-	-
Small town/rural	3	5.4	9	11.4	7	12.5	-	-
Social attitudes/acceptance of chiropractic	2	3.6	2	2.5	-	-	-	-
Weather/climate	2	3.6	6	7.6	10	17.9	1	8.3
ALL OTHER	6	10.7	7	8.9	5	8.9	2	16.7
NO RESPONSE	3	5.4	2	2.5	2	3.6	-	-
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>56</b>		<b>79</b>		<b>56</b>		<b>12</b>	

**2B. LAWS OR POLICIES INFLUENCING THE LOCATION OF CHIROPRACTORS**

Responses:	Maryland		Virginia		North Carolina		Washington, DC	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Ability to do blood tests, lab work	3	10.0%	4	14.3%	2	5.1%	1	16.7%
Ability to include nutrition in practice	2	6.7	3	10.7	2	5.1	1	16.7
Concerns about the ability to practice acupuncture	-	-	3	10.7	2	5.1	-	-
Concerns about state boards	2	6.7	1	3.6	2	5.1	1	16.7
Definition of chiropractic	-	-	1	3.6	4	10.3	-	-
Insurance/insurance equality	15	50.0	9	32.1	15	38.5	-	-
Not overly restrictive	1	3.6	3	10.7	1	2.6	-	-
Physiotherapy	8	26.7	3	10.7	7	17.9	-	-
Scope of practice	13	46.4	10	35.7	19	48.7	3	50.0
Strong laws or board/eliminates unqualified practitioners	3	10.0	-	-	6	15.4	-	-
Testing requirements	1	3.3	1	3.6	-	-	-	-
Use of chiropractic for primary care	1	3.6	1	3.6	1	2.6	-	-
Workers' compensation	2	6.7	1	3.6	5	12.8	-	-
X-rays	1	3.3	3	10.7	-	-	-	-
ALL OTHER	-	-	4	14.3	1	2.6	1	16.7
NO RESPONSE	-	-	3	10.7	4	10.3	-	-
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>30</b>		<b>28</b>		<b>39</b>		<b>6</b>	

**2C. INSURANCE LAWS INFLUENCING THE LOCATION OF CHIROPRACTORS**

Responses:	Maryland		Virginia		North Carolina	
	No.	Pct.	No.	Pct.	No.	Pct.
Concerns about coverage, limits	5	21.7%	9	26.5%	9	32.1%
Concerns about managed care	1	4.3	2	5.9	-	-
Insurance equality	11	47.8	18	55.9	13	46.4
Mandated benefits	1	4.3	4	11.8	-	-
Percent covered by insurance	1	4.3	-	-	2	7.1
Procedures covered by insurance	1	4.3	2	5.9	2	7.1
Requirements of physician referrals	1	4.3	2	5.9	-	-
Workers' compensation/personal injury	5	21.7	4	11.8	4	14.3
ALL OTHER	1	4.3	3	8.8	3	10.7
NO RESPONSE	2	8.7	1	2.9	2	7.1
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>23</b>		<b>34</b>		<b>28</b>	

**2D. LAWS OR POLICIES INFLUENCING THE MOBILITY OF CHIROPRACTORS**

Responses:	Maryland		Virginia		North Carolina	
	No.	Pct.	No.	Pct.	No.	Pct.
Ability to perform acupuncture	-	-	1	2.3	2	6.5
Concerns about licensure (general)	-	-	5	11.6	3	9.7
Concerns about licensing boards	-	-	3	7.0	1	3.2
Education requirements	2	7.4%	6	14.0	1	3.2
Insurance equality	9	33.3	4	9.3	6	19.4
Reciprocity	3	11.1	12	27.9	6	19.4
Restrictions on nutritional supplements	1	3.7	1	2.3	3	9.7
Restrictions on physiotherapy	5	18.5	4	9.3	2	6.5
Scope of practice	6	22.2	7	16.3	9	29.0
Testing requirements	6	22.2	13	30.2	4	12.9
ALL OTHER	2	7.4	2	4.7	2	6.5
NO RESPONSE	4	14.8	2	4.7	6	19.4
<b>TOTAL RESPONDENTS (multiple responses above)</b>	<b>27</b>		<b>43</b>		<b>31</b>	

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**Vita**

Leonard Baer first became interested in geography and health care while helping his grandmother, "Omi," at a nursing home in the suburbs of Washington, DC. Several strokes have impaired Omi's ability to communicate, and geography serves as a bridge for communication during his visits there. Her efforts to recuperate have changed him both personally and professionally, leading to a new career and educational path. With one sister a doctor and another a lawyer, he found a middle ground in health care analysis, policy, and medical geography. As a result, he has made the transition from marginalized philosopher to legitimized geographer, passing through levels A, B, C, and other letters of the alphabet along the way. Alternative Health Care in the 1990's is his first (and only) master's thesis.

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