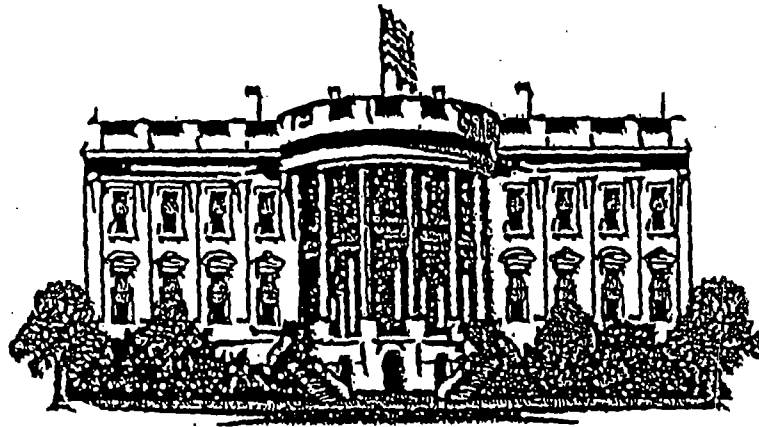


THE WHITE HOUSE



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Comments: Information on CAM

DRAFT

EXECUTIVE ORDER

(Executive Order Number)

WHITE HOUSE COMMISSION ON COMPLEMENTARY AND ALTERNATIVE MEDICINE POLICY

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to establish, in accordance with the provisions of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), the White House Commission on Complementary and Alternative Medicine Policy, it is hereby ordered as follows:

Section 1. Establishment. There is established the White House Commission on Complementary and Alternative Medicine Policy ("Commission"). The Commission shall consist of not more than 12 members, including the chair, appointed by the President from knowledgeable representatives in health care practice, and complementary and alternative medicine.

Section 2. Function. The Commission shall report to the President and the Congress regarding legislative and administrative recommendations to assure that public policy maximizes the benefits to Americans of appropriate use of complementary and alternative medicine (CAM). The recommendations shall address the education and training of health care practitioners; coordinated research to increase knowledge about complementary and alternative medicine practices and products; reliable and useful information for health professionals that can be made readily accessible and understandable to the general public; and guidance for appropriate access and delivery of complementary and alternative medicine.

Section 3. Administration. The Department of Health and Human Services shall provide the Commission with administrative services, facilities, staff, and other support services necessary for the performance of its functions. Funds for the operation of the Commission shall

DRAFT

be provided by the Department of Health and Human Services.

(a) The heads of executive agencies shall, to the extent permitted by law, provide the Commission such information and assistance as it may require for the purpose of carrying out its functions.

(b) Each member of the Commission shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for Level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day during which the member is engaged in the performance of the duties of the Commission. Members shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees under subchapter I of Chapter 57 of Title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Commission.

© Notwithstanding any other Executive Order, the functions of the President under the Federal Advisory Committee Act, as amended, which are applicable to the Commission, except that of reporting to the Congress, shall be performed by the Secretary of Health and Human Services in accordance with guidelines issued by the Administrator of General Services.

(d) The Commission shall terminate 2 years from the date of this order unless extended by the President prior to such date. OR

The Commission shall terminate 30 days after submitting its report.

WILLIAM J. CLINTON

THE WHITE HOUSE,

(Date)

January 8, 1998

MEMORANDUM FOR HILLARY RODHAM CLINTON

FROM: Jennifer Klein, Chris Jennings, Nicole Rabner
SUBJECT: Meeting with Senator Harkin

On Monday, you will be meeting with Senator Harkin at his request to discuss his proposal to examine and promote alternative medicine by forming a White House Commission on Integrated Health Care. In the Congress, Senator Harkin has championed efforts to evaluate the use of alternative medicine. In 1992, he created the Office of Alternative Medicine at the NIH, but has long felt that, nonetheless, the NIH has not given the issue appropriate attention. The last budget signed by the President included, due to Senator Harkin's efforts, a significant increase for the NIH office -- from \$20 million to \$50 million. In addition, Senator Harkin secured \$1 million in the last budget to fund a commission should the President decide to appoint one.

Establishing a commission, as you know, has disadvantages, particularly the extraordinary length of time often taken to appoint members and for any actual work to get done. According to his staff, Senator Harkin may be open to other ways to achieve his goals. We are trying to reach the Acting Director of the NIH Office of Alternative Medicine before Monday's meeting to explore what if anything we might suggest in lieu of a commission. One alternative meeting may be to host a high level meeting to give the issue visibility and momentum.

Attached please find the Senator's proposal for this commission, as well as a recent articles on the subject of alternative medicine.

Meeting Participants

The First Lady
Senator Harkin
Peter Reinecke, Senator Harkin's office
Sabrina Corlette, Senator Harkin's office
Melanne Verveer
Chris Jennings
Jennifer Klein
Nicole Rabner

FROM SENATOR HARKIN

Proposal for a Commission on Integrated Health Care: Developing A National Plan

Background

Wide-spread use: According to the November 1998 issue of the *Journal of the American Medical Association (JAMA)*, 85 million American adults (42% of the population) now use complementary and alternative medical (CAM) products and practices. There are substantially more visits each year to alternative medicine practitioners than to conventional primary care physicians. The public's out-of-pocket expenses for these CAM products and services is equal to that paid out-of-pocket for physician services and is three times that paid out-of-pocket for hospital expenses.

A Women's Health Issue: Increasing numbers of women (48.9% in 1997) are turning to CAM products and practices for a variety of conditions and illnesses, including breast cancer, menstrual problems, endometriosis, nerve-related conditions, and pregnancy and labor management. Over the next 16 years, each year nearly 1 million American women will turn 50. The average age for menopause is 51. Hormone replacement therapies constitute the most prescribed drugs in America today and often are marketed as panaceas for conditions associated with aging such as osteoporosis and heart disease, in addition to the full range of menopausal complaints. Women are seeking natural, less invasive and holistic alternatives to synthetic drugs -- alternatives that may reduce symptoms, improve well-being, and prevent and treat chronic illness. However, there is little or nothing known about the safety and effectiveness of many of these products and practices on pre-and menopausal women.

Similarly, little is known about alternative treatments for endometriosis, even though up to 20% of American women of childbearing age are diagnosed every year with this painful disease. While studies have shown some efficacy with conventional drugs, all of them have side-effects that make them unsuitable for long-term use. Subsequently, women are turning to untested alternative treatments and products to treat this condition.

Women often are the primary caretakers for the health of their entire family, making decisions about diet and illness prevention, such as vitamins and other food supplements, and for treatment of minor aches and pains. And these women increasingly desire to take charge of their own -- and their family's -- health care practices. For example, the vast majority, approximately two-thirds, of homeopathic patients and purchasers of homeopathic products are women.

Integrated Medicine: Over 95% of those who use CAM products and practices do so in conjunction with conventional medicine -- not in place of it. Americans are looking for health care services to complement conventional medicine when its side effects, costs, and effectiveness are inadequate or unacceptable. However, only a minority of patients disclose CAM use to their doctor and few doctors ask about CAM use or have the expertise to advise on the benefits and risks of these practices. In late 1997, *JAMA* noted the "increasingly critical" need to determine how to integrate CAM practices into clinical practice to improve patient care.

There is credible research showing the effectiveness of various CAM practices concerning many common conditions such as heart disease, depression, asthma, addictions and pain management. As research on CAM opens up new treatment options, the health care community has attempted to respond to the public's interest in CAM. Nearly 70% of American medical schools now offer CAM electives, and several are already incorporating required lectures and seminars into their core curricula. And managed care organizations and insurance companies are beginning to grapple with how to offer CAM benefits, and hospitals throughout the nation are opening "integrative care centers."

Statement of Need

National health and science policy must catch up with the changing values and needs of the American people. The movement toward integrated medicine promises a more comprehensive, and more responsive health care system. Evidence suggests that this approach may be far more cost-effective as well.

The Federal government needs to develop a national plan to address the integration of complementary and alternative treatments into mainstream health care. To that end, the Congress provided funding for a White House Commission on Integrated Health Care. The Commission is charged with developing a federal strategy for the integration of CAM into our health care system. In particular, the Commission would evaluate current CAM therapies; assess the prospects of a holistic or integrated approach for improving the health of Americans; address issues of regulation and safety; and establish guidelines for the integration of this approach and these therapies into all aspects of health care, including patient care, research, professional training and health education. Under the leadership of the White House, this Commission would seek input from all relevant constituencies, with a special focus on women's health, in the development of this plan.

Goals

The White House Commission's National Plan for Integrated Health Care would address the following:

- Determining priorities for integrated health care in the areas of practice, research and policy. These should include:
 - Surveillance and monitoring of potential adverse effects from CAM use
 - Adequate CAM education and training of health care providers
 - Accountability of emerging CAM products and practices
 - Consumer access to alternative medicine products and practices
 - Priorities for funding research on integrated health care, with a special emphasis on women's health research
 - Criteria for the provision of integrated health care benefits
 - Areas for frontier and anomalous sciences that are of interest to the public, including family wellness and women's health issues

— Use of traditional and indigenous medical practices in conjunction with conventional medicine

- Identifying what information on integrated health care should be collected, summarized and made easily accessible to the public
- Establishing appropriate and adequate research priorities, particularly in the area of women's health
- Developing guidance in making integrated health care services safe and effective, including how to monitor the possible adverse effects of these practices and products, and how to establish standards of training, credentialing, licensing and monitoring of service quality
- Establishing guidance to assure reasonable access and appropriate benefits to integrated health care services
- Reviewing the impact of integrated health care services on special populations, including the disadvantaged, elderly, veterans, children, women and minority populations

Consensus

Under the leadership of the White House, the Commission may seek the input and participation of a number of organizations, including, but not limited to, the following:

Association of American Medical Colleges
Association of Health Insurers of America
American Board of Medical Specialties
Agency of Health Care Policy and Research
Agency of International Development
Bureau of Primary Health Care
Bureau of Health Professionals
Centers for Disease Control and Prevention
Complementary and Alternative Medicine Consortium
Department of Health and Human Services
Office of Women's Health
Department of Defense
Department of Education
Food and Drug Administration
Federation of State Medical Boards
Government Reform and Oversight Committee
Health Care Financing Administration
Health Resources and Services Administration
Institute of Medicine
National Academy of Sciences

National Institutes of Health
National Library of Medicine
Office of Alternative Medicine
Office of Women's Health Research
Professional Health Care Associations
Veterans' Affairs
The World Bank

Membership

Under the leadership of the White House, the Commission would be composed of 10-15 knowledgeable and prominent citizens of the country with knowledge of and expertise in health care practice and policies and be drawn from both the public and private sectors.

The Chair should be a respected member of the health care establishment with experience in all aspects of medicine and health care and with an openness to innovative alternative practices and an ability to balance a wide diversity of views.

Timeline and Resources

The Commission would convene for a 12 to 15-month period. It would be allotted sufficient resources and a coordinating staff to support the Commission, solicit expert advice, collect relevant background information and obtain public input.

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LEVEL 1 - 5 OF 6 STORIES

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November 11, 1998, Wednesday, Final Edition

SECTION: A SECTION; Pg. A01

LENGTH: 1381 words

HEADLINE: Widening the Medical Mainstream; More Americans Using 'Alternative' Therapies

BYLINE: Susan Okie, Washington Post Staff Writer

BODY:

The number of Americans who are using "alternative" treatments such as herbal supplements, massage therapy and megavitamins is increasing dramatically and visits to alternative practitioners have become more common than visits to the family doctor, according to a new survey released yesterday.

At the same time, scientific attempts to evaluate the effectiveness of such therapies are starting to separate those that work from those that don't. For example, studies also released yesterday by a major medical journal found that burning a Chinese herb next to the toe of a pregnant woman can often make her breech baby turn head-down, but that another herb commonly sold as a weight-loss aid is useless.

The studies were among a half-dozen published today in the Journal of the American Medical Association (JAMA) in a special issue dedicated to alternative medicine. It marked the first such effort by a mainstream U.S. medical journal and was an attempt to meet doctors' need for high-quality scientific information on treatments that more and more patients are trying, the editor said. Altogether, the American Medical Association this week planned to publish a total 80 reports about alternative medical therapies in JAMA and other journals.

"It is the beginning of the beginning of acceptance of some forms of 1998 alternative medicine into mainstream medicine in the United States," said George Lundberg, the editor of JAMA. "Acceptance the good, old-fashioned way -- by merit."

An estimated 83 million American adults -- more than four out of 10 -- used some form of alternative medical treatment last year, according to the new survey by a Harvard research team. They reported that visits to practitioners of alternative therapies, from herbal medicines to "energy healing," have increased 47 percent since 1990, propelled chiefly by middle-aged, health-conscious baby boomers. Half of the people between age 35 and 49 reported of using at least one of the surveyed treatments last year. The majority of users said they were turning to the therapies to prevent future illnesses rather than to treat current ones.

Jeff Sherman, 46, a real estate developer from McLean, said he has used acupuncture and homeopathy to relieve headaches and dizziness. He said many of his friends also have tried various alternative therapies.

"I think we're all of the age, and we know enough about medicine, that we're willing to consider that perhaps Western medicine doesn't have the only answer," he said.

The Harvard team, led by David M. Eisenberg, questioned 2,055 randomly selected adults about their use last year of 16 alternative therapies and compared the results to a similar survey conducted by the same team in 1990. In addition to herbal medicine and "energy healing," therapies included in the survey were relaxation techniques, massage therapy, chiropractic, spiritual healing, megavitamins, self-help, imagery, homeopathy, hypnosis, biofeedback, acupuncture, folk remedies and various diets. The researchers tried to be more specific in a number of these areas. For example, when asked about vitamins, the surveyors specifically said they meant something other than regular daily vitamins or vitamins prescribed by a doctor.

The researchers found that Americans' use of alternative therapies increased by 25 percent during the seven-year period and that expenditures for practitioners' services increased by 45 percent. They estimated that Americans spent \$ 27 billion, most of it not reimbursed by insurance companies, on alternative treatments last year. Among the fastest-growing therapies were herbal remedies, massage, megavitamins, relaxation techniques and "spiritual healing."

"The fact that nearly 50 percent more people visit alternative medicine practitioners now than in 1990 is astounding," said Sen. Tom Harkin (D-Iowa), who sponsored legislation that created the Office of Alternative Medicine at the National Institutes of Health in 1991. "Consumers need and deserve better information on what works and what doesn't."

Last month, President Clinton signed a law upgrading the office to the National Center for Complementary and Alternative Medicine and increasing its

annual budget from \$ 20 million to \$ 50 million.

Only about 40 percent of people who use alternative therapies tell their doctors, the survey found. And as many as 15 million people who take prescription drugs also are using herbs or high-dose vitamins, raising concerns about possible side effects from combining treatments, Eisenberg said. "We raise the question of whether these 15 million adults are at risk for drug-herb or drug-vitamin interactions," he said.

The six studies tested various alternative therapies using a classic research design, the randomized clinical trial in which one group of patients receives a treatment and another group receives a placebo. In most of them, doctors and patients didn't know who was receiving what. Some of the results were surprising.

For instance, one study found that moxibustion, a traditional Chinese therapy in which an herb, *Artemisia vulgaris*, was burned next to an "acupuncture point" on the toe, proved safe and effective for stimulating fetuses in the wombs of pregnant women to turn over from a breech (feet-first) position to a head-first position, which is safer for delivery, said Francesco Cardini, an Italian gynecologist who conducted the study in China.

After two weeks, breech fetuses had turned over in 75 percent of the 130 women who received moxibustion daily or twice a day but in only 48 percent of 130 women who didn't get the treatment, he said. He said the therapy, which is painless, increases fetal movement, perhaps by changing nerve stimulation to the uterus.

"This treatment is quite strange for us, but it is easy, cheap, safe and can be done at home," said Cardini. "If it fails to attain the result, another therapy can be done later."

In another study, a stretching regimen based on yoga was found to help relieve hand pain and weakness produced by carpal tunnel syndrome, which is caused by compression of a nerve at the wrist. And a third study found that a mixture of traditional Chinese herbs helped alleviate symptoms -- such as abdominal pain, constipation or diarrhea -- in people with irritable bowel syndrome.

But spinal manipulation by chiropractors was not shown to relieve tension headaches. An herb, *Garcinia cambogia*, commonly found in supplements marketed to dieters was no more effective than a placebo for promoting weight loss. And acupuncture turned out to be no better than a placebo for pain caused by nerve damage in people with AIDS.

Lundberg said a study that finds that an alternative therapy, such as traditional Chinese herbs, is effective for a particular problem shouldn't be viewed as a blanket endorsement. "It is not proper to make a giant leap from one study to immediately say, 'That means Chinese herbs are okay from anybody's closet, for anything,' " he said at a Washington news conference where the research was released.

Some medical experts also have expressed concern that herbal products, which do not have to meet any official government purity or manufacturing standards, may carry dangerous impurities.

Gary Kaplan, a family practitioner and chronic pain specialist who runs an integrative medicine clinic in Arlington, applauded the studies. Kaplan said he and other practitioners at his clinic use a variety of treatments including manipulation, acupuncture, guided imagery, biofeedback, nutritional counseling and homeopathy. "I'm very pleased to see this stuff being studied," he said. "What's going on is really something of a quiet revolution in medicine. We're going to see an expanded concept of health and illness."

Alternative Treatments

Visits to practitioners of alter-native medicine have grown rapidly in the past seven years.

Total number of visits:

Alternative therapies

1990: 427 million

1997: 629 million

Primary care physicians

1990: 388 million

1997: 386 million

SOURCE: Journal of the American Medical Association

GRAPHIC: CH

LANGUAGE: ENGLISH

LOAD-DATE: November 11, 1998

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November 10, 1998, Tuesday, Final Edition

SECTION: OP-ED; Pg. A21

LENGTH: 766 words

HEADLINE: Another Kind Of Medicine

BYLINE: Daniel S. Greenberg

BODY:

Congress has given the orthodox medical establishment \$ 50 million to sort out the claims, mysteries and realities of "alternative medicine." That's the term for a melange of potions and treatments that includes massage and acupuncture, as well as shark's cartilage for cancer and St. John's Wort, a low-octane anti-depressant for sale without prescription.

Unfortunately, the congressional generosity is misbegotten, since the money was entrusted to the National Institutes of Health, where the management rates alternative medicine as synonymous with quack medicine. With lesser sums previously imposed on it by Congress, \$ 20 million last year, the guardians of medical orthodoxy at NIH have been pawing at alternative medicine since 1993, with little to show for their efforts. In fact, squabbles still persist about the definition of alternative medicine, with some proponents preferring to call it "complementary medicine," while others have recently shown interest in calling it "integrative medicine," sometimes in combination with the other terms.

It's important to look at it, the proponents argue, since Americans by the scores of millions are gulping strange potions beyond the reach of the Food and Drug Administration and subjecting themselves to procedures foreign to traditional medical practice. According to a recent issue of the Journal of the American Medical Association (JAMA) that was devoted to alternative medicine, Americans made 629 million visits to "alternative medicine practitioners" in 1997, "thereby exceeding total visits to all U.S. primary care physicians." The alternative healers are said to have taken in \$ 21.2 billion; \$ 12.2 billion of that sum was out of pocket -- which probably signifies a mixture of confidence and desperation among their clients.

The expressed concern in the ranks of orthodox medicine is that reliance on

the alternatives might delay or interfere with effective treatments for serious ailments. There's also worry about fraud in the grand snake-oil tradition and well-intentioned but harmful incompetence. A mainstream scientist is quoted in the JAMA issue as saying, "Why don't we form a center at Harvard for the scientific study of astrology?" Various alternative camps respond that these concerns reflect the turf insecurities of organized medicine, now intensified by the income-cutting rigors of managed care.

The directed purpose of the NIH program is to subject alternative treatments to the same type of scientific examination that supposedly ensures the safety and efficacy of mainstream medicine. The moving force behind this effort is Sen. Tom Harkin (D-Iowa), who forced money upon NIH in 1992 for what eventually became a low-level Office of Alternative Medicine. Hostile to this mandate, the NIH management entombed the office in bureaucratic snarls, to the point where the founding director quit in disgust after two years. His successor, Wayne B. Jonas, a medical officer on detail from the U.S. Army, fared better during a three-year stint. Jonas made progress toward getting mainstream scientists and physicians to recognize that whatever their attitude toward alternative medicine, scores of millions of Americans are indulging in it and therefore it is desirable to identify what works and what doesn't. Harkin struck again this year, elevating the office to the more independent rank of a center in the NIH organizational structure, and raising the budget to \$ 50 million, despite NIH's preference for holding the money level.

In a swan song article in JAMA, Jonas touched on several characteristics that may account for the popularity of alternative medicine. Based on reports of patient surveys, he notes that the "time spent with each patient by an alternative medicine practitioner usually exceeds that spent by the average conventional physician, and patients are often more satisfied with their interactions with unorthodox than orthodox medical practitioners." He points out that conventional treatments gone awry "are a major cause of death and hospitalization" -- a failing openly acknowledged by orthodox medicine.

The need to study alternative medicine is beyond dispute. But NIH, a stronghold of medical orthodoxy, has amply demonstrated over six years that it's not the place to do it. The new center would be better off as an independent agency, safely insulated from the tender care of the elite skeptics at the National Institutes of Health.

The writer is a visiting scholar in the history of science, medicine and technology at Johns Hopkins University.

GRAPHIC: ILL,JOHN OVERMYER

LANGUAGE: ENGLISH

LOAD-DATE: November 10, 1998

Trends in Alternative Medicine Use in the United States, 1990-1997

Results of a Follow-up National Survey

David M. Eisenberg, MD; Roger B. Davis, ScD; Susan L. Ettner, PhD; Scott Appel, MS; Sonja Wilkey; Maria Van Rompay; Ronald C. Kessler, PhD

Context.—A prior national survey documented the high prevalence and costs of alternative medicine use in the United States in 1990.

Objective.—To document trends in alternative medicine use in the United States between 1990 and 1997.

Design.—Nationally representative random household telephone surveys using comparable key questions were conducted in 1991 and 1997 measuring utilization in 1990 and 1997, respectively.

Participants.—A total of 1539 adults in 1991 and 2055 in 1997.

Main Outcomes Measures.—Prevalence, estimated costs, and disclosure of alternative therapies to physicians.

Results.—Use of at least 1 of 16 alternative therapies during the previous year increased from 33.8% in 1990 to 42.1% in 1997 ($P \leq .001$). The therapies increasing the most included herbal medicine, massage, megavitamins, self-help groups, folk remedies, energy healing, and homeopathy. The probability of users visiting an alternative medicine practitioner increased from 36.3% to 46.3% ($P = .002$). In both surveys alternative therapies were used most frequently for chronic conditions, including back problems, anxiety, depression, and headaches. There was no significant change in disclosure rates between the 2 survey years; 39.8% of alternative therapies were disclosed to physicians in 1990 vs 38.5% in 1997. The percentage of users paying entirely out-of-pocket for services provided by alternative medicine practitioners did not change significantly between 1990 (64.0%) and 1997 (58.3%) ($P = .36$). Extrapolations to the US population suggest a 47.3% increase in total visits to alternative medicine practitioners, from 427 million in 1990 to 629 million in 1997, thereby exceeding total visits to all US primary care physicians. An estimated 15 million adults in 1997 took prescription medications concurrently with herbal remedies and/or high-dose vitamins (18.4% of all prescription users). Estimated expenditures for alternative medicine professional services increased 45.2% between 1990 and 1997 and were conservatively estimated at \$21.2 billion in 1997, with at least \$12.2 billion paid out-of-pocket. This exceeds the 1997 out-of-pocket expenditures for all US hospitalizations. Total 1997 out-of-pocket expenditures relating to alternative therapies were conservatively estimated at \$27.0 billion, which is comparable with the projected 1997 out-of-pocket expenditures for all US physician services.

Conclusions.—Alternative medicine use and expenditures increased substantially between 1990 and 1997, attributable primarily to an increase in the proportion of the population seeking alternative therapies, rather than increased visits per patient.

native medicine prevalence, costs, and patterns of use¹ demonstrated that alternative medicine has a substantial presence in the US health care system. Data from a survey in 1994² and a public opinion poll in 1997³ confirmed the extensive use of alternative medical therapies in the United States. An increasing number of US insurers and managed care organizations now offer alternative medicine programs and benefits.⁴ The majority of US medical schools now offer courses on alternative medicine.⁵

National surveys performed outside the United States suggest that alternative medicine is popular throughout the industrialized world.⁶ The percentage of the population who used alternative therapies during the prior 12 months has been estimated to be 10% in Denmark (1987),⁷ 33% in Finland (1982),⁸ and 49% in Australia (1993).⁹ Public opinion polls and consumers' association surveys suggest high prevalence rates throughout Europe and the United Kingdom.¹⁰⁻¹³ The percentage of the Canadian population who saw an alternative therapy practitioner during the previous 12 months has been estimated at 15% (1995).¹⁴ The wide range of utilization rates can be explained, in part, by the disparity in definitions of alternative therapy and the selection of therapies assessed.

The presumption is that alternative medicine use in the United States has increased at a considerable pace in recent years. The purpose of this follow-up national survey was to investigate this presumption and document trends in alternative medicine prevalence, costs, disclosure of use to physicians, and correlates of use since 1990.

JAMA. 1998;280:1569-1575

From the Center for Alternative Medicine Research and Education, Department of Medicine, Beth Israel Deaconess Medical Center (Drs Eisenberg and Davis, Mr Appel, and Mss Wilkey and Van Rompay), and the Department of Health Care Policy, Harvard Medical School (Drs Ettner and Kessler), Boston, Mass.

Reprints: David M. Eisenberg, MD, Center for Alternative Medicine Research and Education, Beth Israel Deaconess Medical Center, 330 Brookline Ave, Boston, MA 02215.

ALTERNATIVE medical therapies, functionally defined as interventions neither taught widely in medical schools nor generally available in US hospitals,¹ have attracted increased national attention from the media, the medical community, governmental agencies, and the public. A 1990 national survey of alter-

METHODS

Sample

We conducted parallel nationally representative telephone surveys in 1991 and 1997. Survey methods were approved by the Beth Israel Deaconess Institutional Review Board, Boston, Mass.

Both surveys used random-digit dialing to select households and random selection of 1 household resident, aged 18 years or older, as the respondent. Eligibility was limited to English speakers in whom cognitive or physical impairment did not prevent completion of the interview. We asked respondents about their use of alternative therapies during the prior 12 months. We consider the results of the 1991 survey, fielded between January and March of that year, representative of 1990, and the results of the 1997 survey, fielded between November 1997 and February 1998, representative of 1997.

The sampling scheme was designed with a target sample of 1500 in 1990 and 2000 in 1997. The latter sample size was chosen to provide power in excess of 80% to detect an increase from 34% to 39% in the proportion of adults who used at least 1 form of alternative therapy during the prior 12 months. The actual numbers of completed interviews were 1539 in 1990 (67% response rate) and 2055 in 1997 (60% weighted response rate). A secular trend in lower survey response required us to offer a \$20 financial incentive for participation in the 1997 survey to maintain a response rate near the one achieved in 1990. No financial incentive was used in the 1990 survey.

The data in each survey were separately weighted to adjust for geographic variation in cooperation (eg, by region of country and urbanicity) and for household variation in probability of selection (ie, the inverse relationship between size of household and probability of selection because only 1 interview was completed in each sample household). The data were then weighted in parallel on sociodemographic variables to adjust for aggregate discrepancies between the sample distributions and population distributions provided by the US Census Bureau. This last stage of weighting was based on the 1997 Current Population Survey data¹⁵ and was done in parallel across the 2 surveys to remove any between-survey discrepancies of weighted sociodemographic distributions.

Of the initial sample of 9750 telephone numbers in 1997, 26% were nonworking, 17% were not assigned to households, and 9% were unavailable (ie, despite 6 attempted follow-up contacts). We declared 481 households ineligible because respondents did not speak English or because of cognitive or physical incapacity. Among the remaining 4167 eligible respondents, 1720 (41.3%) completed the interview on initial request. Attempts were then made to convert a random subsample of 1066 refusers by offering them an increased stipend (\$50). A total of 335 (31.4%) of the 1066 contacted were converted in this manner. Extrapolating this

conversion rate to all of the refusers and weighting the data for the undersampling of initial refusers, we obtained a 60% ($41.3\% + [31.4\% \times (100\% - 41.3\%)]$) weighted overall response rate among eligible respondents.

Interview

In both years, the interview was presented as a survey conducted about the health care practices of Americans by investigators from Harvard Medical School. No mention was made of alternative or complementary therapies. The substantive questions began by asking about perceived health, health worries, days spent in bed, and functional impairment due to health problems. We then asked respondents about their interactions with a *medical doctor*, defined as "a medical doctor (MD) or a doctor of osteopathic medicine (DO), not a chiropractor or other nonmedical doctor." The term *medical doctor* was used throughout the remainder of the interview.

To document trends we explored the following: (1) Respondents in both surveys were presented with a list of common medical conditions and asked if they had experienced each of these conditions during the previous 12 months. (2) Respondents who reported more than 3 conditions were asked to identify their 3 most bothersome or serious medical conditions and were then asked about seeing a medical doctor for these principal medical conditions and about the perceived quality of these interactions. (3) Respondents were asked about their lifetime and past 12-month use of 16 alternative therapies and whether each of these therapies was used for each of the principal medical conditions. The 1997 survey also asked about use for a representative sample of other medical conditions and expanded the list of therapies beyond the original 16 assessed in 1990. (4) We distinguished between use under the supervision of a practitioner of alternative therapy and use without such supervision. Respondents who reported supervised use were asked about their number of visits in the past 12 months to practitioners of each therapy. (5) All users of alternative therapies in 1997 who acknowledged seeing a medical doctor during the past year were then asked if they had discussed their use of each therapy with a medical doctor and, if not, why not.

Prior use of 16 targeted therapies was explored using a computer-assisted interview transcript, which included the following clarifications in both 1990 and 1997: When asking about high-dose vitamin or megavitamin therapies, interviewers made clear that the survey sought information on vitamins not including a daily vitamin or vitamin pre-

scribed by a doctor. Prayer or spiritual healing by others was asked about separately from prayer or spiritual practice for individual health concern. Commercial diet programs were described as "the kind you have to pay for, but not including trying to lose or gain weight on your own." A lifestyle diet included examples like vegetarianism or macrobiotics. Questions regarding energy healing included examples of magnets, energy-emitting machines, or the "laying on of hands," and use of relaxation techniques was explained using the examples of meditation or the relaxation response. The remaining 9 therapies were asked about without interviewer clarification.

The 1997 survey was longer (average, 30 minutes) than the 1990 survey (average, 25 minutes) because we sought to explore a number of areas in more depth. All the important questions in the 1990 survey were repeated in 1997. These replicated questions are the focus of the current report. One major change in the 1997 survey involved replicated questions: respondents who reported using more than 3 alternative therapies were asked in-depth questions (eg, use of a practitioner of alternative therapies, number of visits, out-of-pocket expenses, reasons for use) for all such therapies in 1990 but only for a random sample of 3 such therapies in 1997. This was required because of expansion in both the number of alternative therapies we assessed in 1997 and questions about each therapy. The 1997 data were weighted to adjust for this sampling in making comparisons with the 1990 data.

Insurance Coverage

For each therapy for which respondents said they used services of an alternative medicine practitioner, we asked whether insurance helped pay for any of the costs of the therapy and whether the respondent paid any of the costs out-of-pocket. Based on the answers to these questions, we calculated the proportion of users of each therapy who had complete, partial, or no insurance coverage for that therapy. We also calculated the overall frequency of insurance coverage by weighting the insurance frequencies within each therapy by the proportion of all user therapies accounted for by that therapy.

Construction of Cost Measures

The total cost of visits to alternative medicine practitioners was calculated by multiplying the number of visits for each therapy by a per-visit price and adding the prices of the following therapies: relaxation techniques, herbal medicine, massage therapy, chiropractic care, megavitamins, self-help groups, imagery techniques, commercial diet, folk rem-

edies, lifestyle diet, energy healing, homeopathy, hypnosis, biofeedback, and acupuncture. Out-of-pocket costs were constructed for each therapy by multiplying each user's visits by the full price of the visit if the user had no insurance coverage, by 0.2 if the user had partial insurance coverage, and by zero if insurance paid the full price of the visit. The assumption of a 20% coinsurance rate among users with partial insurance coverage should yield a conservative estimate of out-of-pocket costs, because it ignores deductibles and benefit caps and assumes that insurance benefits for alternative therapy are similar to medical coverage.

We calculated costs based on per-visit prices chosen from typical prices paid for such services by private insurers using a Resource-Based Relative Value Scale (RBRVS)¹⁶ system in selected states. We then recalculated costs using a second set of prices chosen partly to reflect empirical data on the out-of-pocket costs paid by the respondents, but primarily to represent conservative estimates of the per-visit cost of alternative therapies. Total costs based on this second set of prices should represent a lower bound on true expenditures.

Out-of-pocket costs of herbs, megavitamin supplements, and commercial diet products were calculated by multiplying the total population of users by the average out-of-pocket expenditures reported by respondents who used each of these products. In 1997, each respondent who used an alternative therapy was also asked, "Did you spend any additional money on things like books, classes, equipment, or any other items related to [the alternative therapy] in the past 12 months?" Out-of-pocket expenditures on these other items were calculated following the same procedures used for herbs, megavitamins, and commercial diet products. Out-of-pocket expenditures on herbs, megavitamins, commercial diet products, and related items were based on actual dollar amounts reported, so changes between 1990 and 1997 include inflation. To isolate the increase in the cost of practitioner visits between 1990 and 1997 solely because of the increase in the use of alternative therapies, we calculated 1990 practitioner costs using 1997 prices. The differences between the 1990 and 1997 costs of practitioner services reported are understated because they do not take into account inflation, estimated at 44% by the medical component of the Consumer Price Index.¹⁷

Statistical Analysis

Analyses reported herein consist of computation of prevalence and mean estimates and comparisons of these esti-

mates through the years. As the data in both surveys are weighted, the Taylor series method was used to compute significance tests using SUDAAN software.¹⁸ χ^2 Tests of independence were used for comparing proportions, while t tests were used for continuous measures. Extrapolations of survey estimates to the total population were based on the assumption that there were 180 million adults living in the US household population in 1990 and 198 million in 1997.¹⁵

RESULTS

Characteristics of Respondents

The characteristics of the subjects we interviewed are shown in Table 1. The sociodemographic characteristics of the survey sample are similar to the population distributions published by the US Bureau of the Census.¹⁵

Patterns of Use

Use of alternative therapies in 1997 was not confined to any narrow segment of society. Rates of use ranged from 32% to 54% in the wide range of sociodemographic groups examined. Use was more common among women (48.9%) than men (37.8%) ($P = .001$) and less common among African Americans (33.1%) than members of other racial groups (44.5%) ($P = .004$). People aged 35 to 49 years reported higher rates of use (50.1%) than people either older (39.1%) ($P = .001$) or younger (41.8%) ($P = .003$). Use was higher among those who had some college education (50.6%) than with no college education (36.4%) ($P = .001$) and more common among people with annual incomes above \$50 000 (48.1%) than with lower incomes (42.6%) ($P = .03$). Use was more common among those in the West (50.1%) than elsewhere in the United States (42.1%) ($P = .004$). With the exception of observed sex differences in 1997, these patterns are consistent with those identified in 1990.

Population prevalence estimates of alternative medicine use in 1990 and 1997 are shown in Table 2. The 1990 survey estimated that 33.8% of the US adult population (60 million people) used at least 1 of the 16 alternative therapies listed, while the 1997 survey estimated that this proportion increased significantly to 42.1% (83 million people). A comparison of specific therapies in the first column shows increases in 15 of the 16 therapies; 10 of these were statistically significant ($P \leq .05$). The largest increases were in the use of herbal medicine, massage, megavitamins, self-help groups, folk remedies, energy healing, and homeopathy. Summing Table 2 (first column) data shows a 65% increase in

Table 1.—Characteristics of the 1997 (N = 2055) and 1990 (N = 1539) Subjects Interviewed Compared With the US Population*

Characteristic	1997 US		
	1997 Survey, %	Bureau of the Census, ¹⁵ %	1990 Survey, %
Sex			
Female	52	52	48
Male	48	48	52
Age, y			
18-24	10	13	16
25-34	22	20	23
35-49	33	32	27
≥50	35	35	34
Race/ethnicity			
White	77	73	82
African American	8	12	9
Hispanic	10	11	6
Asian	1	4	1
Other	4	1	2
Education			
<High school	14	18	24
High school graduate	37	34	35
College or more	49	48	40
Annual income, \$			
<20 000	27	33	30
20 000-49 999	45	41	53
≥50 000	27	26	18
Region			
Northeast	21	19	22
North central	24	24	32
South	35	35	26
West	20	22	19

* Due to rounding, percentages do not always total 100.

total number of therapies used, from 577 therapies per 1000 population in 1990 to 953 per 1000 in 1997.

Several categories of alternative therapy warrant clarification about the actual modalities used. Three quarters of respondents who acknowledged use of relaxation techniques said they used meditation. Among those who reported using energy healing, the most frequently cited technique involved the use of magnets. Other modalities common to this category included Therapeutic Touch, Reiki, and energy healing by religious groups. The use of self-prayer, in contrast to spiritual or energy healing performed by others, was investigated in terms of prevalence of use but not in terms of costs, referral patterns, or insurance reimbursement. All analyses in this article exclude data involving self-prayer.

Table 2 (second column) shows that a significantly higher proportion of alternative therapy users saw an alternative medicine practitioner in 1997 (46.3%, equivalent to 39 million people) than in 1990 (36.3%, equivalent to 22 million people). Of the 15 therapies for which the question was asked, the proportion of users who saw a practitioner increased for 11. However, even in 1997 there were only 5 therapies in which a majority of users consulted a practi-

Table 2.—Comparison of Prevalence and Frequency of Use of Alternative Therapies Among Adult Respondents, 1997 vs 1990*

Type of Therapy	Used in Past 12 mo, %		Saw a Practitioner in Past 12 mo, %		Mean No. of Visits per User in Past 12 mo		No. of Visits per 1000 Population		Estimated Total No. of Visits in 1997 (in Thousands)†	Total Visits, %‡§
	1997	1990	1997	1990	1997	1990	1997	1990		
Relaxation techniques	16.3¶	13.1	15.3	9.0	20.9	18.6	521.2	219.3	103 203	16.4
Herbal medicine	12.1**	2.5	15.1	10.2	2.9	8.1	53.0	20.7	10 491	1.7
Massage	11.1**	6.9	61.6#	41.4	8.4	14.8	574.4	422.8	113 723	18.1
Chiropractic	11.0	10.1	89.9**	71.1	9.8	12.6	969.1¶	904.8	191 886	30.5
Spiritual healing by others	7.0#	4.2	...	9.2	...	14.2	...	54.9	...	...
Megavitamins	5.5**	2.4	23.7	11.8	8.6	12.6	112.1	35.7	22 196	3.5
Self-help group	4.8**	2.3	44.4	38.3	18.9	20.5	402.8	180.6	79 754	12.7
Imagery	4.5	4.2	23.1	15.1	11.0	14.2	114.3	90.1	22 640	3.6
Commercial diet	4.4	3.9	43.2	24.0	7.3	20.7	138.8	193.8	27 474	4.4
Folk remedies	4.2**	0.2	6.2	0.0	1.0	...	2.6	...	516	0.1
Lifestyle diet	4.0	3.6	8.0	12.5	2.8	8.1	9.0	36.5	1774	0.3
Energy healing	3.8**	1.3	26.3	32.2	20.2#	8.3	201.9¶	34.7	39 972	6.4
Homeopathy	3.4**	0.7	16.5	31.7	1.6	6.1	9.0	13.5	1777	0.3
Hypnosis	1.2	0.9	62.7	51.8	2.8	2.6	21.1	12.1	4171	0.7
Biofeedback	1.0	1.0	54.3	20.8	3.6	6.4	19.5	13.3	3871	0.6
Acupuncture	1.0¶	0.4	87.6	91.3	3.1	38.4	27.2	140.2	5377	0.9
≥1 of 16 alternative therapies	42.1**	33.8	46.3#	36.3	16.3	19.2	3176.0	2373.0	628 825	...
SE	1.2	1.4	1.9	2.5	1.8	4.5	378.7	599.7	74 997	...
Self-prayer	35.1**	25.2	...	...	...	...	...	...	...	...

*Percentages are of those who used that type of therapy. Ellipses indicate data not applicable.

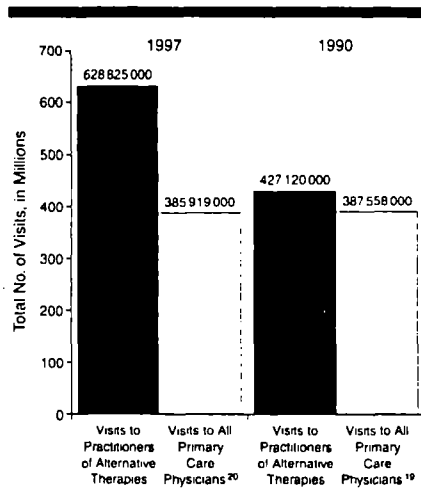
†Estimate based on 1997 population estimate of 198 million.

‡Percentage of total visits of the 16 therapies (ie, excluding self-prayer).

§Because of rounding, percentages do not total 100.

||Respondents who received spiritual healing by others were not asked for details of visits in 1997, nor were those who used self-prayer in either year.

¶P≤.05, #P≤.01; **P≤.001.

Figure 1.—Trends in annual visits to practitioners of alternative therapies vs visits to primary care physicians, United States, 1997 vs 1990. Data are from the National Ambulatory Medical Care Survey from 1996²⁰ and 1990.¹⁹

tioner: massage, chiropractic, hypnosis, biofeedback, and acupuncture. Unsupervised use (ie, a form of expanded self-care) remains the usual method of use for all other alternative therapies.

Table 2 (third column) reveals no consistent change in the average number of visits among respondents who consulted practitioners of alternative therapy between 1990 (19.2%) and 1997 (16.3%). However, because of the increase in the proportion of people using these therapies, the total number of visits increased substantially from 1990 to 1997. This

47.3% increase in total visits is largely because of increases in visits for relaxation therapy, massage, chiropractic, self-help, and energy healing. The visits to practitioners of alternative therapy in 1997 exceeded the projected number of visits to all primary care physicians in the United States by an estimated 243 million (Figure 1).^{19,20} Visits to chiropractors and massage therapists accounted for nearly half of all visits to practitioners of alternative therapies.

Prevalence estimates for selected additional therapies assessed in 1997 but not 1990 include: aromatherapy (5.6%), neural therapy (1.7%), naturopathy (0.7%), and chelation therapy (0.13%) (data not shown). Comparisons of total visits and costs for 1990 and 1997 were performed without inclusion of these data. Prevalence estimates for the simultaneous use of prescription medications with herbs, with high-dose vitamins, or with both were obtained. Among the 44% of adults who said they regularly take prescription medications, nearly 1 (18.4%) in 5 reported the concurrent use of at least 1 herbal product, a high-dose vitamin, or both.

Table 3 summarizes results regarding use of alternative therapies for the most commonly reported principal medical conditions in either survey. In each year, a majority of respondents reported 1 or more principal medical conditions. The list of conditions was expanded in 1997 (37 conditions) compared with 1990 (24 conditions). Significant increases in the proportion using alternative therapies

for principal condition(s) (second column) occurred for back problems, allergies, arthritis, and digestive problems. The highest condition-specific rates of alternative therapy use in 1997 were for neck (57.0%) and back (47.6%) problems. The proportion of respondents with 1 or more medical conditions who reported use of an alternative therapy for at least 1 of those conditions increased significantly from 22.9% in 1990 to 33.7% in 1997 ($P \leq .001$). The weighted condition-specific proportion who saw an alternative medicine practitioner for a given condition also increased significantly from 6.8% in 1990 to 11.4% in 1997 ($P \leq .001$).

Table 3 also summarizes the probability that individuals who saw a medical doctor for a particular condition also used an alternative therapy (fourth column) or also saw a practitioner of alternative therapy (fifth column) for that same condition during the same year. A generally increasing pattern of alternative medicine use can be seen across the range of conditions studied. In 1990, an estimated 1 (19.9%) in 5 individuals seeing a medical doctor for a principal condition also used an alternative therapy. This percentage increased to nearly 1 (31.8%) in 3 in 1997 ($P \leq .001$). The percentage who saw a medical doctor and also sought the services of an alternative practitioner increased significantly from 8.3% in 1990 to 13.7% in 1997 ($P \leq .01$). In both 1990 and 1997, chiropractic, relaxation techniques, and massage therapy were among the al-

Table 3.—Comparison of Use of Alternative Therapies for the Most Frequently Reported Principal Medical Conditions, 1997 vs 1990

Condition	Percentage Reporting Condition		Used Alternative Therapy for Condition in Past 12 mo, %		Saw Alternative Practitioner for Condition in Past 12 mo, %		Saw Medical Doctor and Used Alternative Therapy for Condition in Past 12 mo, %		Saw Medical Doctor and Alternative Practitioner for Condition in Past 12 mo, %		Therapies Most Commonly Used in 1997
	1997	1990	1997	1990	1997	1990	1997	1990	1997	1990	
Back problems	24.0#	19.9	47.6#	35.9	30.1#	19.5	58.8**	36.1	39.1#	23.0	Chiropractic, massage
Allergies	20.7#	16.0	16.6#	8.7	4.2	3.3	28.0#	15.7	6.4	5.0	Herbal, relaxation
Fatigue*	16.7	...	27.0	...	6.3	...	51.6	...	13.1	...	Relaxation, massage
Arthritis	16.6	15.9	26.7#	17.5	10.0	7.6	38.5#	23.8	15.9	13.8	Relaxation, chiropractic
Headaches	12.9	13.2	32.2	26.5	13.3#	6.3	42.0	31.8	20.0	12.1	Relaxation, chiropractic
Neck problems*	12.1	...	57.0	...	37.5	...	66.6	...	47.5	...	Chiropractic, massage
High blood pressure	10.9	11.0	11.7	11.0	0.9	2.9	11.9	11.6	1.1	3.5	Megavitamins, relaxation
Sprains or strains	10.8	13.4	23.6	22.3	10.3	9.6	29.4	24.7	15.9	13.6	Chiropractic, relaxation
Insomnia	9.3#	13.6	26.4	20.4	7.6	4.0	48.4	19.8	13.3	10.9	Relaxation, herbal
Lung problems	8.7	7.3	13.2	8.8	2.5	0.5	17.9	11.1	3.4	0.6	Relaxation, spiritual healing, herbal
Skin problems	8.6	8.0	6.7	6.0	2.2	1.6	6.8	6.9	0.0	2.5	Imagery, energy healing
Digestive problems	8.2	10.1	27.3#	13.2	9.7#	3.6	34.1#	15.3	10.7	5.8	Relaxation, herbal
Depression†	5.6	8.4	40.9	20.2	15.6	7.0	40.9	35.2	26.9	14.0	Relaxation, spiritual healing
Anxiety‡	5.5	9.5	42.7	27.9	11.6	6.5	42.7	45.4	21.0	10.4	Relaxation, spiritual healing
Weighted average across all conditions§	...	...	28.2**	19.1	11.4**	6.8	31.8**	19.9	13.7#	8.3	...
People with ≥1 condition	77.8#	81.5	33.7**	22.9	15.3**	6.9	...	...	...	...	...

*Not included as a separate question in 1990 survey. Ellipses indicate data not applicable.

†The 1997 question asked about severe depression, which is not directly comparable with the 1990 question that asked about depression.

‡The 1997 question asked about anxiety attacks, which is not directly comparable with the 1990 question that asked about anxiety.

§The weighted averages are calculated based on all 37 conditions studied in 1997 and all 24 conditions studied in 1990, ie, condition is unit of analysis.

||This row shows percentage of respondents who reported 1 or more principal medical conditions, along with the percentage of these respondents who reported use of therapy or practitioners for at least 1 of these conditions, ie, person is the unit of analysis.

#P ≤ .05; *P ≤ .01; **P < .001.

ternative therapies used most commonly to treat principal medical conditions.

As in 1990, 96% of 1997 respondents who saw a practitioner of alternative therapy for a principal condition also saw a medical doctor during the prior 12 months, and only a minority of alternative therapies used were discussed with a medical doctor. Among the 618 respondents in 1997 who used 1 or more alternative therapies and had a medical doctor, only 377 (38.5%) of the 979 therapies used were discussed with the respondent's medical doctor. This is not significantly different from the 353 (39.8%) of the 886 therapies discussed by the comparable group of respondents (n = 501) in the 1990 survey. Given that most alternative therapy is used without the supervision of an alternative practitioner, a substantial portion of alternative therapy use for principal medical conditions (46.0% in 1997 and 51.3% in 1990) was done without input from either a medical doctor or practitioner of alternative therapy.

Payment for Alternative Therapy

Data on insurance coverage of expenditures for alternative therapy services are shown in Table 4. The majority of people who saw alternative therapy practitioners paid all the costs out-of-pocket in both 1990 (64.0%) and 1997 (58.3%). None of the changes in insurance coverage between 1990 and 1997 were statistically significant, probably due in part to small sample sizes.

Using conservative assumptions about the fees charged by practitioners of alternative therapies and assuming no changes in visit prices, Americans spent an estimated \$14.6 billion on visits to these practitioners in 1990 and \$21.2 billion in 1997 (Table 5). Using less conservative (RVRBS) price figures, the amount spent on services of practitioners of alternative therapies was estimated at \$22.6 billion in 1990 and \$32.7 billion in 1997. Regardless of which set of prices is used, total expenditures for practitioners of alternative therapies are estimated to have increased by approximately 45% between 1990 and 1997 exclusive of inflation.

Estimated out-of-pocket expenditures for high-dose vitamins increased from \$0.9 billion in 1990 to \$3.3 billion in 1997. Smaller increases were observed for commercial diet products (\$1.3 billion vs \$1.7 billion). Unlike the 1990 survey, the 1997 survey included questions about expenditures for herbal products (\$5.1 billion) and respondents' alternative therapy-specific books, classes, or equipment (\$4.7 billion).

The estimated total out-of-pocket component of the alternative medicine market in 1997 is shown in Figure 2. Projected out-of-pocket expenditures for all hospitalizations in 1997 in the United States totaled \$9.1 billion, while projected out-of-pocket expenses for all US physician services in the same year were \$29.3 billion.²¹ This compares to a conservatively estimated \$12.2 billion in out-of-

pocket payments to alternative medicine practitioners for the 15 therapies studied. Adding the estimates of \$5.1 billion for herbal therapies, \$3.3 billion for megavitamins, \$1.7 billion for diet products, and \$4.7 billion on alternative therapy-specific books, classes, and equipment, the total out-of-pocket expenditures for alternative medicine are conservatively estimated to be \$27.0 billion. Using the average per-visit prices derived from an RBRVS system¹⁶ rather than our conservative estimates (Table 5), the estimated total out-of-pocket expense is approximately \$34.4 billion, which is comparable with the projected 1997 out-of-pocket expenditures for all physician services.²¹ These estimates exclude out-of-pocket expenditures associated with therapies unique to the 1997 survey (eg, naturopathy, aromatherapy, neural therapy, and chelation therapy).

COMMENT

The results of our study are limited by the restriction of the sampling frame to people who speak English and have telephones and by the low response rate. The decrease in overall response rate from 67% in 1990 to 60% in 1997 is consistent with secular trends for US telephone interviews in recent years.²² It is difficult to know what, if any, bias was introduced or whether trend estimates are biased by the fact that financial incentives were used in 1997 but not 1990. Furthermore, we have no data on the accuracy of self-

Table 4.—Insurance Coverage of Alternative Medicine Services in the United States, 1997 vs 1990*

Type of Therapy	Percentage of Users of Services					
	Coverage, 1997			Coverage, 1990		
	Complete	Partial	None	Complete	Partial	None
Relaxation techniques	28.8	6.6	64.7	5.1	25.9	68.7
Herbal medicine	8.6	11.2	80.2	30.7	15.5	53.8
Massage	11.8	16.7	71.5	19.1	18.3	62.6
Chiropractic	17.6	38.1	44.3	11.5	32.8	55.9
Spiritual healing by others†	...	...	...	0.0	0.0	100.0
Megavitamins	2.7	53.3	44.0	0.0	100.0	0.0
Self-help group	11.7	36.9	51.5	2.8	17.4	79.8
Imagery	51.5	3.5	45.0	16.1	0.0	83.9
Commercial diet	5.0	40.1	54.9	0.0	5.1	94.9
Folk remedies	0.0	0.0	100.0	...	...	...
Lifestyle diet	0.0	44.9	55.1	62.3	0.0	37.7
Energy healing	30.8	8.2	61.1	0.0	19.1	80.9
Homeopathy	0.0	0.0	100.0	0.0	24.7	75.3
Hypnosis	5.1	0.0	94.9	7.0	0.0	93.0
Biofeedback	30.5	43.7	26.0	14.1	19.9	66.0
Acupuncture	0.0	40.7	59.3	21.6	23.0	55.4
Weighted average across all therapies	15.3	26.4	58.3	12.3	23.7	64.0

*Data are percentage of users of alternative therapies provided by practitioners. Ellipses indicate data not applicable.
†Reimbursement patterns not explored in 1997.

Table 5.—National Projections of Expenditures for Alternative Therapies in the United States, 1997 vs 1990*

Category of Expenditure	1997 (Billions of Dollars)		1990 (Billions of Dollars)		Change (%), 1997 vs 1990 (Billions of Dollars)	
	Conservative (SE)	RBRVS (SE)	Conservative (SE)	RBRVS (SE)	Conservative	RBRVS
Total expenditures on professional services for 15 alternative therapies†	21.2 (2.4)	32.7 (3.8)	14.6 (4.0)	22.6 (6.1)	6.6 (45.2)	10.1 (44.7)
Out-of-pocket expenditures						
Professional services, 15 therapies††	12.2 (1.7)	19.6 (3.3)	7.2 (1.3)	11.0 (2.1)	5.0 (69.4)§	8.6 (78.2)§
Megavitamins	3.3 (0.4)		0.9 (0.3)		2.4 (266.7)¶	
Commercial diet products	1.7 (0.3)		1.3 (0.3)		0.4 (30.8)	
Subtotal of out-of-pocket expenditures assessed in 1997 and 1990†	17.2	24.6	9.4	13.2	7.8 (83.0)	11.4 (86.4)
Out-of-pocket expenditures assessed only in 1997						
Herbal medicine	5.1 (0.5)		...		...	
Therapy-specific books, classes, and equipment	4.7 (0.8)		...		...	
Total out-of-pocket expenditures for alternative therapies in 1997†	27.0	34.4	...	...	...	...

*The 1990 and 1997 cost measures are based on 1990 and 1997 population estimates, respectively (180 million vs 198 million). Both used 1997 per-visit price estimates as follows (conservative price estimate is followed by Resource-Based Relative Value Scale [RBRVS] estimate for each therapy): relaxation techniques (\$20, \$50), herbal medicine (\$40, \$60), massage therapy (\$40, \$60), chiropractic care (\$40, \$65), megavitamins (\$40, \$50), self-help groups (\$20, \$20), imagery techniques (\$45, \$50), commercial diet (\$20, \$20), folk remedies (\$20, \$50), lifestyle diet (\$20, \$60), energy healing (\$40, \$50), homeopathy (\$45, \$60), hypnosis (\$60, \$80), biofeedback (\$60, \$80), and acupuncture (\$40, \$60). (Price estimates for spiritual healing by others were not included because respondents reporting use were not asked for details of professional visits). Ellipses indicate data not applicable.

†These figures reflect the range in out-of-pocket expenditures for conservative vs RBRVS-derived visit prices.

††Assumes a 20% copayment for users with partial insurance coverage.

§P≤.05; ¶P≤.001.

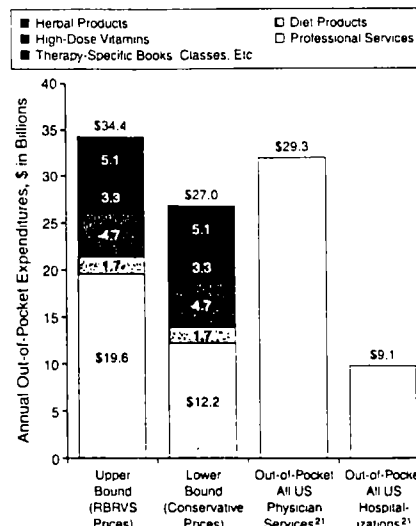


Figure 2.—Estimated annual out-of-pocket expenditures for alternative therapies vs conventional medical services, United States, 1997. Data are from the Health Care Financing Administration, United States.²¹ RBRVS indicates Resource-Based Relative Value Scale.

pared with 3 in 10 in 1990. For adults aged 35 to 49 years in 1997, it is estimated that 1 of every 2 persons used at least 1 alternative therapy. Overall prevalence of use increased by 25%, total visits by an estimated 47%, and expenditures on services provided by practitioners of alternative therapies by an estimated 45% exclusive of inflation. Moreover, the use of alternative therapies is distributed widely across all sociodemographic groups.

It is possible to arrange the 16 principal therapies common to the 1990 and 1997 surveys along a spectrum that varies from "more alternative" to "less alternative" in relationship to existing medical school curricula, clinical training, and practice. Arguably, therapies such as biofeedback, hypnosis, guided imagery, relaxation techniques that involve elicitation of the relaxation response (<1% of the sample), lifestyle diet, and (possibly) vitamin therapy can be considered as representative of the more conventional (ie, less alternative) side of the spectrum. Visits associated with these 6 categories accounted for less than 10% of total visits to alternative medicine practitioners; the remainder were associated with the more alternative therapies.

In light of the observed 380% increase in the use of herbal remedies and the 130% increase in high-dose vitamin use, it is not surprising to find that nearly 1 in 5 individuals taking prescription medications also was taking herbs, high-dose vitamin supplements, or both. Extrapolations to the total US population suggest that an estimated 15 million adults are at risk for potential adverse interac-

reports concerning recollections of number of visits and amounts spent on books, classes, relevant equipment, herbs, or supplements. To the extent possible, we adjusted by weighting data on sociodemographic variables associated with alternative therapy use (eg, income, education, age, region). It is conceivable that the estimated prevalence and costs of alternative therapy use would have been lower if it were possible to correct for those limitations.

Within the context of these limitations, the results of these 2 surveys suggest that the prevalence and expenditures associated with alternative medical therapies in the United States have increased substantially from 1990 to 1997. This increase appears to be primarily due to increases in the prevalence of use and in the frequency with which users of alternative therapy sought professional services. In 1997, an estimated 4 in 10 Americans used at least 1 alternative therapy as com-

tions involving prescription medications and herbs or high-dose vitamin supplements. This figure includes nearly 3 million adults aged 65 years or older. Adverse interactions of this nature, including alterations of drug bioavailability or efficacy, are known to occur^{23,27} and are more likely among individuals with chronic medical illness, especially those with liver or kidney abnormalities. No adequate mechanism currently is in place to collect relevant surveillance data to document the extent to which the potential for drug-herb and drug-vitamin interaction is real or imaginary.

The magnitude of the demand for alternative therapy is noteworthy, in light of the relatively low rates of insurance coverage for these services. Unlike hospitalizations and physician services, alternative therapies are only infrequently included in insurance benefits. Even when alternative therapies are covered, they tend to have high deductibles and co-payments and tend to be subject to stringent limits on the number of visits or total dollar coverage. Because the demand for health care (and presumably alternative therapies) is sensitive to how much patients must pay out-of-pocket,²⁸ current use is likely to underrepresent utilization patterns if insurance coverage for alternative therapies increases in the future.

In 1990, a full third of respondents who used alternative therapy did not use it for any principal medical condition.¹ From these data, we inferred that a substantial amount of alternative therapy was used for health promotion or disease prevention. In 1997, 42% of all alternative therapies used were exclusively attributed to treatment of existing illness, whereas 58% were used, at least in part, to "prevent future illness from occurring or to maintain health and vitality."

Despite the dramatic increases in use and expenditures associated with alternative medical care, the extent to which patients disclose their use of alternative therapies to their physicians remains low. Less than 40% of the alternative therapies used were disclosed to a physician in both 1990 and 1997. It would be overly simplistic to blame either the patient or their physician for this inadequacy in patient-physician communication. The current status quo, which can be described as "don't ask and don't tell," needs to be abandoned.²⁹ Professional strategies for responsible dialogue in this area need to be further developed and refined.

Data from this survey, reflective of the US population, are representative of a predominantly white population. Even if we were to combine data sets from the 1990 and 1997 surveys, we would not

have a sufficiently large database to provide precise estimates of the patterns of alternative therapy use among African Americans, Hispanic Americans, Asian Americans, or other minority groups. Parallel surveys, modified to include therapies unique to minority populations and translated when appropriate, should be conducted using necessary sampling strategies. Only then can we compare patterns across ethnic groups and prioritize research agendas for individual populations. As alternative medicine is introduced by third-party payers as an attractive insurance product, it would be unfair for individuals without health insurance and those with less expendable income to be excluded from useful alternative medical services or consultation (eg, professional advice on use or avoidance of alternative therapies).

In conclusion, our survey confirms that alternative medicine use and expenditures have increased dramatically from 1990 to 1997. In light of these observations, we suggest that federal agencies, private corporations, foundations, and academic institutions adopt a more proactive posture concerning the implementation of clinical and basic science research, the development of relevant educational curricula, credentialing and referral guidelines, improved quality control of dietary supplements, and the establishment of postmarket surveillance of drug-herb (and drug-supplement) interactions.

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Harkin staff mtg 3/1/89

Commission wd not dev. research priorities - rather, The NIH Center Advisory Bd wd do this.

↑ consumer conf - weeding out quacks, devel. rec for standards, etc.

Research rec: priv sector not carrying weight - products that aren't patentable
who can make claims about a product - address issue

inappropriate claims / penalties - fines

if that respect comes some level of responsibility - getting rid of quacks helps
the perception of industry

request of Harkin / Datcher - putting together what they're doing w/ Rich Tarphin
what HHS is doing overall re: CAM Roger McNamee

COC working group - ~~for~~ Nov.

HRSA, Bureau of Primary Health Care.

appointments (?)

Inventory department-wide

NIH wants to be involved in structure development -> Harkin
reps from HHS, HHS.

design of Commission - \$ ed be transferred or admin function
admin & at vely - move resources / investment in

with HHS app't.

Meeting w/ Hankin staff
3/1/99
- Sabrina Corlette

Draft March 1, 1999

***Proposal for Commission on Complementary and Alternative Medicine:
Developing a National Plan***

THE CHARGE TO THE COMMISSION

The Commission will report to the President and the Congress legislative and administrative recommendations to assure that public policy maximizes the benefits to Americans of appropriate use of complementary and alternative medicine (CAM). These recommendations should address the education and training of health care practitioners; coordinated research to increase knowledge about CAM practices and products; reliable and useful information for health professionals that can be made readily accessible and understandable to the general public; and guidance for appropriate access and delivery of CAM.

BACKGROUND

In November 1998, the *Journal of the American Medical Association* reported that 83 million Americans now use some form of complementary and alternative therapy. That represents a nearly 50 percent increase from 1990 in the number of visits to complementary and alternative medicine (CAM) practitioners. These visits totaled 629 million in 1997, exceeding total visits to all primary care physicians. Americans are digging into their pocketbooks for this care. Nearly 60 percent of alternative health care was paid for out-of-pocket--an estimated \$12 billion.

With this rapid rise in the use of CAM therapies by the public has come a number of other changes. Over the last decade nearly all U.S. medical schools have incorporated some form of training in unconventional medical therapies. Many private insurers have begun to offer coverage for CAM therapies. The number and quality of research studies evaluating CAM therapies has increased significantly.

While the government has acted to substantially increase its support for CAM research by establishing and funding the new National Center for Complementary and Alternative Medicine at the National Institutes of Health (NIH), many other areas of public policy have not kept pace. Public policy regarding training, credentialing, access, quality and consumer education, among others, must be evaluated and updated to meet the challenges and opportunities presented by complementary and alternative medicine.

The Commission will review and make recommendations in each of these areas. While the Commission will be charged with reviewing ways to increase support for CAM research, it will not set the nation's research agenda. This function remains the clear responsibility and role of the National Center for Complementary and Alternative Medicine at the NIH.

FOCUS AREAS FOR THE COMMISSION

Education, Training and Credentialing:

1. Should those being trained in CAM practices, such as acupuncture and homeopathy, be eligible for the full range of federal education assistance (loans, grants....)?
2. How should CAM be better integrated into the curricula and field training of medical, public health, and other health professional schools?
3. What can be done to encourage continuing education of CAM among practicing physicians and other conventional health care professionals?
4. Are existing licensing and accreditation standards for CAM fields appropriate?
typically state level - some states none

Research:

1. How can private sector support be increased for research on CAM practices and products, particularly self-care remedies such as vitamin and herbal products that are not easily patented? Are additional federal incentives required?
Orphan drugs model
2. How can greater coordination among federal agencies be encouraged to address the diversity of research needs in CAM?
3. What can be done to expand the current research environment so that frontier claims and practices that lie outside conventional scientific conceptions are adequately and appropriately addressed?
e.g. prayer

Delivery of Integrated Health Care:

1. What criteria should be used to determine whether CAM therapies or products that demonstrate effectiveness are covered or subsidized by government health programs and private health plans?
identify reasonable criteria
2. What should and can be done to further the integration of effective CAM therapies and approaches with mainstream/traditional medical practices?
edu info

Oversight: *(combine?)*

1. What come be done to ensure that consumers have appropriate access to promising CAM therapies and products?
does go need to support these things?
2. Are there adequate guidelines for the use of CAM whether in self-care or under the guidance of a health care provider?

3. Should a federally-sponsored entity be established to coordinate CAM-related activities and discussions among federal agencies?

Public Information:

1. How can useful, reliable and updated information about CAM products and practices be made more accessible to the public and to health professionals?

COMMISSION MEMBERSHIP

The White House will identify and appoint 12-15 knowledgeable and prominent representatives with expertise in health care practice and/or CAM from the public and private sectors in the following measure:

4-6 CAM and conventional practitioners

2 research experts

2 health policy experts

2 business/health management experts

2-3 consumers/patient representatives

The Chair should be a respected health care professional with broad-based health care and public policy experience, who reflects an openness to innovative alternative practice and an ability to balance a wide diversity of views.

Additionally, a number of ex officio representatives will be identified from federal agencies to provide technical assistance and expertise. ↵

An executive staff will be established to organize and support the Commission, and will include detailees from federal agencies.

TIME LINE and FUNDING

The Commission would be named and begin its work by May 15, 1999. It would conclude its work and provide its recommendations to the President and Congress by June 1, 2000. It would be funded by the \$1,000,000 provided through the National Center for Complementary and Alternative Medicine in the Fiscal Year 1999 Labor, HHS Appropriations Act.

Possible Commission Members

Chair:

Haile Debbas, M.D., (Dean, Univ. Of California at San Francisco Medical School)
Jim Gordon, M.D. (Georgetown Univ. Med School, Center for Mind-Body Medicine)

Practitioners:

Mehmet Oz, M.D. (Cardiac Surgeon, Columbia University) *Asian*
Joe Pizzorno, ND (President, Bastyr University)
Dean Ornish, M.D. (President, California Pacific Preventive Medical Center)
Tieraona Low Dog, M.D. (Herbalist, Family Physician, Indian Health Service)
Tracy Gaudet, M.D., (Medical Director, Integrated Health Clinic, Univ. Of Arizona)
Guy F. Riekeman, D.C., (President, Palmer College of Chiropractic, Davenport, Iowa)
Jeanette South-Paul, M.D. (Chair, Dept. of Family Practice, USUHS) *AA (obg.)*
Harold Freeman, M.D. (Chief of Surgery, Harlem Hospital) *AA - (obg.)* *Canen Advise. Canen chn.?*
Sister Charlotte Kerr, M.Ac. (Acupuncturist, health care advisor to Sen. Mikulski)
Nurse, TBD

Research Community:

David Eisenberg, MD, Harvard Medical School Center for CAM
William Sturrock, Ph.D. (Prof of Astrophysics, Stanford University) *steph*
Robert McCaleb, PhD, (Herb Research Foundation, Boulder, CO)
Freddi Kronenberg, M.D. (Director, Center for CAM, Columbia University) *♀*
William Haskell, Ph.D. (Prof. of Medicine, Director CAM Center, Stanford University)

Health Policy:

Jay Moskowitz, M.D. (Assoc. Dean, Wake Forest, Former Deputy Director, NIH) *- 8 min. talk - ob of AA. Medicine*
Bob Marston, M.D. (Former Director, NIH)
Margaret Heckler (Former HHS Secretary)
C. Everet Koop, M.D. (Former Surgeon General of the US)
Joseph M. Kaczmarczyk, D.O., M.P.H. (Senior Advisor on integrative medicine, Bureau of Primary Health Care, HRSA)
David Smith, M.D. (Dean, Health Sciences, Texas Tech, fmr. Texas Comm. of Health) *- 9.5 effort delivery through community-based*
Bill Roper, M.D., (former HCFA, CDC head, Dean of Public Health, UNC)

Public representatives:

Berkeley Bedell (former Congressman from Iowa)
Michael Ford (Executive Director, National Nutritional Foods Association)
Debra Lappin (Chair, Arthritis Foundation) *- no particular interest among members*
Religious Representative - TBD

Michaela Odone (Lorenzo's Oil mother, founder of the Myelin Project) *hope*
Julian Bond (Chairman, NAACP) *AA*

Business/Health Management:

David Lawrence, M.D., (CEO, Kaiser Permanente) *- looked at CAM*
Regina Hertzling, Ph.D. (Professor, Harvard Business School)
Paul Van Etten (CEO, Stanford Medical Center)
Robert Smith (CEO, Charles E. Smith Company) *bus can rep; personal account*

Executive Director:

Wayne Jonas, M.D. (Former Director, Office of Alternative Medicine) *- thought about him, knows the field; respected by people on both sides; admired by activists, - didn't get along w/ Veterans*

Consultants:

Marc Micozzi, M.D., Ph.D. (Exec. Director, College of Physicians, Philadelphia)
Zach Hall, M.D. (Dean of Research, UCSF, past Director of NINDS)
Maryln Schlitz, Ph.D. (Director of Research, IONS, AMPAC member)
Richard Stohman, M.D. (Prof Emeritus, Biology, UC Berkeley)
Bob Duggan, M.Ac. (Co-founder and Director, Traditional Acupuncture Institute)
Brian Josephson, Ph.D. (Prof of Physics, Oxford Univ, Nobel Laureate)
Brian Berman, M.D. (Associate Prof. Univ. Maryland)
Robert Windom, M.D. (Former Assistant Secretary of Health)
Ian Coulter, Ph.D. (Senior scientist, RAND Corp.)
Ian Chalmers, M.D. (Director, Oxford Cochrane Center)
Cindy Mulrow, M.D. (Associate Prof of Fam Practice, Univ Texas, San Antonio)
Raymond Murray, M.D. (Prof Emeritus of Medicine, Univ. of Michigan)
Dan Fox, Ph.D. (Director, Milbank Memorial Fund)
Daniel Cherkin, Ph.D. (Kaiser Permanente and chiropractic researcher)
Larry Hedges, Ph.D. (Prof Education and statistician, Univ Chicago)
Richard Hammerslag, Ph.D. (Associate Dean, San Yo College of TCM)
Peter Hindenberger, M.D., Ph.D. (President, Anthroposophical Med. Soc.)
Curt Furberg, M.D., Ph.D. (Chairman, Dept of Public Health, Wake Forest)
Alan Neims, M.D. (Prof. Med and former Dean, Univ of Florida Medical School)
Roger Nelson, Ph.D. (Prof. Princeton University)
Karen Olness, M.D. (Prof Pediatrics, Rainbow Hospital, Cleveland and AMPAC)
Robert Porter, M.D. (Orthopedic Surgeon, Past President FSMBE)
Gilbert Ramirez, Dr. P.H. (Epidemiologist, UT, San Antonio and AMPAC)
Richard Roberts, M.D., J.D. (Prof, Dept of Fam Med, Univ of Wisconsin)
Jessica Utts, Ph.D. (Prof, Dept of Statistics, UC Davis)

Ex officio members - go!!
HHS

January 8, 1998

MEMORANDUM FOR HILLARY RODHAM CLINTON

FROM: Jennifer Klein, Chris Jennings, Nicole Rabner
SUBJECT: Meeting with Senator Harkin

- 1 year
- Phil Lee, Dean Ornish,
- Dr. Koop, Dr. Oz - Columbia
- Gulf War model
- what kind of leg. shld we consider?
- Pres. announcement
- Commission to give guidance to Center at NIH
- Look at med. educ. coverage, educ. of alt. providers, FDA reg.

On Monday, you will be meeting with Senator Harkin at his request to discuss his proposal to examine and promote alternative medicine by forming a White House Commission on Integrated Health Care. In the Congress, Senator Harkin has championed efforts to evaluate the use of alternative medicine. In 1992, he created the Office of Alternative Medicine at the NIH, but has long felt that, nonetheless, the NIH has not given the issue appropriate attention. The last budget signed by the President included, due to Senator Harkin's efforts, a significant increase for the NIH office -- from \$20 million to \$50 million. In addition, Senator Harkin secured \$1 million in the last budget to fund a commission should the President decide to appoint one.

Establishing a commission, as you know, has disadvantages, particularly the extraordinary length of time often taken to appoint members and for any actual work to get done. According to his staff, Senator Harkin may be open to other ways to achieve his goals. We are trying to reach the Acting Director of the NIH Office of Alternative Medicine before Monday's meeting to explore what if anything we might suggest in lieu of a commission. One alternative meeting may be to host a high level meeting to give the issue visibility and momentum.

Attached please find the Senator's proposal for this commission, as well as a recent articles on the subject of alternative medicine.

Meeting Participants

The First Lady
Senator Harkin
Peter Reinecke, Senator Harkin's office
Sabrina Corlette, Senator Harkin's office
Melanne Verveer
Chris Jennings
Jennifer Klein
Nicole Rabner

- Draft mission statement, time from suggested names - shld look at nutrition too.

- Berkeley Vidal

FROM SENATOR HARKIN

Proposal for a Commission on Integrated Health Care: Developing A National Plan

Background

Wide-spread use: According to the November 1998 issue of the *Journal of the American Medical Association (JAMA)*, 85 million American adults (42% of the population) now use complementary and alternative medical (CAM) products and practices. There are substantially more visits each year to alternative medicine practitioners than to conventional primary care physicians. The public's out-of-pocket expenses for these CAM products and services is equal to that paid out-of-pocket for physician services and is three times that paid out-of-pocket for hospital expenses.

A Women's Health Issue: Increasing numbers of women (48.9% in 1997) are turning to CAM products and practices for a variety of conditions and illnesses, including breast cancer, menstrual problems, endometriosis, nerve-related conditions, and pregnancy and labor management. Over the next 16 years, each year nearly 1 million American women will turn 50. The average age for menopause is 51. Hormone replacement therapies constitute the most prescribed drugs in America today and often are marketed as panaceas for conditions associated with aging such as osteoporosis and heart disease, in addition to the full range of menopausal complaints. Women are seeking natural, less invasive and holistic alternatives to synthetic drugs -- alternatives that may reduce symptoms, improve well-being, and prevent and treat chronic illness. However, there is little or nothing known about the safety and effectiveness of many of these products and practices on pre-and menopausal women.

Similarly, little is known about alternative treatments for endometriosis, even though up to 20% of American women of childbearing age are diagnosed every year with this painful disease. While studies have shown some efficacy with conventional drugs, all of them have side-effects that make them unsuitable for long-term use. Subsequently, women are turning to untested alternative treatments and products to treat this condition.

Women often are the primary caretakers for the health of their entire family, making decisions about diet and illness prevention, such as vitamins and other food supplements, and for treatment of minor aches and pains. And these women increasingly desire to take charge of their own -- and their family's -- health care practices. For example, the vast majority, approximately two-thirds, of homeopathic patients and purchasers of homeopathic products are women.

Integrated Medicine: Over 95% of those who use CAM products and practices do so in conjunction with conventional medicine -- not in place of it. Americans are looking for health care services to complement conventional medicine when its side effects, costs, and effectiveness are inadequate or unacceptable. However, only a minority of patients disclose CAM use to their doctor and few doctors ask about CAM use or have the expertise to advise on the benefits and risks of these practices. In late 1997, *JAMA* noted the "increasingly critical" need to determine how to integrate CAM practices into clinical practice to improve patient care.

There is credible research showing the effectiveness of various CAM practices concerning many common conditions such as heart disease, depression, asthma, addictions and pain management. As research on CAM opens up new treatment options, the health care community has attempted to respond to the public's interest in CAM. Nearly 70% of American medical schools now offer CAM electives, and several are already incorporating required lectures and seminars into their core curricula. And managed care organizations and insurance companies are beginning to grapple with how to offer CAM benefits, and hospitals throughout the nation are opening "integrative care centers."

Statement of Need

National health and science policy must catch up with the changing values and needs of the American people. The movement toward integrated medicine promises a more comprehensive, and more responsive health care system. Evidence suggests that this approach may be far more cost-effective as well.

The Federal government needs to develop a national plan to address the integration of complementary and alternative treatments into mainstream health care. To that end, the Congress provided funding for a White House Commission on Integrated Health Care. The Commission is charged with developing a federal strategy for the integration of CAM into our health care system. In particular, the Commission would evaluate current CAM therapies; assess the prospects of a holistic or integrated approach for improving the health of Americans; address issues of regulation and safety; and establish guidelines for the integration of this approach and these therapies into all aspects of health care, including patient care, research, professional training and health education. Under the leadership of the White House, this Commission would seek input from all relevant constituencies, with a special focus on women's health, in the development of this plan.

Goals

The White House Commission's National Plan for Integrated Health Care would address the following:

- Determining priorities for integrated health care in the areas of practice, research and policy. These should include:
 - Surveillance and monitoring of potential adverse effects from CAM use
 - Adequate CAM education and training of health care providers
 - Accountability of emerging CAM products and practices
 - Consumer access to alternative medicine products and practices
 - Priorities for funding research on integrated health care, with a special emphasis on women's health research
 - Criteria for the provision of integrated health care benefits
 - Areas for frontier and anomalous sciences that are of interest to the public, including family wellness and women's health issues

— Use of traditional and indigenous medical practices in conjunction with conventional medicine

- Identifying what information on integrated health care should be collected, summarized and made easily accessible to the public
- Establishing appropriate and adequate research priorities, particularly in the area of women's health
- Developing guidance in making integrated health care services safe and effective, including how to monitor the possible adverse effects of these practices and products, and how to establish standards of training, credentialing, licensing and monitoring of service quality
- Establishing guidance to assure reasonable access and appropriate benefits to integrated health care services
- Reviewing the impact of integrated health care services on special populations, including the disadvantaged, elderly, veterans, children, women and minority populations

Consensus

Under the leadership of the White House, the Commission may seek the input and participation of a number of organizations, including, but not limited to, the following:

Association of American Medical Colleges
Association of Health Insurers of America
American Board of Medical Specialties
Agency of Health Care Policy and Research
Agency of International Development
Bureau of Primary Health Care
Bureau of Health Professionals
Centers for Disease Control and Prevention
Complementary and Alternative Medicine Consortium
Department of Health and Human Services
Office of Women's Health
Department of Defense
Department of Education
Food and Drug Administration
Federation of State Medical Boards
Government Reform and Oversight Committee
Health Care Financing Administration
Health Resources and Services Administration
Institute of Medicine
National Academy of Sciences

National Institutes of Health
National Library of Medicine
Office of Alternative Medicine
Office of Women's Health Research
Professional Health Care Associations
Veterans' Affairs
The World Bank

Membership

Under the leadership of the White House, the Commission would be composed of 10-15 knowledgeable and prominent citizens of the country with knowledge of and expertise in health care practice and policies and be drawn from both the public and private sectors.

The Chair should be a respected member of the health care establishment with experience in all aspects of medicine and health care and with an openness to innovative alternative practices and an ability to balance a wide diversity of views.

Timeline and Resources

The Commission would convene for a 12 to 15-month period. It would be allotted sufficient resources and a coordinating staff to support the Commission, solicit expert advice, collect relevant background information and obtain public input.

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LEVEL 1 - 5 OF 6 STORIES

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November 11, 1998, Wednesday, Final Edition

SECTION: A SECTION; Pg. A01

LENGTH: 1381 words

HEADLINE: Widening the Medical Mainstream; More Americans Using 'Alternative' Therapies

BYLINE: Susan Okie, Washington Post Staff Writer

BODY:

The number of Americans who are using "alternative" treatments such as herbal supplements, massage therapy and megavitamins is increasing dramatically and visits to alternative practitioners have become more common than visits to the family doctor, according to a new survey released yesterday.

At the same time, scientific attempts to evaluate the effectiveness of such therapies are starting to separate those that work from those that don't. For example, studies also released yesterday by a major medical journal found that burning a Chinese herb next to the toe of a pregnant woman can often make her breech baby turn head-down, but that another herb commonly sold as a weight-loss aid is useless.

The studies were among a half-dozen published today in the Journal of the American Medical Association (JAMA) in a special issue dedicated to alternative medicine. It marked the first such effort by a mainstream U.S. medical journal and was an attempt to meet doctors' need for high-quality scientific information on treatments that more and more patients are trying, the editor said. Altogether, the American Medical Association this week planned to publish a total 80 reports about alternative medical therapies in JAMA and other journals.

"It is the beginning of the beginning of acceptance of some forms of 1998 alternative medicine into mainstream medicine in the United States," said George Lundberg, the editor of JAMA. "Acceptance the good, old-fashioned way -- by merit."

An estimated 83 million American adults -- more than four out of 10 -- used some form of alternative medical treatment last year, according to the new survey by a Harvard research team. They reported that visits to practitioners of alternative therapies, from herbal medicines to "energy healing," have increased 47 percent since 1990, propelled chiefly by middle-aged, health-conscious baby boomers. Half of the people between age 35 and 49 reported of using at least one of the surveyed treatments last year. The majority of users said they were turning to the therapies to prevent future illnesses rather than to treat current ones.

Jeff Sherman, 46, a real estate developer from McLean, said he has used acupuncture and homeopathy to relieve headaches and dizziness. He said many of his friends also have tried various alternative therapies.

"I think we're all of the age, and we know enough about medicine, that we're willing to consider that perhaps Western medicine doesn't have the only answer," he said.

The Harvard team, led by David M. Eisenberg, questioned 2,055 randomly selected adults about their use last year of 16 alternative therapies and compared the results to a similar survey conducted by the same team in 1990. In addition to herbal medicine and "energy healing," therapies included in the survey were relaxation techniques, massage therapy, chiropractic, spiritual healing, megavitamins, self-help, imagery, homeopathy, hypnosis, biofeedback, acupuncture, folk remedies and various diets. The researchers tried to be more specific in a number of these areas. For example, when asked about vitamins, the surveyors specifically said they meant something other than regular daily vitamins or vitamins prescribed by a doctor.

The researchers found that Americans' use of alternative therapies increased by 25 percent during the seven-year period and that expenditures for practitioners' services increased by 45 percent. They estimated that Americans spent \$ 27 billion, most of it not reimbursed by insurance companies, on alternative treatments last year. Among the fastest-growing therapies were herbal remedies, massage, megavitamins, relaxation techniques and "spiritual healing."

"The fact that nearly 50 percent more people visit alternative medicine practitioners now than in 1990 is astounding," said Sen. Tom Harkin (D-Iowa), who sponsored legislation that created the Office of Alternative Medicine at the National Institutes of Health in 1991. "Consumers need and deserve better information on what works and what doesn't."

Last month, President Clinton signed a law upgrading the office to the National Center for Complementary and Alternative Medicine and increasing its

annual budget from \$ 20 million to \$ 50 million.

Only about 40 percent of people who use alternative therapies tell their doctors, the survey found. And as many as 15 million people who take prescription drugs also are using herbs or high-dose vitamins, raising concerns about possible side effects from combining treatments, Eisenberg said. "We raise the question of whether these 15 million adults are at risk for drug-herb or drug-vitamin interactions," he said.

The six studies tested various alternative therapies using a classic research design, the randomized clinical trial in which one group of patients receives a treatment and another group receives a placebo. In most of them, doctors and patients didn't know who was receiving what. Some of the results were surprising.

For instance, one study found that moxibustion, a traditional Chinese therapy in which an herb, *Artemisia vulgaris*, was burned next to an "acupuncture point" on the toe, proved safe and effective for stimulating fetuses in the wombs of pregnant women to turn over from a breech (feet-first) position to a head-first position, which is safer for delivery, said Francesco Cardini, an Italian gynecologist who conducted the study in China.

After two weeks, breech fetuses had turned over in 75 percent of the 130 women who received moxibustion daily or twice a day but in only 48 percent of 130 women who didn't get the treatment, he said. He said the therapy, which is painless, increases fetal movement, perhaps by changing nerve stimulation to the uterus.

"This treatment is quite strange for us, but it is easy, cheap, safe and can be done at home," said Cardini. "If it fails to attain the result, another therapy can be done later."

In another study, a stretching regimen based on yoga was found to help relieve hand pain and weakness produced by carpal tunnel syndrome, which is caused by compression of a nerve at the wrist. And a third study found that a mixture of traditional Chinese herbs helped alleviate symptoms -- such as abdominal pain, constipation or diarrhea -- in people with irritable bowel syndrome.

But spinal manipulation by chiropractors was not shown to relieve tension headaches. An herb, *Garcinia cambogia*, commonly found in supplements marketed to dieters was no more effective than a placebo for promoting weight loss. And acupuncture turned out to be no better than a placebo for pain caused by nerve damage in people with AIDS.

Lundberg said a study that finds that an alternative therapy, such as traditional Chinese herbs, is effective for a particular problem shouldn't be viewed as a blanket endorsement. "It is not proper to make a giant leap from one study to immediately say, 'That means Chinese herbs are okay from anybody's closet, for anything,' " he said at a Washington news conference where the research was released.

Some medical experts also have expressed concern that herbal products, which do not have to meet any official government purity or manufacturing standards, may carry dangerous impurities.

Gary Kaplan, a family practitioner and chronic pain specialist who runs an integrative medicine clinic in Arlington, applauded the studies. Kaplan said he and other practitioners at his clinic use a variety of treatments including manipulation, acupuncture, guided imagery, biofeedback, nutritional counseling and homeopathy. "I'm very pleased to see this stuff being studied," he said. "What's going on is really something of a quiet revolution in medicine. We're going to see an expanded concept of health and illness."

Alternative Treatments

Visits to practitioners of alter-native medicine have grown rapidly in the past seven years.

Total number of visits:

Alternative therapies

1990: 427 million

1997: 629 million

Primary care physicians

1990: 388 million

1997: 386 million

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Congress has given the orthodox medical establishment \$ 50 million to sort out the claims, mysteries and realities of "alternative medicine." That's the term for a melange of potions and treatments that includes massage and acupuncture, as well as shark's cartilage for cancer and St. John's Wort, a low-octane anti-depressant for sale without prescription.

Unfortunately, the congressional generosity is misbegotten, since the money was entrusted to the National Institutes of Health, where the management rates alternative medicine as synonymous with quack medicine. With lesser sums previously imposed on it by Congress, \$ 20 million last year, the guardians of medical orthodoxy at NIH have been pawing at alternative medicine since 1993, with little to show for their efforts. In fact, squabbles still persist about the definition of alternative medicine, with some proponents preferring to call it "complementary medicine," while others have recently shown interest in calling it "integrative medicine," sometimes in combination with the other terms.

It's important to look at it, the proponents argue, since Americans by the scores of millions are gulping strange potions beyond the reach of the Food and Drug Administration and subjecting themselves to procedures foreign to traditional medical practice. According to a recent issue of the Journal of the American Medical Association (JAMA) that was devoted to alternative medicine, Americans made 629 million visits to "alternative medicine practitioners" in 1997, "thereby exceeding total visits to all U.S. primary care physicians." The alternative healers are said to have taken in \$ 21.2 billion; \$ 12.2 billion of that sum was out of pocket -- which probably signifies a mixture of confidence and desperation among their clients.

The expressed concern in the ranks of orthodox medicine is that reliance on

the alternatives might delay or interfere with effective treatments for serious ailments. There's also worry about fraud in the grand snake-oil tradition and well-intentioned but harmful incompetence. A mainstream scientist is quoted in the JAMA issue as saying, "Why don't we form a center at Harvard for the scientific study of astrology?" Various alternative camps respond that these concerns reflect the turf insecurities of organized medicine, now intensified by the income-cutting rigors of managed care.

The directed purpose of the NIH program is to subject alternative treatments to the same type of scientific examination that supposedly ensures the safety and efficacy of mainstream medicine. The moving force behind this effort is Sen. Tom Harkin (D-Iowa), who forced money upon NIH in 1992 for what eventually became a low-level Office of Alternative Medicine. Hostile to this mandate, the NIH management entombed the office in bureaucratic snarls, to the point where the founding director quit in disgust after two years. His successor, Wayne B. Jonas, a medical officer on detail from the U.S. Army, fared better during a three-year stint. Jonas made progress toward getting mainstream scientists and physicians to recognize that whatever their attitude toward alternative medicine, scores of millions of Americans are indulging in it and therefore it is desirable to identify what works and what doesn't. Harkin struck again this year, elevating the office to the more independent rank of a center in the NIH organizational structure, and raising the budget to \$ 50 million, despite NIH's preference for holding the money level.

In a swan song article in JAMA, Jonas touched on several characteristics that may account for the popularity of alternative medicine. Based on reports of patient surveys, he notes that the "time spent with each patient by an alternative medicine practitioner usually exceeds that spent by the average conventional physician, and patients are often more satisfied with their interactions with unorthodox than orthodox medical practitioners." He points out that conventional treatments gone awry "are a major cause of death and hospitalization" -- a failing openly acknowledged by orthodox medicine.

The need to study alternative medicine is beyond dispute. But NIH, a stronghold of medical orthodoxy, has amply demonstrated over six years that it's not the place to do it. The new center would be better off as an independent agency, safely insulated from the tender care of the elite skeptics at the National Institutes of Health.

The writer is a visiting scholar in the history of science, medicine and technology at Johns Hopkins University.

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Trends in Alternative Medicine Use in the United States, 1990-1997

Results of a Follow-up National Survey

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Context.—A prior national survey documented the high prevalence and costs of alternative medicine use in the United States in 1990.

Objective.—To document trends in alternative medicine use in the United States between 1990 and 1997.

Design.—Nationally representative random household telephone surveys using comparable key questions were conducted in 1991 and 1997 measuring utilization in 1990 and 1997, respectively.

Participants.—A total of 1539 adults in 1991 and 2055 in 1997.

Main Outcomes Measures.—Prevalence, estimated costs, and disclosure of alternative therapies to physicians.

Results.—Use of at least 1 of 16 alternative therapies during the previous year increased from 33.8% in 1990 to 42.1% in 1997 ($P \leq .001$). The therapies increasing the most included herbal medicine, massage, megavitamins, self-help groups, folk remedies, energy healing, and homeopathy. The probability of users visiting an alternative medicine practitioner increased from 36.3% to 46.3% ($P = .002$). In both surveys alternative therapies were used most frequently for chronic conditions, including back problems, anxiety, depression, and headaches. There was no significant change in disclosure rates between the 2 survey years; 39.8% of alternative therapies were disclosed to physicians in 1990 vs 38.5% in 1997. The percentage of users paying entirely out-of-pocket for services provided by alternative medicine practitioners did not change significantly between 1990 (64.0%) and 1997 (58.3%) ($P = .36$). Extrapolations to the US population suggest a 47.3% increase in total visits to alternative medicine practitioners, from 427 million in 1990 to 629 million in 1997, thereby exceeding total visits to all US primary care physicians. An estimated 15 million adults in 1997 took prescription medications concurrently with herbal remedies and/or high-dose vitamins (18.4% of all prescription users). Estimated expenditures for alternative medicine professional services increased 45.2% between 1990 and 1997 and were conservatively estimated at \$21.2 billion in 1997, with at least \$12.2 billion paid out-of-pocket. This exceeds the 1997 out-of-pocket expenditures for all US hospitalizations. Total 1997 out-of-pocket expenditures relating to alternative therapies were conservatively estimated at \$27.0 billion, which is comparable with the projected 1997 out-of-pocket expenditures for all US physician services.

Conclusions.—Alternative medicine use and expenditures increased substantially between 1990 and 1997, attributable primarily to an increase in the proportion of the population seeking alternative therapies, rather than increased visits per patient.

native medicine prevalence, costs, and patterns of use¹ demonstrated that alternative medicine has a substantial presence in the US health care system. Data from a survey in 1994² and a public opinion poll in 1997³ confirmed the extensive use of alternative medical therapies in the United States. An increasing number of US insurers and managed care organizations now offer alternative medicine programs and benefits.⁴ The majority of US medical schools now offer courses on alternative medicine.⁵

National surveys performed outside the United States suggest that alternative medicine is popular throughout the industrialized world.⁶ The percentage of the population who used alternative therapies during the prior 12 months has been estimated to be 10% in Denmark (1987),⁷ 33% in Finland (1982),⁸ and 49% in Australia (1993).⁹ Public opinion polls and consumers' association surveys suggest high prevalence rates throughout Europe and the United Kingdom.¹⁰⁻¹³ The percentage of the Canadian population who saw an alternative therapy practitioner during the previous 12 months has been estimated at 15% (1995).¹⁴ The wide range of utilization rates can be explained, in part, by the disparity in definitions of alternative therapy and the selection of therapies assessed.

The presumption is that alternative medicine use in the United States has increased at a considerable pace in recent years. The purpose of this follow-up national survey was to investigate this presumption and document trends in alternative medicine prevalence, costs, disclosure of use to physicians, and correlates of use since 1990.

METHODS

Sample

We conducted parallel nationally representative telephone surveys in 1991 and 1997. Survey methods were approved by the Beth Israel Deaconess Institutional Review Board, Boston, Mass.

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ALTERNATIVE medical therapies, functionally defined as interventions neither taught widely in medical schools nor generally available in US hospitals,¹ have attracted increased national attention from the media, the medical community, governmental agencies, and the public. A 1990 national survey of alter-

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Both surveys used random-digit dialing to select households and random selection of 1 household resident, aged 18 years or older, as the respondent. Eligibility was limited to English speakers in whom cognitive or physical impairment did not prevent completion of the interview. We asked respondents about their use of alternative therapies during the prior 12 months. We consider the results of the 1991 survey, fielded between January and March of that year, representative of 1990, and the results of the 1997 survey, fielded between November 1997 and February 1998, representative of 1997.

The sampling scheme was designed with a target sample of 1500 in 1990 and 2000 in 1997. The latter sample size was chosen to provide power in excess of 80% to detect an increase from 34% to 39% in the proportion of adults who used at least 1 form of alternative therapy during the prior 12 months. The actual numbers of completed interviews were 1539 in 1990 (67% response rate) and 2055 in 1997 (60% weighted response rate). A secular trend in lower survey response required us to offer a \$20 financial incentive for participation in the 1997 survey to maintain a response rate near the one achieved in 1990. No financial incentive was used in the 1990 survey.

The data in each survey were separately weighted to adjust for geographic variation in cooperation (eg, by region of country and urbanicity) and for household variation in probability of selection (ie, the inverse relationship between size of household and probability of selection because only 1 interview was completed in each sample household). The data were then weighted in parallel on sociodemographic variables to adjust for aggregate discrepancies between the sample distributions and population distributions provided by the US Census Bureau. This last stage of weighting was based on the 1997 Current Population Survey data¹⁵ and was done in parallel across the 2 surveys to remove any between-survey discrepancies of weighted sociodemographic distributions.

Of the initial sample of 9750 telephone numbers in 1997, 26% were nonworking, 17% were not assigned to households, and 9% were unavailable (ie, despite 6 attempted follow-up contacts). We declared 481 households ineligible because respondents did not speak English or because of cognitive or physical incapacity. Among the remaining 4167 eligible respondents, 1720 (41.3%) completed the interview on initial request. Attempts were then made to convert a random subsample of 1066 refusers by offering them an increased stipend (\$50). A total of 335 (31.4%) of the 1066 contacted were converted in this manner. Extrapolating this

conversion rate to all of the refusers and weighting the data for the undersampling of initial refusers, we obtained a 60% ($41.3\% + [31.4\% \times (100\% - 41.3\%)]$) weighted overall response rate among eligible respondents.

Interview

In both years, the interview was presented as a survey conducted about the health care practices of Americans by investigators from Harvard Medical School. No mention was made of alternative or complementary therapies. The substantive questions began by asking about perceived health, health worries, days spent in bed, and functional impairment due to health problems. We then asked respondents about their interactions with a *medical doctor*, defined as "a medical doctor (MD) or a doctor of osteopathic medicine (DO), not a chiropractor or other nonmedical doctor." The term *medical doctor* was used throughout the remainder of the interview.

To document trends we explored the following: (1) Respondents in both surveys were presented with a list of common medical conditions and asked if they had experienced each of these conditions during the previous 12 months. (2) Respondents who reported more than 3 conditions were asked to identify their 3 most bothersome or serious medical conditions and were then asked about seeing a medical doctor for these principal medical conditions and about the perceived quality of these interactions. (3) Respondents were asked about their lifetime and past 12-month use of 16 alternative therapies and whether each of these therapies was used for each of the principal medical conditions. The 1997 survey also asked about use for a representative sample of other medical conditions and expanded the list of therapies beyond the original 16 assessed in 1990. (4) We distinguished between use under the supervision of a practitioner of alternative therapy and use without such supervision. Respondents who reported supervised use were asked about their number of visits in the past 12 months to practitioners of each therapy. (5) All users of alternative therapies in 1997 who acknowledged seeing a medical doctor during the past year were then asked if they had discussed their use of each therapy with a medical doctor and, if not, why not.

Prior use of 16 targeted therapies was explored using a computer-assisted interview transcript, which included the following clarifications in both 1990 and 1997: When asking about high-dose vitamin or megavitamin therapies, interviewers made clear that the survey sought information on vitamins not including a daily vitamin or vitamin pre-

scribed by a doctor. Prayer or spiritual healing by others was asked about separately from prayer or spiritual practice for individual health concern. Commercial diet programs were described as "the kind you have to pay for, but not including trying to lose or gain weight on your own." A lifestyle diet included examples like vegetarianism or macrobiotics. Questions regarding energy healing included examples of magnets, energy-emitting machines, or the "laying on of hands," and use of relaxation techniques was explained using the examples of meditation or the relaxation response. The remaining 9 therapies were asked about without interviewer clarification.

The 1997 survey was longer (average, 30 minutes) than the 1990 survey (average, 25 minutes) because we sought to explore a number of areas in more depth. All the important questions in the 1990 survey were repeated in 1997. These replicated questions are the focus of the current report. One major change in the 1997 survey involved replicated questions: respondents who reported using more than 3 alternative therapies were asked in-depth questions (eg, use of a practitioner of alternative therapies, number of visits, out-of-pocket expenses, reasons for use) for all such therapies in 1990 but only for a random sample of 3 such therapies in 1997. This was required because of expansion in both the number of alternative therapies we assessed in 1997 and questions about each therapy. The 1997 data were weighted to adjust for this sampling in making comparisons with the 1990 data.

Insurance Coverage

For each therapy for which respondents said they used services of an alternative medicine practitioner, we asked whether insurance helped pay for any of the costs of the therapy and whether the respondent paid any of the costs out-of-pocket. Based on the answers to these questions, we calculated the proportion of users of each therapy who had complete, partial, or no insurance coverage for that therapy. We also calculated the overall frequency of insurance coverage by weighting the insurance frequencies within each therapy by the proportion of all user therapies accounted for by that therapy.

Construction of Cost Measures

The total cost of visits to alternative medicine practitioners was calculated by multiplying the number of visits for each therapy by a per-visit price and adding the prices of the following therapies: relaxation techniques, herbal medicine, massage therapy, chiropractic care, megavitamins, self-help groups, imagery techniques, commercial diet, folk rem-

edies, lifestyle diet, energy healing, homeopathy, hypnosis, biofeedback, and acupuncture. Out-of-pocket costs were constructed for each therapy by multiplying each user's visits by the full price of the visit if the user had no insurance coverage, by 0.2 if the user had partial insurance coverage, and by zero if insurance paid the full price of the visit. The assumption of a 20% coinsurance rate among users with partial insurance coverage should yield a conservative estimate of out-of-pocket costs, because it ignores deductibles and benefit caps and assumes that insurance benefits for alternative therapy are similar to medical coverage.

We calculated costs based on per-visit prices chosen from typical prices paid for such services by private insurers using a Resource-Based Relative Value Scale (RBRVS)¹⁶ system in selected states. We then recalculated costs using a second set of prices chosen partly to reflect empirical data on the out-of-pocket costs paid by the respondents, but primarily to represent conservative estimates of the per-visit cost of alternative therapies. Total costs based on this second set of prices should represent a lower bound on true expenditures.

Out-of-pocket costs of herbs, megavitamin supplements, and commercial diet products were calculated by multiplying the total population of users by the average out-of-pocket expenditures reported by respondents who used each of these products. In 1997, each respondent who used an alternative therapy was also asked, "Did you spend any additional money on things like books, classes, equipment, or any other items related to [the alternative therapy] in the past 12 months?" Out-of-pocket expenditures on these other items were calculated following the same procedures used for herbs, megavitamins, and commercial diet products. Out-of-pocket expenditures on herbs, megavitamins, commercial diet products, and related items were based on actual dollar amounts reported, so changes between 1990 and 1997 include inflation. To isolate the increase in the cost of practitioner visits between 1990 and 1997 solely because of the increase in the use of alternative therapies, we calculated 1990 practitioner costs using 1997 prices. The differences between the 1990 and 1997 costs of practitioner services reported are understated because they do not take into account inflation, estimated at 44% by the medical component of the Consumer Price Index.¹⁷

Statistical Analysis

Analyses reported herein consist of computation of prevalence and mean estimates and comparisons of these esti-

mates through the years. As the data in both surveys are weighted, the Taylor series method was used to compute significance tests using SUDAAN software.¹⁸ χ^2 Tests of independence were used for comparing proportions, while *t* tests were used for continuous measures. Extrapolations of survey estimates to the total population were based on the assumption that there were 180 million adults living in the US household population in 1990 and 198 million in 1997.¹⁵

RESULTS

Characteristics of Respondents

The characteristics of the subjects we interviewed are shown in Table 1. The sociodemographic characteristics of the survey sample are similar to the population distributions published by the US Bureau of the Census.¹⁵

Patterns of Use

Use of alternative therapies in 1997 was not confined to any narrow segment of society. Rates of use ranged from 32% to 54% in the wide range of sociodemographic groups examined. Use was more common among women (48.9%) than men (37.8%) ($P = .001$) and less common among African Americans (33.1%) than members of other racial groups (44.5%) ($P = .004$). People aged 35 to 49 years reported higher rates of use (50.1%) than people either older (39.1%) ($P = .001$) or younger (41.8%) ($P = .003$). Use was higher among those who had some college education (50.6%) than with no college education (36.4%) ($P = .001$) and more common among people with annual incomes above \$50 000 (48.1%) than with lower incomes (42.6%) ($P = .03$). Use was more common among those in the West (50.1%) than elsewhere in the United States (42.1%) ($P = .004$). With the exception of observed sex differences in 1997, these patterns are consistent with those identified in 1990.

Population prevalence estimates of alternative medicine use in 1990 and 1997 are shown in Table 2. The 1990 survey estimated that 33.8% of the US adult population (60 million people) used at least 1 of the 16 alternative therapies listed, while the 1997 survey estimated that this proportion increased significantly to 42.1% (83 million people). A comparison of specific therapies in the first column shows increases in 15 of the 16 therapies; 10 of these were statistically significant ($P \leq .05$). The largest increases were in the use of herbal medicine, massage, megavitamins, self-help groups, folk remedies, energy healing, and homeopathy. Summing Table 2 (first column) data shows a 65% increase in

Table 1.—Characteristics of the 1997 (N = 2055) and 1990 (N = 1539) Subjects Interviewed Compared With the US Population*

Characteristic	1997 US		1990
	Survey, %	Bureau of the Census, ¹⁵ %	
Sex			
Female	52	52	48
Male	48	48	52
Age, y			
18-24	10	13	16
25-34	22	20	23
35-49	33	32	27
≥50	35	35	34
Race/ethnicity			
White	77	73	82
African American	8	12	9
Hispanic	10	11	6
Asian	1	4	1
Other	4	1	2
Education			
<High school	14	18	24
High school graduate	37	34	35
College or more	49	48	40
Annual income, \$			
<20 000	27	33	30
20 000-49 999	45	41	53
≥50 000	27	26	18
Region			
Northeast	21	19	22
North central	24	24	32
South	35	35	26
West	20	22	19

*Due to rounding, percentages do not always total 100.

total number of therapies used, from 577 therapies per 1000 population in 1990 to 953 per 1000 in 1997.

Several categories of alternative therapy warrant clarification about the actual modalities used. Three quarters of respondents who acknowledged use of relaxation techniques said they used meditation. Among those who reported using energy healing, the most frequently cited technique involved the use of magnets. Other modalities common to this category included Therapeutic Touch, Reiki, and energy healing by religious groups. The use of self-prayer, in contrast to spiritual or energy healing performed by others, was investigated in terms of prevalence of use but not in terms of costs, referral patterns, or insurance reimbursement. All analyses in this article exclude data involving self-prayer.

Table 2 (second column) shows that a significantly higher proportion of alternative therapy users saw an alternative medicine practitioner in 1997 (46.3%, equivalent to 39 million people) than in 1990 (36.3%, equivalent to 22 million people). Of the 15 therapies for which the question was asked, the proportion of users who saw a practitioner increased for 11. However, even in 1997 there were only 5 therapies in which a majority of users consulted a practi-

Table 2.—Comparison of Prevalence and Frequency of Use of Alternative Therapies Among Adult Respondents, 1997 vs 1990*

Type of Therapy	Used in Past 12 mo, %		Saw a Practitioner in Past 12 mo, %		Mean No. of Visits per User in Past 12 mo		No. of Visits per 1000 Population		Estimated Total No. of Visits in 1997 (in Thousands)†	Total Visits, %‡§
	1997	1990	1997	1990	1997	1990	1997	1990		
Relaxation techniques	16.3¶	13.1	15.3	9.0	20.9	18.6	521.2	219.3	103 203	16.4
Herbal medicine	12.1**	2.5	15.1	10.2	2.9	8.1	53.0	20.7	10 491	1.7
Massage	11.1**	6.9	61.6#	41.4	8.4	14.8	574.4	422.8	113 723	18.1
Chiropractic	11.0	10.1	89.9**	71.1	9.8	12.6	969.1¶	904.8	191 886	30.5
Spiritual healing by others	7.0#	4.2	...	9.2	...	14.2	...	54.9	...	...
Megavitamins	5.5**	2.4	23.7	11.8	8.6	12.6	112.1	35.7	22 196	3.5
Self-help group	4.8**	2.3	44.4	38.3	18.9	20.5	402.8	180.6	79 754	12.7
Imagery	4.5	4.2	23.1	15.1	11.0	14.2	114.3	90.1	22 640	3.6
Commercial diet	4.4	3.9	43.2	24.0	7.3	20.7	138.8	193.8	27 474	4.4
Folk remedies	4.2**	0.2	6.2	0.0	1.0	...	2.6	...	516	0.1
Lifestyle diet	4.0	3.6	8.0	12.5	2.8	8.1	9.0	36.5	1774	0.3
Energy healing	3.8**	1.3	26.3	32.2	20.2#	8.3	201.9¶	34.7	39 972	6.4
Homeopathy	3.4**	0.7	16.5	31.7	1.6	6.1	9.0	13.5	1777	0.3
Hypnosis	1.2	0.9	62.7	51.8	2.8	2.6	21.1	12.1	4171	0.7
Biofeedback	1.0	1.0	54.3	20.8	3.6	6.4	19.5	13.3	3871	0.6
Acupuncture	1.0¶	0.4	87.6	91.3	3.1	38.4	27.2	140.2	5377	0.9
≥ 1 of 16 alternative therapies	42.1**	33.8	46.3#	36.3	16.3	19.2	3176.0	2373.0	628 825	...
SE	1.2	1.4	1.9	2.5	1.8	4.5	378.7	599.7	74 997	...
Self-prayer¶	35.1**	25.2	...	...	...	...	...	...	...	...

*Percentages are of those who used that type of therapy. Ellipses indicate data not applicable.

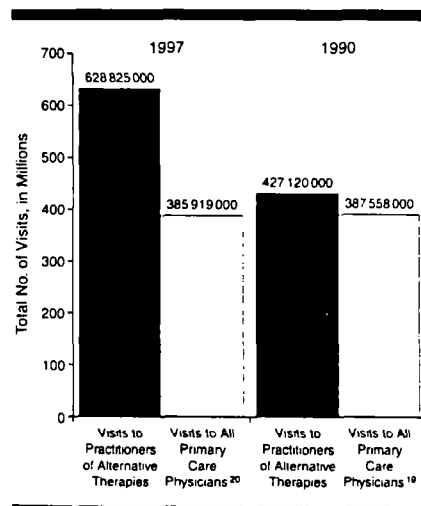
†Estimate based on 1997 population estimate of 198 million.

‡Percentage of total visits of the 16 therapies (ie, excluding self-prayer).

§Because of rounding, percentages do not total 100.

||Respondents who received spiritual healing by others were not asked for details of visits in 1997, nor were those who used self-prayer in either year.

¶P≤.05; #P≤.01; **P≤.001.

Figure 1.—Trends in annual visits to practitioners of alternative therapies vs visits to primary care physicians, United States, 1997 vs 1990. Data are from the National Ambulatory Medical Care Survey from 1996²⁰ and 1990.¹⁹

tioner: massage, chiropractic, hypnosis, biofeedback, and acupuncture. Unsupervised use (ie, a form of expanded self-care) remains the usual method of use for all other alternative therapies.

Table 2 (third column) reveals no consistent change in the average number of visits among respondents who consulted practitioners of alternative therapy between 1990 (19.2%) and 1997 (16.3%). However, because of the increase in the proportion of people using these therapies, the total number of visits increased substantially from 1990 to 1997. This

47.3% increase in total visits is largely because of increases in visits for relaxation therapy, massage, chiropractic, self-help, and energy healing. The visits to practitioners of alternative therapy in 1997 exceeded the projected number of visits to all primary care physicians in the United States by an estimated 243 million (Figure 1).^{19,20} Visits to chiropractors and massage therapists accounted for nearly half of all visits to practitioners of alternative therapies.

Prevalence estimates for selected additional therapies assessed in 1997 but not 1990 include: aromatherapy (5.6%), neural therapy (1.7%), naturopathy (0.7%), and chelation therapy (0.13%) (data not shown). Comparisons of total visits and costs for 1990 and 1997 were performed without inclusion of these data. Prevalence estimates for the simultaneous use of prescription medications with herbs, with high-dose vitamins, or with both were obtained. Among the 44% of adults who said they regularly take prescription medications, nearly 1 (18.4%) in 5 reported the concurrent use of at least 1 herbal product, a high-dose vitamin, or both.

Table 3 summarizes results regarding use of alternative therapies for the most commonly reported principal medical conditions in either survey. In each year, a majority of respondents reported 1 or more principal medical conditions. The list of conditions was expanded in 1997 (37 conditions) compared with 1990 (24 conditions). Significant increases in the proportion using alternative therapies

for principal condition(s) (second column) occurred for back problems, allergies, arthritis, and digestive problems. The highest condition-specific rates of alternative therapy use in 1997 were for neck (57.0%) and back (47.6%) problems. The proportion of respondents with 1 or more medical conditions who reported use of an alternative therapy for at least 1 of those conditions increased significantly from 22.9% in 1990 to 33.7% in 1997 ($P \leq .001$). The weighted condition-specific proportion who saw an alternative medicine practitioner for a given condition also increased significantly from 6.8% in 1990 to 11.4% in 1997 ($P \leq .001$).

Table 3 also summarizes the probability that individuals who saw a medical doctor for a particular condition also used an alternative therapy (fourth column) or also saw a practitioner of alternative therapy (fifth column) for that same condition during the same year. A generally increasing pattern of alternative medicine use can be seen across the range of conditions studied. In 1990, an estimated 1 (19.9%) in 5 individuals seeing a medical doctor for a principal condition also used an alternative therapy. This percentage increased to nearly 1 (31.8%) in 3 in 1997 ($P \leq .001$). The percentage who saw a medical doctor and also sought the services of an alternative practitioner increased significantly from 8.3% in 1990 to 13.7% in 1997 ($P \leq .01$). In both 1990 and 1997, chiropractic, relaxation techniques, and massage therapy were among the al-

Table 3.—Comparison of Use of Alternative Therapies for the Most Frequently Reported Principal Medical Conditions, 1997 vs 1990

Condition	Percentage Reporting Condition		Used Alternative Therapy for Condition in Past 12 mo, %		Saw Alternative Practitioner for Condition in Past 12 mo, %		Saw Medical Doctor and Used Alternative Therapy for Condition in Past 12 mo, %		Saw Medical Doctor and Alternative Practitioner for Condition in Past 12 mo, %		Therapies Most Commonly Used in 1997
	1997	1990	1997	1990	1997	1990	1997	1990	1997	1990	
Back problems	24.0#	19.9	47.6#	35.9	30.1#	19.5	58.8**	36.1	39.1#	23.0	Chiropractic, massage
Allergies	20.7#	16.0	16.6#	8.7	4.2	3.3	28.0†	15.7	6.4	5.0	Herbal, relaxation
Fatigue*	16.7	...	27.0	...	6.3	...	51.6	...	13.1	...	Relaxation, massage
Arthritis	16.6	15.9	26.7†	17.5	10.0	7.6	38.5†	23.8	15.9	13.8	Relaxation, chiropractic
Headaches	12.9	13.2	32.2	26.5	13.3†	6.3	42.0	31.8	20.0	12.1	Relaxation, chiropractic
Neck problems*	12.1	...	57.0	...	37.5	...	66.6	...	47.5	...	Chiropractic, massage
High blood pressure	10.9	11.0	11.7	11.0	0.9	2.9	11.9	11.6	1.1	3.5	Megavitamins, relaxation
Sprains or strains	10.8	13.4	23.6	22.3	10.3	9.6	29.4	24.7	15.9	13.6	Chiropractic, relaxation
Insomnia	9.3#	13.6	26.4	20.4	7.6	4.0	48.4	19.8	13.3	10.9	Relaxation, herbal
Lung problems	8.7	7.3	13.2	8.8	2.5	0.5	17.9	11.1	3.4	0.6	Relaxation, spiritual healing, herbal
Skin problems	8.6	8.0	6.7	6.0	2.2	1.6	6.8	6.9	0.0	2.5	Imagery, energy healing
Digestive problems	8.2	10.1	27.3#	13.2	9.7†	3.6	34.1†	15.3	10.7	5.8	Relaxation, herbal
Depression†	5.6	8.4	40.9	20.2	15.6	7.0	40.9	35.2	26.9	14.0	Relaxation, spiritual healing
Anxiety‡	5.5	9.5	42.7	27.9	11.6	6.5	42.7	45.4	21.0	10.4	Relaxation, spiritual healing
Weighted average across all conditions§	...	...	28.2**	19.1	11.4**	6.8	31.8**	19.9	13.7#	8.3	...
People with ≥1 condition	77.8†	81.5	33.7**	22.9	15.3**	6.9	...	...	...	...	...

*Not included as a separate question in 1990 survey. Ellipses indicate data not applicable.

†The 1997 question asked about severe depression, which is not directly comparable with the 1990 question that asked about depression.

‡The 1997 question asked about anxiety attacks, which is not directly comparable with the 1990 question that asked about anxiety.

§The weighted averages are calculated based on all 37 conditions studied in 1997 and all 24 conditions studied in 1990, ie, condition is unit of analysis.

||This row shows percentage of respondents who reported 1 or more principal medical conditions, along with the percentage of these respondents who reported use of therapy or practitioners for at least 1 of these conditions, ie, person is the unit of analysis.

†P<.05; #P<.01; **P<.001.

alternative therapies used most commonly to treat principal medical conditions.

As in 1990, 96% of 1997 respondents who saw a practitioner of alternative therapy for a principal condition also saw a medical doctor during the prior 12 months, and only a minority of alternative therapies used were discussed with a medical doctor. Among the 618 respondents in 1997 who used 1 or more alternative therapies and had a medical doctor, only 377 (38.5%) of the 979 therapies used were discussed with the respondent's medical doctor. This is not significantly different from the 353 (39.8%) of the 886 therapies discussed by the comparable group of respondents (n=501) in the 1990 survey. Given that most alternative therapy is used without the supervision of an alternative practitioner, a substantial portion of alternative therapy use for principal medical conditions (46.0% in 1997 and 51.3% in 1990) was done without input from either a medical doctor or practitioner of alternative therapy.

Payment for Alternative Therapy

Data on insurance coverage of expenditures for alternative therapy services are shown in Table 4. The majority of people who saw alternative therapy practitioners paid all the costs out-of-pocket in both 1990 (64.0%) and 1997 (58.3%). None of the changes in insurance coverage between 1990 and 1997 were statistically significant, probably due in part to small sample sizes.

Using conservative assumptions about the fees charged by practitioners of alternative therapies and assuming no changes in visit prices, Americans spent an estimated \$14.6 billion on visits to these practitioners in 1990 and \$21.2 billion in 1997 (Table 5). Using less conservative (RVRBS) price figures, the amount spent on services of practitioners of alternative therapies was estimated at \$22.6 billion in 1990 and \$32.7 billion in 1997. Regardless of which set of prices is used, total expenditures for practitioners of alternative therapies are estimated to have increased by approximately 45% between 1990 and 1997 exclusive of inflation.

Estimated out-of-pocket expenditures for high-dose vitamins increased from \$0.9 billion in 1990 to \$3.3 billion in 1997. Smaller increases were observed for commercial diet products (\$1.3 billion vs \$1.7 billion). Unlike the 1990 survey, the 1997 survey included questions about expenditures for herbal products (\$5.1 billion) and respondents' alternative therapy-specific books, classes, or equipment (\$4.7 billion).

The estimated total out-of-pocket component of the alternative medicine market in 1997 is shown in Figure 2. Projected out-of-pocket expenditures for all hospitalizations in 1997 in the United States totaled \$9.1 billion, while projected out-of-pocket expenses for all US physician services in the same year were \$29.3 billion.²¹ This compares to a conservatively estimated \$12.2 billion in out-of-

pocket payments to alternative medicine practitioners for the 15 therapies studied. Adding the estimates of \$5.1 billion for herbal therapies, \$3.3 billion for megavitamins, \$1.7 billion for diet products, and \$4.7 billion on alternative therapy-specific books, classes, and equipment, the total out-of-pocket expenditures for alternative medicine are conservatively estimated to be \$27.0 billion. Using the average per-visit prices derived from an RBRVS system¹⁶ rather than our conservative estimates (Table 5), the estimated total out-of-pocket expense is approximately \$34.4 billion, which is comparable with the projected 1997 out-of-pocket expenditures for all physician services.²¹ These estimates exclude out-of-pocket expenditures associated with therapies unique to the 1997 survey (eg, naturopathy, aromatherapy, neural therapy, and chelation therapy).

COMMENT

The results of our study are limited by the restriction of the sampling frame to people who speak English and have telephones and by the low response rate. The decrease in overall response rate from 67% in 1990 to 60% in 1997 is consistent with secular trends for US telephone interviews in recent years.²² It is difficult to know what, if any, bias was introduced or whether trend estimates are biased by the fact that financial incentives were used in 1997 but not 1990. Furthermore, we have no data on the accuracy of self-

Table 4.—Insurance Coverage of Alternative Medicine Services in the United States, 1997 vs 1990*

Type of Therapy	Percentage of Users of Services					
	Coverage, 1997			Coverage, 1990		
	Complete	Partial	None	Complete	Partial	None
Relaxation techniques	28.8	6.6	64.7	5.3	25.9	68.7
Herbal medicine	8.6	11.2	80.2	30.7	15.5	53.8
Massage	11.8	16.7	71.5	19.1	18.3	62.6
Chiropractic	17.6	38.1	44.3	11.5	32.8	55.9
Spiritual healing by others†	...	...	...	0.0	0.0	100.0
Megavitamins	2.7	53.3	44.0	0.0	100.0	0.0
Self-help group	11.7	36.9	51.5	2.8	17.4	79.8
Imagery	51.5	3.5	45.0	16.1	0.0	83.9
Commercial diet	5.0	40.1	54.9	0.0	5.1	94.9
Folk remedies	0.0	0.0	100.0	...	...	...
Lifestyle diet	0.0	44.9	55.1	62.3	0.0	37.7
Energy healing	30.8	8.2	61.1	0.0	19.1	80.9
Homeopathy	0.0	0.0	100.0	0.0	24.7	75.3
Hypnosis	5.1	0.0	94.9	7.0	0.0	93.0
Biofeedback	30.5	43.7	26.0	14.1	19.9	66.0
Acupuncture	0.0	40.7	59.3	21.6	23.0	55.4
Weighted average across all therapies	15.3	26.4	58.3	12.3	23.7	64.0

*Data are percentage of users of alternative therapies provided by practitioners. Ellipses indicate data not applicable.
†Reimbursement patterns not explored in 1997.

Table 5.—National Projections of Expenditures for Alternative Therapies in the United States, 1997 vs 1990*

Category of Expenditure	1997 (Billions of Dollars)		1990 (Billions of Dollars)		Change (%), 1997 vs 1990 (Billions of Dollars)	
	Conservative (SE)	RBRVS (SE)	Conservative (SE)	RBRVS (SE)	Conservative	RBRVS
Total expenditures on professional services for 15 alternative therapies†	21.2 (2.4)	32.7 (3.8)	14.6 (4.0)	22.6 (6.1)	6.6 (45.2)	10.1 (44.7)
Out-of-pocket expenditures						
Professional services, 15 therapies††	12.2 (1.7)	19.6 (3.3)	7.2 (1.3)	11.0 (2.1)	5.0 (69.4)§	8.6 (78.2)§
Megavitamins	3.3 (0.4)		0.9 (0.3)		2.4 (265.7)‡	
Commercial diet products	1.7 (0.3)		1.3 (0.3)		0.4 (30.8)	
Subtotal of out-of-pocket expenditures assessed in 1997 and 1990†	17.2	24.6	9.4	13.2	7.8 (83.0)	11.4 (86.4)
Out-of-pocket expenditures assessed only in 1997						
Herbal medicine	5.1 (0.5)		...			
Therapy-specific books, classes, and equipment	4.7 (0.8)		...			
Total out-of-pocket expenditures for alternative therapies in 1997†	27.0	34.4	...			

*The 1990 and 1997 cost measures are based on 1990 and 1997 population estimates, respectively (180 million vs 198 million). Both used 1997 per-visit price estimates as follows (conservative price estimate is followed by Resource-Based Relative Value Scale [RBRVS] estimate for each therapy): relaxation techniques (\$20, \$50), herbal medicine (\$40, \$60), massage therapy (\$40, \$60), chiropractic care (\$40, \$65), megavitamins (\$40, \$50), self-help groups (\$20, \$20), imagery techniques (\$45, \$50), commercial diet (\$20, \$20), folk remedies (\$20, \$50), lifestyle diet (\$20, \$60), energy healing (\$40, \$50), homeopathy (\$45, \$60), hypnosis (\$60, \$80), biofeedback (\$60, \$80), and acupuncture (\$40, \$60). (Price estimates for spiritual healing by others were not included because respondents reporting use were not asked for details of professional visits). Ellipses indicate data not applicable.

†These figures reflect the range in out-of-pocket expenditures for conservative vs RBRVS-derived visit prices.

‡Assumes a 20% copayment for users with partial insurance coverage.

§P≤.05; ‡P≤.001.

reports concerning recollections of number of visits and amounts spent on books, classes, relevant equipment, herbs, or supplements. To the extent possible, we adjusted by weighting data on sociodemographic variables associated with alternative therapy use (eg, income, education, age, region). It is conceivable that the estimated prevalence and costs of alternative therapy use would have been lower if it were possible to correct for those limitations.

Within the context of these limitations, the results of these 2 surveys suggest that the prevalence and expenditures associated with alternative medical therapies in the United States have increased substantially from 1990 to 1997. This increase appears to be primarily due to increases in the prevalence of use and in the frequency with which users of alternative therapy sought professional services. In 1997, an estimated 4 in 10 Americans used at least 1 alternative therapy as com-

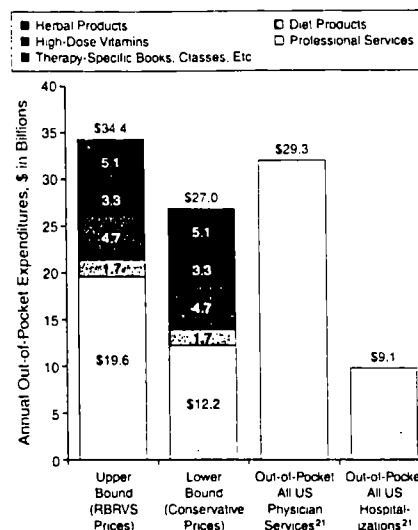


Figure 2.—Estimated annual out-of-pocket expenditures for alternative therapies vs conventional medical services, United States, 1997. Data are from the Health Care Financing Administration, United States.²¹ RBRVS indicates Resource-Based Relative Value Scale.

pared with 3 in 10 in 1990. For adults aged 35 to 49 years in 1997, it is estimated that 1 of every 2 persons used at least 1 alternative therapy. Overall prevalence of use increased by 25%, total visits by an estimated 47%, and expenditures on services provided by practitioners of alternative therapies by an estimated 45% exclusive of inflation. Moreover, the use of alternative therapies is distributed widely across all sociodemographic groups.

It is possible to arrange the 16 principal therapies common to the 1990 and 1997 surveys along a spectrum that varies from "more alternative" to "less alternative" in relationship to existing medical school curricula, clinical training, and practice. Arguably, therapies such as biofeedback, hypnosis, guided imagery, relaxation techniques that involve elicitation of the relaxation response (<1% of the sample), lifestyle diet, and (possibly) vitamin therapy can be considered as representative of the more conventional (ie, less alternative) side of the spectrum. Visits associated with these 6 categories accounted for less than 10% of total visits to alternative medicine practitioners; the remainder were associated with the more alternative therapies.

In light of the observed 380% increase in the use of herbal remedies and the 130% increase in high-dose vitamin use, it is not surprising to find that nearly 1 in 5 individuals taking prescription medications also was taking herbs, high-dose vitamin supplements, or both. Extrapolations to the total US population suggest that an estimated 15 million adults are at risk for potential adverse interac-

tions involving prescription medications and herbs or high-dose vitamin supplements. This figure includes nearly 3 million adults aged 65 years or older. Adverse interactions of this nature, including alterations of drug bioavailability or efficacy, are known to occur^{24,25} and are more likely among individuals with chronic medical illness, especially those with liver or kidney abnormalities. No adequate mechanism currently is in place to collect relevant surveillance data to document the extent to which the potential for drug-herb and drug-vitamin interaction is real or imaginary.

The magnitude of the demand for alternative therapy is noteworthy, in light of the relatively low rates of insurance coverage for these services. Unlike hospitalizations and physician services, alternative therapies are only infrequently included in insurance benefits. Even when alternative therapies are covered, they tend to have high deductibles and co-payments and tend to be subject to stringent limits on the number of visits or total dollar coverage. Because the demand for health care (and presumably alternative therapies) is sensitive to how much patients must pay out-of-pocket,²⁶ current use is likely to underrepresent utilization patterns if insurance coverage for alternative therapies increases in the future.

In 1990, a full third of respondents who used alternative therapy did not use it for any principal medical condition.¹ From these data, we inferred that a substantial amount of alternative therapy was used for health promotion or disease prevention. In 1997, 42% of all alternative therapies used were exclusively attributed to treatment of existing illness, whereas 58% were used, at least in part, to "prevent future illness from occurring or to maintain health and vitality."

Despite the dramatic increases in use and expenditures associated with alternative medical care, the extent to which patients disclose their use of alternative therapies to their physicians remains low. Less than 40% of the alternative therapies used were disclosed to a physician in both 1990 and 1997. It would be overly simplistic to blame either the patient or their physician for this inadequacy in patient-physician communication. The current status quo, which can be described as "don't ask and don't tell," needs to be abandoned.²⁷ Professional strategies for responsible dialogue in this area need to be further developed and refined.

Data from this survey, reflective of the US population, are representative of a predominantly white population. Even if we were to combine data sets from the 1990 and 1997 surveys, we would not

have a sufficiently large database to provide precise estimates of the patterns of alternative therapy use among African Americans, Hispanic Americans, Asian Americans, or other minority groups. Parallel surveys, modified to include therapies unique to minority populations and translated when appropriate, should be conducted using necessary sampling strategies. Only then can we compare patterns across ethnic groups and prioritize research agendas for individual populations. As alternative medicine is introduced by third-party payers as an attractive insurance product, it would be unfair for individuals without health insurance and those with less expendable income to be excluded from useful alternative medical services or consultation (eg, professional advice on use or avoidance of alternative therapies).

In conclusion, our survey confirms that alternative medicine use and expenditures have increased dramatically from 1990 to 1997. In light of these observations, we suggest that federal agencies, private corporations, foundations, and academic institutions adopt a more proactive posture concerning the implementation of clinical and basic science research, the development of relevant educational curricula, credentialing and referral guidelines, improved quality control of dietary supplements, and the establishment of postmarket surveillance of drug-herb (and drug-supplement) interactions.

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AGRICULTURE
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SMALL BUSINESS
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RESOURCES

FACSIMILE

DATE: 9-17-98

TO: Jennifer Klein

WITH: First Lady's Office / Policy

FAX: _____

FROM: Michele Chang

COMMENTS: _____

PAGES TO FOLLOW: 1

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September 17, 1998

Ms. Patti Solis-Doyle
Director of Scheduling
for the First Lady
The White House

Dear Patti:

I recently met with Jennifer Klein to discuss a proposal for a White House Commission on Integrated Health Care. As you may know, this proposal is, in part, a result of a recent conversation between the First Lady and Senator Harkin at Camp David regarding alternative and complementary medicine. Senator Harkin would like to meet with the First Lady to discuss the idea. The Senator and the First Lady share a mutual interest and concern in this issue.

Please contact me (224-9369) or Senator Harkin's scheduler, Carrie Nelson, at 224-3254, when you get a chance to discuss this further, and hopefully to arrange a convenient meeting time. Thanks for looking into this for Senator Harkin.

Sincerely,



Peter Reinecke
Legislative Director for
Tom Harkin, U.S. Senator

cc: Jennifer Klein

Proposal for a White House Commission on Integrated Health Care: Developing A National Plan

BACKGROUND

Widespread and Increasing Use: The *New England Journal of Medicine* reported that, in 1990 alone, an estimated one in three Americans visited an alternative health care practitioner, constituting nearly 425 million visits, more than to all conventional primary care physicians. It is estimated that 85 million American adults (42% of the population) now use complementary and alternative medical (CAM) products and practices, usually in conjunction with more conventional care. Harvard University reported that the public's out-of-pocket expenses for these CAM products and services is equal to that paid out-of-pocket for physician services and is three times that paid out-of-pocket for hospital expenses. In 1990, those costs equaled more than \$14 billion, of which at least \$10 billion were not reimbursed to patients by medical insurances.

The NIH reports that more than 50% of conventional physicians in the U.S. use or refer patients for alternative treatments, while in Europe and Australia, up to 70% of health care patients make regular use of CAM practices. The groundswell of public demand for CAM therapies has greatly fueled the interest of conventional medical practitioners, with 80% of medical students in the U.S. reporting a desire for more structured training in CAM practices.

A Women's Health Issue: Increasingly, women are turning to CAM products and practices for a variety of conditions and illnesses, including breast cancer, fibroids, menstrual-related problems, endometriosis, nerve-related conditions, and pregnancy and labor management. The *Journal of the American Medical Association* (JAMA) recently reported that the four top treatment categories for CAM users are chiropractic (16%); lifestyle diet (8%); exercise/movement (7%), and relaxation (7%). Nearly 50% of these CAM users are women.

Health issues for women are multiple and diverse; most have profound effects on both the mind and the body. Some of these impact all women, regardless of health status, simply through the process of aging. For example, over the next 16 years, each year nearly 1 million American women will turn 50. The average age for menopause is 51. Accordingly, hormone replacement therapies constitute the most prescribed drugs in America today and often are marketed as panaceas for conditions associated with aging such as osteoporosis and heart disease, in addition to the full range of menopausal complaints. Increasingly, older women are seeking out natural products and mind-body treatments as alternatives to synthetic drugs. Yet very little is known about the effectiveness of these products and practices on pre- and menopausal women.

Similarly, little is known about alternative treatments for endometriosis, even though up to 20% of American women of childbearing age are diagnosed every year with this painful disease. Current treatment strategies are ineffective in eliminating the disease, which can affect

a woman's whole existence--her ability to work and to reproduce, as well as her relationships with her mate, her child, and everyone around her. Studies have shown some efficacy with drugs, but all of them have side-effects that make them unsuitable for long-term use. Subsequently, women are turning to alternative treatments and products, about which very little is known.

Women often are the primary caretakers for the health of their entire family, making decisions about diet and illness prevention, such as vitamins and other food supplements, and for treatment of minor aches and pains. The vast majority, approximately two-thirds, of homeopathic patients and purchasers of homeopathic products are women. Meanwhile, 20% of Americans on prescription medications are also taking herbal or high dose vitamins, but little or no guidance and oversight is available to monitor interactions or unseen risks.

Need for Integrated Health Care: Over 95% of those who use CAM products and practices do so in conjunction with conventional medicine — not in place of it. Patients who use alternative medicine are not alternative patients; they use it to supplement or support, rather than to supplant, conventional medicine. In late 1997, *JAMA* noted the “increasingly critical” need to determine how to integrate CAM practices into clinical practice to improve patient care.

There is credible research showing the effectiveness of various CAM practices concerning many common conditions such as heart disease, depression, asthma, addictions and in pain management. As alternative medicine research opens up additional options for managing clinical conditions, the health care community’s responsiveness to public interest in CAM practices has also increased. Nearly 70 American medical schools now offer CAM electives, and several are already incorporating required lectures and seminars into their core curricula. There are more than 15,000 acupuncturists in the U.S., of whom some 5,000 are physicians. Even managed care organizations and insurance companies are beginning to grapple with how to offer CAM benefits, and hospitals throughout the nation are opening “integrative care centers.”

STATEMENT OF NEED

Clearly, science and policy must catch up with the changing values and needs of the American people. The movement toward integrated medicine promises a more comprehensive, more effective, and more responsive health care system. Evidence also suggests that this approach may be far more cost-effective as well.

A national plan for addressing the two main vulnerabilities of integrated health care—research evidence and regulatory oversight—is crucial for the safety and benefit of the American public. Such a plan should include, but not be dictated by, a wide range of governmental, scientific, medical, private and public groups. It must be grounded in the ethical principles of autonomy and beneficence, use science as a guide, and be responsive to consumer needs.

A White House Commission on Integrated Health Care is needed to examine the changes that are underway: to evaluate the state-of-the-art of complementary and alternative therapies; assess the promise of a holistic or integrated approach for improving the health of Americans; address issues of regulation and safety; and establish guidelines for the integration of this approach and these therapies into all aspects of health care, including patient care, research, professional training and health education. Under the leadership of the White House, this Commission would seek input from all relevant constituencies, with a special focus on women's health, in the development of this plan.

GOALS

The White House Commission's National Plan for Integrated Health Care would address the following:

- Determining priorities for integrated health care in the areas of practice, research and policy. These should include:
 - Surveillance and monitoring of the effects from CAM use
 - Adequate CAM education and training of health care providers
 - Accountability of emerging medicine products and practices
 - Access to alternative medicine products and practices
 - Priorities for funding research on integrated health care, with a special emphasis on women's health research
 - Criteria for the provision of integrated health care benefits
 - Areas for frontier sciences that are of interest to the public
 - Use of traditional and indigenous medical practices in conjunction with conventional medicine
- Identifying what information on integrated health care should be collected, summarized and made easily accessible to the public
- Establishing appropriate and adequate research priorities, particularly in the area of women's health
- Developing guidance in making integrated health care services safe and effective, including how to monitor the possible adverse effects of these practices and products, and how to establish standards of training, credentialing, licensing and monitoring of service quality
- Establishing guidance to assure reasonable access and appropriate benefits to integrated health care services

- Reviewing the impact of integrated health care services on special populations, including the disadvantaged, elderly, veterans, children, women and minority populations

CONSENSUS

Under the leadership of the White House, the Commission may seek the input and participation of a number of organizations, as follows (including, but not limited to):

Association of American Medical Colleges
 Association of Health Insurers of America
 American Board of Medical Specialties
 Agency of Health Care Policy and Research
 Agency of International Development
 Bureau of Primary Health Care
 Bureau of Health Professionals
 Centers for Disease Control and Prevention
 Complementary and Alternative Medicine Consortium
 Department of Health and Human Services
 Office of Women's Health
 Department of Defense
 Department of Education
 Food and Drug Administration
 Federation of State Medical Boards
 Government Reform and Oversight Committee
 Health Care Financing Administration
 Health Resources and Services Administration
 Institute of Medicine
 National Academy of Sciences
 National Institutes of Health
 National Library of Medicine
 Office of Alternative Medicine
 Office of Women's Health Research
 Professional Health Care Associations
 Veterans' Affairs
 The World Bank

MEMBERSHIP

Under the leadership of the White House, the Commission would be composed of 15-20 knowledgeable and prominent citizens of the country with expertise in health care practice, policy, scientific and public communities and be drawn from both the public and private sectors.

The Chair should be a respected member of the health care establishment with experience in all aspects of medicine and health care and with an openness to innovative alternative practices and an ability to balance a wide diversity of views. This individual must be skilled in balancing diverse points of view and gifted at making the White House Commission's recommendations intelligible and useful to the general public and the health care community. The Chair would work in close collaboration with the White House on all aspects of the Commission's work.

TIMELINE AND RESOURCES

The Commission would be convened for a 2-year period. It would be allotted sufficient resources and a coordinating staff to support the Commission, solicit expert advice, collect relevant background information and obtain public input on all areas.

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[COMMITTEE PRINT]

NOTICE: This is a draft for use of the Committee and its staff only, in preparation for markup.

Calendar No. 000

105TH CONGRESS }
2d Session }

SENATE

{ REPORT
105-000 }

DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION AND RELATED AGENCIES APPROPRIATION BILL, 1999

SEPTEMBER 00 (legislative day, JULY 00), 1998.—Ordered to be printed

Mr. SPECTER, from the Committee on Appropriations,
submitted the following

REPORT

[To accompany S. 0000]

The Committee on Appropriations reports the bill (S. 0000) making appropriations for Departments of Labor, Health and Human Services, and Education and related agencies for the fiscal year ending September 30, 1999, and for other purposes, reports favorably thereon and recommends that the bill do pass.

Amount of budget authority

Total bill as reported to Senate	\$287,592,472,000
Amount of adjusted appropriations, 1998	262,257,417,000
Budget estimates, 1999	286,606,839,000
The bill as reported to the Senate:	
Over the adjusted appropriations for 1998	+ 25,335,055,000
Over the budget estimates for 1999	+ 985,633,000

lection and evaluation of outcome data on promising alternative therapies, including new clinical trials of herbal natural products and other CAM therapies. The Committee also expects CCAM to continue and expand its work with CDC on field investigations and with AHCPR on literature reviews. Finally, the Committee continues to be concerned with the lack of adequate staff resources dedicated to this Center. The Committee notes that this Office has only eight FTE's while other NIH entities with comparable budgets have considerably larger professional staffs. Therefore, the Committee expects that the CCAM will be provided sufficient FTE's.

The Committee believes that Federal policy in a number of areas is failing to keep up with the increased use of complementary and alternative therapies. An amount of \$1,000,000 has been provided to support the establishment and operation of a White House Commission on Complementary and Alternative Medicine Policy to study and make recommendations to the Congress on appropriate policies regarding research, training, insurance coverage, licensing, and other pressing issues in this area.

Office of Dietary Supplements.—The Committee continues to strongly support the important work of this Office. Use of dietary supplements has increased significantly among Americans who want to improve their health and prevent disease. There is a great need for additional research to better inform consumers of the health benefits of supplements. The President's Commission on Dietary Supplements recently recommended that ODS be funded at its fully authorized level to meet this need. The Committee has included \$2,000,000 in additional funds for the Office to expand its efforts and to develop a botanical research centers initiative with major research institutions across the Nation.

The Committee also notes that 1999 marks the 30th anniversary of the landmark White House Conference on Food, Nutrition, and Health which lead to many major advancements in nutrition and health policy. The Committee encourages the Institute to plan and convene a conference to develop human nutrition policy recommendations for the next century. This conference should be developed in cooperation with the Agriculture Department and ensure full and appropriate private sector involvement.

Training.—The Committee received the Director's response to the 1994 National Academy of Sciences recommendations on training needs for health research. The Committee appreciates NIH's decision to increase stipends as recommended, but is concerned that the NAS recommendations for increasing the number of awards in behavioral science, health services research, oral health, and nursing research were not included in this decision. The Academy articulated compelling national needs for increased training in these areas and its recommendations were developed with every awareness of the cost implications. Given the importance of a stable supply of high-quality scientists in the areas specified in the NAS report, the Committee urges NIH to revisit the NAS recommendations. The Committee would like to receive a report on NIH's system for considering the NAS recommendations and establishing training policies in general.

Office of Behavioral and Social Sciences.—The Committee has included \$12,853,000 for the Office of Behavioral and Social Sciences.

TOM HARKIN
IOWA

(202) 224-3254
TTY (202) 224-4833

COMMITTEES:
AGRICULTURE
APPROPRIATIONS
SMALL BUSINESS
LABOR AND HUMAN
RESOURCES

United States Senate

WASHINGTON, DC 20510-1502

FAX COVER SHEET

TO: Katy Button

FR: Sabrina Corlette

Number of Pages to Follow: 1

COMMENTS:

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Memo

To: Katy Button
Fr: Sabrina Corlette *SC*
Re: Senator Harkin and alternative medicine
Da: July 24, 1998

To Sen + Co.
Call

sent to path

Hi Katy. Could you run this by Melanne and Mrs. Clinton? Thanks!

While at Camp David together a few weeks ago, Senator Harkin and Mrs. Clinton spoke about their interest in complementary and alternative medicine (CAM) and her acquaintance with Dr. Jim Gordon.

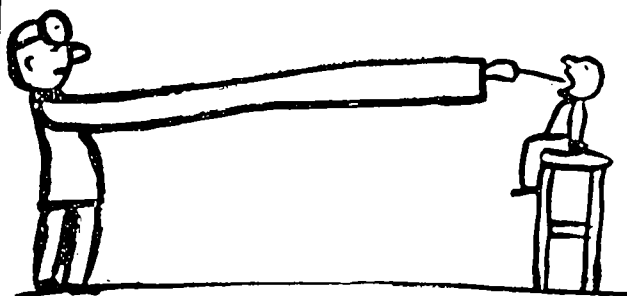
Sometime in November, Harvard University researchers will publish in JAMA a comprehensive study of the use of CAM in the United States. Their results will show that the use of CAM is growing rapidly, particularly among women.

For example, the study will show that in 1990, 34% of Americans used CAM. In 1996, 42% of Americans use CAM. In 1996, there were 50% more visits to CAM providers than to conventional primary care doctors. In addition, out-of-pocket spending on CAM currently equals spending for conventional medicine.

However, the Federal government has done little or nothing to address this issue, whether through research, training, safety and effectiveness review, or information dissemination. Senator Harkin would like to discuss this with Mrs. Clinton, including the possibility of a White House Commission to coordinate activities at the Federal level.

He'd like to sit down with her sometime before the August break or in early September, whichever time best suits her schedule.

If you could call me at 224-4538 to discuss this, that would be great. Or you could contact Senator Harkin's scheduler, Carrie Nelson, at 224-3254 to set up a time. Thanks. I miss you guys!



Daniel S. Greenberg

Another Kind Of Medicine

Congress has given the orthodox medical establishment \$50 million to sort out the claims, mysteries and realities of "alternative medicine." That's the term for a melange of potions and treatments that includes massage and acupuncture, as well as shark's cartilage for cancer and St. John's Wort, a low-octane anti-depressant for sale without prescription.

Unfortunately, the congressional generosity is misbegotten, since the money was entrusted to the National Institutes of Health, where the management rates alternative medicine as synonymous with quack medicine. With lesser sums previously imposed on it by Congress, \$20 million last year, the guardians of medical orthodoxy at NIH have been pawing at alternative medicine since 1993, with little to show for their efforts. In fact, squabbles still persist about the definition of alternative medicine, with some proponents preferring to call it "complementary medicine," while others have recently shown interest in calling it "integrative medicine," sometimes in combination with the other terms.

It's important to look at it, the proponents argue, since Americans by the scores of millions are gulping strange potions beyond the reach of the Food and Drug Administration and subjecting themselves to procedures foreign to traditional medical practice. According to a recent issue of the Journal of the American Medical Association (JAMA) that was devoted to alternative medicine, Americans made 629 million visits to "alternative medicine practitioners" in 1997, "thereby exceeding total visits to all U.S. primary care physicians." The alternative healers are said to have taken in \$21.2 billion; \$12.2 billion of that sum was out of pocket—which probably signifies a mixture of confidence and desperation among their clients.

The expressed concern in the ranks of orthodox medicine is that reliance on the alternatives might delay or interfere with effective treatments for serious ailments. There's also worry about fraud in the grand snake-oil tradition and well-intentioned but harmful incompetence. A mainstream scientist is quoted in the JAMA issue as saying, "Why don't we form a center at Harvard for the scientific study of astrology?" Various alternative camps respond that these concerns reflect the turf insecurities of organized medicine, now intensified by the income-cutting rigors of managed care.

The directed purpose of the NIH program is to subject alternative treatments to the same type of scientific examination that supposedly ensures the safety and efficacy of mainstream medicine. The moving force behind this effort is Sen. Tom Harkin (D-Iowa), who forced money upon NIH in 1992 for what eventually became a low-level Office of Alternative Medicine. Hostile to this mandate, the NIH management entombed the office in bureaucratic snarls, to the point where the founding director quit in disgust after two years. His successor, Wayne B. Jonas, a medical officer on detail from the U.S. Army, fared better during a three-year stint. Jonas made progress toward getting mainstream scientists and physicians to recognize that whatever their attitude toward alternative medicine, scores of millions of Americans are indulging in it and therefore it is desirable to identify what works and what doesn't. Harkin struck again this year, elevating the office to the more independent rank of a center in the NIH organizational structure, and raising the budget to \$50 million, despite NIH's preference for holding the money level.

In a swan song article in JAMA, Jonas touched on several characteristics that may account for the popularity of alternative medicine. Based on reports of patient surveys, he notes that the "time spent with each patient by an alternative medicine practitioner usually exceeds that spent by the average conventional physician, and patients are often more satisfied with their interactions with unorthodox than orthodox medical practitioners." He points out that conventional treatments gone awry "are a major cause of death and hospitalization"—a failing openly acknowledged by orthodox medicine.

The need to study alternative medicine is beyond dispute. But NIH, a stronghold of medical orthodoxy, has amply demonstrated over six years that it's not the place to do it. The new center would be better off as an independent agency, safely insulated from the tender care of the elite skeptics at the National Institutes of Health.

The writer is a visiting scholar in the history of science, medicine and technology at Johns Hopkins University.

Washington Post
11/98

Jan - where
are we
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A Proposal for a White House Commission on Integrated Health Care

Background:

Over the last 25 years, Americans have been participating in a vast, rapidly growing, and largely unorganized popular health movement. They are turning to therapies that are alternative to, or other than, those learned by physicians in medical schools, and to approaches which complement conventional Western medicine. Though many in this movement make use of particular therapies in symptomatic treatment – the herb echinacea to forestall a cold, a chiropractic adjustment for a stiff neck – there is a strong desire for a new kind of integrative medicine which includes the best of complementary and alternative as well as conventional therapies, a medicine which understands the needs, perspectives, and whole lives of patients and makes them full partners in their own care.

People have become part of this movement for several reasons. First and foremost, they have begun to look outside of conventional medical practice because the treatment of chronic illness is (in contrast to its capacity to deal with trauma or surgical and medical emergencies) inadequate or fraught with side effects that can be almost as distressing as the illness. (For example, a recent study in the *Journal of the American Medical Association* showed that conventional treatment, *properly administered*, is now one of the leading causes of death and is responsible for over 10% of the hospitalizations in the US.) In addition, many who are fatigued, depressed, and feel unwell, but have no easily diagnosable condition are also looking for healing approaches – like acupuncture, mind-body therapies and nutrition – which appear tailored to enhancing health, rather than treating illness. Finally, an aging population is reaching out to find any and all means to stay well and prevent illness. Ninety-five percent of all those who use complementary and alternative therapies do so in conjunction with conventional treatment, but few are able to find both in the same practitioner or practice.

Americans are also looking for more caring relationships, as well as more effective treatment. In a time when managed care has made many physicians less attentive, as well as more hurried and harried, patients want more respect, more kindness and more time. They believe – often with some justification – that those who offer a holistic approach or who use alternative therapies are more likely to stand against the tide of assembly-line medicine, to pay more attention to them as whole people with lives as well as lab values.

A study published in the *New England Journal of Medicine* (in 1993) indicated that 34% of American adults had used complementary and alternative therapies in 1990. In 1997 the figures were at 42%, and at over 50% among women. At present, Americans make substantially more visits each year to alternative medicine practitioners than to conventional primary care physicians. The public's out-of-pocket expense for products and services is equal to that paid out-of-pocket for conventional physicians' services, and it is three times the amount they pay out-of-pocket for hospital expenses.

This public interest has been matched by a significant and rapidly growing response in the professional community and the health care industry. Seventy American medical schools now offer electives in complementary and alternative medicine, and several are already incorporating required lectures and seminars into their core curricula. In 1970 there were virtually no non-Asian acupuncturists in the US; today, there are more than 15,000, of whom some 5,000 are physicians. Twenty million Americans use chiropractors each year and a number of bright college graduates are choosing to become chiropractors, acupuncturists, naturopaths, or Chinese medical doctors, rather than MDs. Meanwhile, every major managed care organization and insurance company is grappling with how to "cover" alternative medicine (and therefore attract new subscribers); hospitals in every part of the country are hurrying to open "integrative care centers;" and the natural food, supplement and herbal businesses are booming.

Though most of the surveys indicate that primary users of complementary medicine are adult, white, and middle or upper-middle class, there is every reason to believe that larger numbers of people with less income would use these therapies if they were covered by insurance. In addition, it is clear that the number of poor people already using these approaches is

underestimated in the surveys; the overall percentages are likely to be significantly higher than 42% for many of those who do not have telephones: migrant workers, as well as recent immigrants from Latin America, Asia and Africa for whom the therapies that we call complementary and alternative are both the traditional and the primary sources of health care.

This movement is immensely hopeful. It is, however, only minimally integrated into our health care system, with potential and real adverse effects. One in five Americans uses herbal formulations or vitamins in high doses in combination with conventional drugs, and neither their physicians nor the public know if they are being harmed. Research on complementary and alternative therapies is in its infancy and is grossly underfunded. Licensing of non-physician practitioners varies greatly from state to state and is often arbitrary. Procedures for feedback about adverse effects of alternative therapies are as haphazard as provision of information about their benefits.

Finally, it is interesting to note that the use of these therapies – and passionate advocacy on their behalf – is distributed among people of every political persuasion, in the general public as well as in Congress. Progressive Democrats, moderate Republicans and arch conservatives all use these therapies. And the vast majority agree that there should be easier access to them, greater insurance coverage for them, more research into and more readily available knowledge about them, more informed regulation of them, and better integration with conventional medicine.

It is no longer a question of whether complementary and alternative medical approaches will become part of health care, but of how this process of integration will proceed. In the past, changes in medicine and health care have followed particular discoveries (the introduction of antibiotics), the rise of powerful interest groups (the AMA in the latter part of the 19th century), the passage of wide-reaching new legislation (Medicare and Medicaid), or market forces (the creation of managed care organizations). The movement toward an integrated medicine is larger, less coherent and insistently populist. It holds out the promise of a health care that is far more comprehensive, more effective and more responsive to people's human needs. There is already some evidence to suggest that this approach may be far more cost-effective as well.

A White House Commission on Integrative Medicine would examine the changes that are underway; evaluate the state of the art of complementary and alternative therapies; assess the promise of a holistic or integrated approach for improving the health of Americans; deal with issues of regulation and safety; and establish guidelines for the integration of this approach and these therapies into all aspects of health care, including patient care, research, professional training and health education. It is entirely likely that such a Commission would not only provide guidelines for integration, but a new model for what all health care should be.

The Tasks of the Commission:

Specifically the Commission would

- Address the public's need for a system of integrated health care that is responsive to their needs and reflects their concerns
- Formulate strategies for gathering and evaluating information about complementary and alternative therapies and the role they can play in an integrated health care
- Develop research agendas and priorities for the government and help guide private efforts in the study of the most promising therapies
- Provide guidelines for the safe use of natural products and of new therapies, and for the ongoing reporting of both adverse effects and benefits
- Establish criteria for training, credentialing, licensing, and monitoring integrated health care professionals
- Develop models for offering health benefits in federal and private programs
- Develop guidelines for the integration of education about integrative health care and its various perspectives and practices in all programs of health professional education
- Develop a blueprint for distributing responsibility for all aspects of integrative health care among the various federal agencies
- Suggest mechanisms of on-going coordination among federal agencies and between federal agencies, professional groups and the general public
- Offer guidance in the development of proposals for funding model integrative health programs for people with specific illnesses (e.g. cancer) and for special populations which so far have the least access to these areas of care: the poor, minorities, veterans, and children

(See diagram for visual image of these tasks)

The Commission

Membership:

The Commission would be composed of 15-20 people who are committed to the creation of a system of health care that is responsive to the public's diverse needs, respectful, effective, and integrative. Members will include those who have been leaders in creating an integrative medicine, as well as those who have been working within the medical establishment (as researchers, clinicians and administrators) to enlarge its perspective; visionaries in the area of health policy, as well as citizen advocates who grapple each day with the medical system; representatives of the business community concerned with their employees' health; and ordinary men and women who are struggling to create their own programs of integrative health care.

The Chair of the Commission would be a leader in creating an integrative medicine and articulating its scope and importance – someone thoroughly grounded in the practice of complementary and alternative as well as conventional medicine. This person must be skilled in balancing diverse points of view and gifted at making the Commission's recommendations intelligible and useful to the general public and the health care community. The Chair would work in close collaboration with the White House on all aspects of the Commission's work.

Timetable, Staffing and Budget:

The Commission would be convened for a two-year period. It would have a coordinating staff to support its work in collecting background information, soliciting expert and public testimony, holding hearings, and assembling work groups on particular topics. Estimated personnel: seven. Estimated cost: \$5 million.

Developing a National Plan for Integrated Health Care

