Health Policy

Current Trends in the Integration and Reimbursement of Complementary and Alternative Medicine by Managed Care Organizations (MCOs) and Insurance Providers: 1998 Update and Cohort Analysis

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Abstract

Objectives. *To assess the status of managed care and insurance coverage of complementary and alternative medicine (CAM) and the integration of such services into conventional medicine.*

Methods. *A literature review and information search was conducted to determine which insurers had special policies for CAM. Telephone interviews were conducted with a definitive sample of 9 out of 10 new MCOs or insurers identified in 1998 and a cohort of eight MCOs and insurers who responded both to the original survey in 1997 and again in 1998 to determine trends.*

Results. *This study constitutes the results of the second year of a 3-year ongoing survey. For 1998, 10 MCOs and insurance carriers initiated CAM coverage. Survey results are analyzed for these 10 new providers as well as the results of a cohort of eight insurers surveyed in both 1997 and 1998 to determine current trends. A majority of the insurers interviewed offer some coverage for the following: nutrition counseling, biofeedback, psychotherapy, acupuncture, preventive medicine, chiropractic, osteopathy, and physical therapy. All new MCOs and insurers said that market demand was their primary motivation for covering CAM. Factors determining whether insurers would offer coverage for additional therapies included potential cost-effectiveness, consumer interest, demonstrable clinical efficacy, and state mandates. Among the most common obstacles listed to incorporating CAM into mainstream health care were lack of research on efficacy, economics, ignorance about CAM, provider competition and division, and lack of standards of practice.*

Conclusions. *Consumer demand for CAM is motivating more MCOs and insurance companies to assess the benefits of incorporating CAM. Outcomes studies for both conventional and CAM therapies are needed to help create a health care system based upon treatments that work, whether they are conventional, complementary, or alternative. (Am J Health Promot 1999;14[2]:125–133.)*

Key Words: Complementary and Alternative Medicine

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INTRODUCTION

CAM has been commonly defined as "medical interventions not taught widely at U.S. medical schools or generally available at U.S. hospitals."[1] Among the most commonly used practices are nutritional supplements, herbal therapy, chiropractic, relaxation techniques, massage, and acupuncture.[1–6] In 1997, nearly half (50.1% in the West and 42.1% elsewhere) of the U.S. adult population used CAM. Also, the estimated number of visits to CAM providers, 629 million, was greater than the number of visits, 386 million, to all primary care doctors in that same year. Total 1997 expenditures for professional services were $21.2 billion, a 45% increase since the earlier 1990 data. Expenditures for professional services, herbals, vitamins, diet products, books, and classes totaled $27 billion.[1] Five surveys conducted since 1990 report frequent use of CAM, ranging from 30 to 73% by patients suffering from conditions such as cancer, arthritis, acquired immunodeficiency syndrome, multiple sclerosis, and acute back pain.[1–5]

Use of CAM varies significantly by gender, with women at 48.9% vs. men at 37.8%. Use is more frequent for highly educated, high income, non-Black Americans who live in the western U.S.[1] Likewise, use of vitamin supplements is most common by those living in the western U.S. with

a college degree and an income of $50,000 or more.[7] Major users of CAM are either between the ages of 25 and 49 years or over 65.[1,8,9] Data indicate that the current market for CAM is being created by middle-aged and older individuals, some of whom are investing to improve their health and some of whom find it necessary due to their health conditions to invest in their own health.

Demand for CAM by the general public is increasing, despite the fact that its use is largely paid for by consumers without coverage by third-party payors. In 1990, Americans spent an estimated $11.7 billion for visits to CAM providers and an additional $2 billion for commercial diet supplements and over-the-counter megavitamins.[1] In 1991, the market for herbal therapy was $1.3 billion and is growing at a rate of approximately 20% per year.[8] In 1990, sales of homeopathic medicine reached $150 million in the U.S., which was a 50% increase in sales from 1988.[9] Businesses that offer CAM are capitalizing quite successfully on consumer interest. Whether this commercialization of CAM is good or bad has not been established and is highly debated, but ultimately, it will depend upon the results of clinical and cost outcomes research.

Among the most frequently cited reasons for the recent increased consumer use of CAM include (1) consumer dissatisfaction with the limitations of conventional medicine[8–10]; (2) consumer perception that the Western model of medicine treats patients as if they were mechanical processes rather than human beings with psychological and spiritual lives[2,9,11]; (3) a greater awareness of medical practices from other cultures[8,12]; (4) a growing body of scientific literature suggesting that diseases are linked to nutritional, emotional, and lifestyle factors[8,12]; (5) a desire and expectation of wellness by baby boomers[2,8]; (6) consumer desire to take fewer medications and decrease side effects, especially seniors[9]; (7) consumer desire to reduce personal health care spending, especially seniors[9]; and (8) support of nationally renowned clinicians.[13]

Evolving CAM coverage is occurring within the context of broader changes in the delivery of health care in the U.S. and internationally throughout industrialized nations, particularly in Germany, France, the United Kingdom, the Netherlands, and throughout Asia. Some characteristics of this health care reform include a demand for decreased costs and improved clinical outcomes, increased enrollment of patients and physicians in MCOs, development of clinical practice guidelines and clinician quality reviews, a move to capitated managed care, an emphasis on preventive care, intensified competition among third-party insurers, and a national debate over how to provide continuity of care and insurance coverage for everyone.[14,15] Among the influences driving health care delivery reform are rising medical care costs and the aging of the U.S. population, of which the latter also affects health care costs since seniors are the largest utilizers of medical treatments.[12,13,16] This may result in a need for less expensive medical care, including the appropriate use of CAM, although there are absolutely no data to support this frequently cited claim.

Advocates of CAM suggest that some CAM therapies could play a significant role in preventing diseases and helping contain medical care costs. For example, research has demonstrated that cardiovascular disease can be reduced through a combination of a low-fat vegetarian diet, exercise, and stress management.[17,18] As a result, several insurers are funding this program, including Mutual of Omaha, American Medical Securities, Blue Shield of California, and Principal Mutual. CAM therapists may also help improve the quality of health care through their holistic approach, which may allow patients to feel more in control of their health and more satisfied with their medical care,[2,11] which in turn may help decrease unnecessary office visits due to anxiety or miscommunications between physician and patient.[3,19]

In 1997, a research team at the Stanford University School of Medicine conducted mail and telephone interviews with a definitive sample of 18 insurers and a representative subsample of seven hospitals. A majority of the insurers interviewed offered some coverage for the following: nutritional counseling, biofeedback, psychotherapy, acupuncture, preventive medicine, chiropractic, osteopathy, and physical therapy. Twelve insurers said that market demand was their primary motivation for covering CAM. Factors determining whether insurers would offer coverage for additional therapies included cost-effectiveness based on consumer interest, demonstrable clinical efficacy, and state mandates. Some hospitals are also responding to consumer interest in CAM, although most hospitals can only offer CAM therapies for which local, licensed practitioners are available. Among the most common obstacles to incorporating CAM into mainstream health care are lack of research on efficacy, economics, ignorance about CAM, provider competition and division, and lack of standards of practice.[20] Consumer demand for CAM is motivating more insurers and hospitals to assess the benefits of incorporating CAM. Outcomes studies for both allopathic and CAM therapies are needed to help create a health care system based upon treatments that work, whether they are mainstream, complementary, or alternative.[20]

In 1998, for the second year of this 3-year study, we conducted a comprehensive database search, a literature review, and a definitive survey of 10 MCOs and insurance companies identified with new CAM offerings in 1998 in order to determine the current MCO and insurance coverage for such therapies. All responses are reported as group data only since the survey participants requested that the research not link their names to specific outcomes. In the Results section, there is a summary of the obstacles to integrating CAM into conventional health care. The Discussion section describes the overall findings, conclusions, study limitations, and future research directions.

METHODS

Literature Review and Information Search

A comprehensive review of existing literature on the insurance cover-

age of CAM was initiated in January 1996 and updated in September and December 1998. Literature searches were undertaken in several databases, including ABI, BIOSIS, ERIC, LEXIS/NEXIS, MAGS, MEDLINE, PAIS, PSYC, SOCA, and the Internet. In addition to the literature review, the researchers received information from experts on CAM and the health care industry via (1) an electronic mail request for information sent to members of an alternative medicine Health Online course; (2) an electronic mail request for information sent to directors of the 10 research centers established by the National Institutes of Health's Office of Alternative Medicine (now, the National Center for Complementary and Alternative Medicine—NCCAM); (3) literature sent by the NCCAM centers; and (4) consultation with experts at the Stanford University School of Medicine, UCSF/Stanford Health Systems, and the Stanford University Graduate School of Business.

Most importantly, this rapidly evolving area of CAM necessitates a suitable qualitative methodology since it is an emerging area of inquiry where little scientific study has been done. CAM practices and acceptance vary tremendously from one location to another. Terminology is not consistent among practitioners, sponsors, or consumers. Actual practices may have been masked by the apparently common practice of misusing Current Procedure Terminology (CPT) codes for services so that the services would qualify for payments by insurers. This is the kind of complicated, emerging phenomenon that is best studied by using purposive selection of case studies or case institutions with well-designed, semistructured, and open-ended interviews. A random sampling is inherently inappropriate; therefore, the research team identified a second, definitive national sample of MCOs and insurance providers offering some new coverage of CAM as of 1998. As a result, the managed care/insurance carrier sample is a definitive case sample subject to qualitative methods.

This database search, literature review, and information search may not be definitive because the market in the area of CAM is changing so quickly. Nonetheless, the completeness of the information search is suggested by the fact that the researchers began to receive referrals to the same MCOs and insurers that were already identified earlier in our search.

Sample

For the second year of the survey and analysis in 1998, 10 new managed care and insurance companies were identified and subsequently surveyed between April and October 1998 for year 2 of this ongoing study. Among these 10 new companies, there were three larger "Blue" plans, including Anthem Blue Cross/Blue Shield of Ohio, Blue Cross/Blue Shield of Michigan, and Hawaii Medical Services Association. Additionally, the 1998 group included four more conventional health maintenance organizations: Matthew Thornton, Healthnet, HealthPartners, and United Healthcare. Finally, there were three CAM-oriented HMOs: Group Health Cooperative, Landmark Healthcare, and American Health Specialty Program (AHSP). Among the 10 companies, there were two Midwest companies and one from the East Coast, with the remaining being based in the western states of California, Arizona, Washington, and Hawaii. Nine of the 10 companies (90%) responded to our written survey.

Response rate in the cohort from year 1 of the study was considerably lower, with only 8 of the original 18 companies responding to our resurvey for a 44% response rate. There are several possible reasons for this. First, from the time we conducted our initial survey in 1997, a number of the research contacts within the companies were lost to turnover, which is a common phenomenon in the industry today. This made it considerably more difficult to sustain any continuity of contact within the companies for our follow-up resurvey. Second, high levels of stress and uncertainty resulting from the rapidly changing managed care/insurance industries may have made participation less likely. It is possible that the resurvey was seen as yet another unwelcome demand on time. This latter explanation seems quite plausible, given that nonresponders who said they would respond failed to do so despite multiple telephone reminders and, in several cases, remailing and/or faxing of surveys. Lastly, one carrier, American Western Life Insurance, had gone out of business since the original survey.

Structured Interviews

Research team members informed the potential respondents of the survey that this was a study by researchers at the Complementary and Alternative Medicine Program at Stanford (CAMPS) that was designed to assess the status of and reimbursement for CAM. Mail surveys were sent by a Stanford researcher, with telephone follow-up calls to increase the response rate and to clarify specific points. All participants sent actual copies of their policies and materials, which are on file in the CAMPS office. We asked about 34 specific therapies from the NCCAM classification of alternative medical practices. Interview questions were both structured for baseline information and open ended to allow participants to express their beliefs and experiences without the constraints imposed by closed questions.

Managed Care/Insurance Providers and CAM

Managed care providers and insurers want to know whether a particular therapy is clinically efficacious, preferably with few complications or side effects. CAM may be helpful for chronic illnesses, such as back pain, with the potential to be less costly and have fewer side effects than pharmaceuticals or surgery. Studies also suggest that CAM may play a particular role in preventive care, especially the prevention of stress-related disorders, as some insurers have already determined. For example, Harvard Medical School's Mind/Body Institute has reported as many as five calls per week from HMOs that are considering teaching relaxation techniques to their members.[21] Likewise, a Blue Cross/Blue Shield

Association (BCBSA) survey "indicates that 70 percent of BCBSA plans are either developing or marketing programs that include health education programs and healthy lifestyle incentives."[22] However, until there is clear scientific proof of the efficacy of particular CAM therapies, each insurance company is left to decide for itself whether the effectiveness may exceed the costs of covering a particular therapy.

Insurers want to know whether or not a particular therapy is cost-effective. Advocates claim that insurers can save money by offering coverage of CAM for the following reasons. First, CAM usually is less expensive than allopathic treatments. For example, a large study by the RAND Corporation published in 1990 found that chiropractors were more successful at treating patients with chronic low-back pain and that chiropractic care cost about 1/10 that of allopathic care.[8] Likewise, a survey by the French government found that the cost of all services provided by homeopathic doctors was about half as much as services provided by allopathic physicians using conventional services.[11] However, these are two of a very limited number of studies that have evaluated the cost-effectiveness of particular types of CAM, and even fewer have evaluated both clinical efficacy and cost-effectiveness. A second reason for CAM coverage is that insurers that advertise such coverage may attract healthier members, which is supported by the fact that the heaviest users of CAM are highly educated with high incomes and are between the ages of 25 and 49.[21] However, CAM is also widely used by people over the age of 65 and by very sick people who have no other alternatives, so it is difficult to say whether the total CAM users pool will be low risk. Thirdly, insurers that offer access to CAM providers may save money because many providers of CAM focus on preventive medicine, which can decrease the need for costly treatments. Preliminary information suggests that insurers that cover CAM along with major medical expenses, such as American Western Life, which has since gone out of business, and Alliance for Alternatives in Healthcare Inc., are competitive with more conventional plans/insurers and may even save money on the treatment of certain conditions, such as arthritis, ear infections, and high blood pressure.[23,24] Although cost-benefit analyses are hotly debated, there are little empirical data brought to bear on whether CAM will indeed decrease costs or whether coverage of CAM will be an added expense.[25]

Table 1

CAM Therapies Covered by Insurers

Therapy	Percentage Offering Some Coverage: First Sample 1997 (n = 18)	Percentage Offering Some Coverage: Second Sample 1998 (n = 9)	Cohort of Original Companies (1997 and 1998) (n = 8)
Chiropractic	(100%)	(100%)	(100%)
Acupuncture	(94%)	(77%)	(88%)
Naturopathy	(38%)	(44%)	(63%)*
Massage	(61%)	(44%)	(88%)†
Traditional Chinese medicine	(22%)	(22%)	(13%)
Stress management/meditation	(22%)	(22%)	(50%)
Homeopathy	(44%)	(22%)	(63%)‡
Herbal medicine	(22%)	(11%)	(50%)‡

* Two companies added coverage in 1998.
† Two companies added, one dropped coverage in 1998.
‡ One company added coverage in 1998.
Note: Additional therapies for which coverage was added were craniosacral, biofeedback, and ayurvedic. Additional therapies dropped were acupressure and guided imagery.

RESULTS

Nine of the 10 new companies we surveyed in 1998 responded to our mailed questionnaire. The number of insurers or MCOs that reported coverage to any extent on one or more of their policies for a particular complementary medical practice is summarized in Table 1. A minority of the companies we surveyed offered extensive coverage of CAM. Of those, the smaller companies offered more extensive coverage of CAM.

All of the nine new MCOs and insurers interviewed are currently considering additional coverage of CAM. Furthermore, all nine of the MCOs and insurers indicated that market demand was their primary motivation for offering coverage of CAM, and consumer interest was cited as a key factor in determining coverage of CAM.

Table 2

Factors that Were Most Influential in Decision to Offer CAM (n = 17)*

Reasons	Mean Rating (1 = not important; 3 = very important)
Demand from consumers	2.42
Demand from purchasers	2.25
Market research	2.23
Attract new enrollees	2.23
Retain existing enrollees	2.13
Legislative mandate	1.94
Potentially less invasive care	1.94
Demonstrated efficacy	1.93
Experience of payor executives	1.84
Perceived cost-effectiveness	1.77
Attract new (ethnic) populations	1.37

* Mean ratings averaged across both the new sample and cohort's (1997–1998) responses to this item.

Companies were asked to rate on a scale of 1 to 3 the most important factors influencing their decision to offer coverage for CAM. As can be seen in Table 2, demand from both consumers and purchasers as well as the results from market research appear to be the most important determinants. These findings are consistent with our initial study in 1997

Table 3

Therapies or Systems Designated as Having "Licensed Practitioner" by Number of States

CAM Therapy or System	Number of States
Acupuncture	33
Ayurvedic medicine	0
Biofeedback	0
Chiropractic medicine	50
Craniosacral therapy	0
Herbal medicine	0
Homeopathic medicine	3
Massage therapy	23
Midwifery	15
Naturopathic medicine	11
Nutritionists or dietitians	26
Osteopathy	50
Physical therapy	50
Tibetan medicine	0
Traditional Chinese medicine	1

Sources: Maharishi Ayurvedic University, National Center for Homeopathy, American Association of Naturopathic Physicians, Official Office of Tibet, American Association of Acupuncture and Oriental Medicine, East-West Academy of the Healing Arts, American Chiropractic Association, American Dietic Association, Midwifery Alliance of North America, Upledger Institute, Touch Research Institute, American Osteopathic Association, and American Physical Therapy Association.

Note: Many states certify practitioners of biofeedback, massage, and other alternative and complementary therapists. However, this table specifically lists categories of providers who are legally considered "licensed practitioners" and therefore receive insurance reimbursement in those states. Also, California requires reimbursement of all providers who are licensed to provide service if that benefit is offered. However, HMOs can pick and choose their providers.

Table 4

Obstacles to Incorporating CAM into Mainstream Health Care

	Percentage of Companies that Cited		
Obstacles	% First Sample (1997) (n = 18)	% Second Sample (1998) (n = 9)	% Cohort (1997–1998) (n = 8)
Need for more research on efficacy	44	55	75
Economics	22	44	13
Ignorance about CAM	17	0	0
Provider competition and division	22	11	0
Need for practice and license standards	33	0	13
Fear of change by medical establishment	6	55	25
Cultural biases and prejudice	11	0	0
Lack of utilization data on CAM	11	0	0
Lack of consumer or employer demand	11	0	13
Lack of insurance reimbursement	0	11	0
Lack of CAM provider networks	6	0	0
Fear of liability for referring to CAM	0	22	0

that identified consumer demand as the most critical factor underlying the decision to offer CAM coverage. When asked in open-ended fashion what factors would determine whether they would offer coverage for additional CAM therapies in the future, the majority of companies in our new sample again stated market demand, with demonstrated clinical efficacy cited second most frequently. In response to this question, our cohort from years 1 and 2, while again noting the importance of market factors, also cited demonstrated clinical efficacy as the most important reason.

Reimbursement was described as depending on (1) market-driven rates, (2) the practitioner's license, (3) CPT codes, and (4) the particular health plan. With regard to CPT codes, most insurers interviewed thought it common for currently acceptable CPT codes to be used when, in fact, alternative medicine procedures are being administered. They did not think this as common for Diagnosis Related Groups (DRGs) since DRGs are mostly used for hospital billing, and alternative/complementary therapists are usually more involved in outpatient visits. Among the new companies surveyed, five stated that they were in the process of or anticipated developing CPT codes, while one company from the 1997–1998 cohort stated they were developing such codes.

Overall, a vast majority of CAM covered by insurers was covered only if the treatment was medically necessary for a specific diagnosis, and reimbursement was given only for a certain number of visits or dollar limit. Defining "medical necessity" varies from insurer to insurer but, in general, requires that a "particular procedure or pattern of treatment must have scientifically provable efficacy, be administered by medical professionals, and be subject to decision-making case by case and treatment by treatment."[25] Additionally, insurers reimburse providers who are legally defined by individual states as "licensed practitioners." For this reason, Table 3 summarizes the number of states that consider particular therapists to be licensed practitioners. Clearly, the predominant factor cited by managed care companies when selecting providers for their managed care plans was that the provider be licensed or even board certified by an officially recognized entity. Other important selection factors were that the provider (1) possess malpractice insurance, (2) be part of a network of practitioners, (3) follow national quality assurance standards, and (4) be trained in a needed specialty.

Summary of Obstacles to Integrating CAM

Table 4 lists the responses of insurers to the questions: What changes need to be made in order to incorporate CAM into the mainstream?, and What is at the root of the sentiment opposing CAM? In effect, these questions were asked to determine the perceived barriers to the more widespread implementation and/or insurance coverage for CAM. Results in Table 4 list the 12 most frequently cited reasons.

Among the primary obstacles to incorporating CAM into mainstream health care as listed by insurers in our study were (1) lack of research on efficacy, (2) economics, (3) ignorance about CAM, (4) provider com-

petition and division, and (5) lack of standards of practice. Of the obstacles listed, the only one that is unique to CAM is ignorance about CAM. Research on efficacy is lacking in much of conventional medicine as well as CAM. Financial considerations are driving mainstream health care reform and are part of what makes it so difficult to meet the different interests of insurers, employers, health care providers, and consumers. Provider competition and division occurs among conventional doctors, nurses, physician assistants, and other clinicians, as well as between conventional and CAM providers. Finally, studies of conventional medicine evidence wide variations in practice by regional economics and cultural norms, which suggests that standards of practice are needed among conventional providers as well as CAM providers.

DISCUSSION

In the interviews with insurers, the researchers inquired about 34 specific therapies from the NCCAM classification of alternative medical practices. Results indicate that some of these therapies are now covered by most insurers (e.g., chiropractic, osteopathy, and acupuncture), while other therapies are covered only by a few, smaller insurance companies (e.g., traditional Chinese Medicine and reflexology). Furthermore, the majority of insurers interviewed do not offer CAM coverage to enhance wellness or prevent disease. Rather, like conventional therapies, CAM therapies are usually covered only if treatment is medically necessary for a specific diagnosis, and reimbursement is given only for a certain number of visits and/or dollar limit. Thus, although the popular media report that an increasing number of insurers are offering coverage of CAM, the current status of CAM coverage is quite limited. This is not too surprising since for most types of CAM, there is limited, if any, research on clinical and/or cost-effectiveness.

CAM Coverage

Nonetheless, all of the nine new MCOs and insurers interviewed are currently considering additional coverage of CAM. Among our cohort of companies that were resurveyed, we observed several changes in terms of the types of therapies covered from years 1 to 2. There was an increase in the percentage of companies offering coverage for naturopathy (with two companies adding coverage for these services). There was also a slight increase in coverage for massage, with two companies adding coverage and one discontinuing coverage of this CAM therapy. Finally, we also observed marginal increases in coverage for both homeopathy and herbal medicine, with one company adding coverage for each of these therapies. Additional therapies for which coverage was added were craniosacral, biofeedback, and ayurvedic medicine. Additional therapies dropped by the cohort in 1998 were acupressure and guided imagery. In our 1998 resurvey, consumer demand continued to be the most frequently cited reason for offering CAM coverage among our original cohort of insurers and MCOs. However, there did appear to be a growing, and we believe positive, trend in terms of the cohort's mentioning demonstrated clinical efficacy as a critical factor in deciding to offer any new or additional coverage for CAM.

All nine of the MCOs and insurers interviewed indicated that market demand was their primary motivation for offering coverage of CAM, and consumer interest was cited as a key factor in determining coverage of CAM. Although insurers also stated that proof of clinical efficacy was an important factor in determining coverage of CAM, the influence of consumer interest on insurers could lead to an increasing number of insurers offering inappropriate coverage of CAM. "Token" or inadequate coverage CAM therapies may be offered mainly to attract new enrollees. This in turn could lead to data indicating that the therapy was not efficacious in terms of clinical and/or cost outcomes, when the actual cause was inadequate or token provision of such services. Relevant questions for such scenarios might include: what constitutes an adequate length of care for chronic pain with acupuncture; how effective is homeopathy with otitis media for children vs. antibiotics; what is the appropriate dosage and duration of an herbal remedy for sinusitis or allergic rhinitis; and numerous other issues of what constitutes a clinically defined, effective course of therapy vs. what is allowed or limited in the CAM policy.

These are major issues not yet addressed but requiring further research as well as both clinical and cost documentation by managed care and insurers. Alternatively, the pressure to differentiate from other third-party payers may convince some insurers to offer coverage of a CAM therapy that is not proven to be safe or efficacious. Since there is such a range of CAM services being offered, with an equally wide variance in the extent of scientifically based clinical studies to warrant these services, it is certainly possible that some services may be determined as not efficacious and even of potential harm in future research.

Legislation is one means of regulating CAM coverage. Indeed, state-mandated coverage of particular therapies was listed as a third dominant factor influencing whether or not insurers would offer coverage for CAM. In general, insurers reimburse services that are provided by a licensed practitioner, although the definition of a "licensed practitioner" varies from state to state (see Table 5).

Thus, lobbying for or against state licensure and state-mandated reimbursement of a particular CAM therapy is one avenue by which consumers as well as CAM practitioners are seeking to influence insurance companies.

Study Limitations

All nine of the new MCOs and insurers were selected specifically because they were reimbursing or offering CAM. Thus, the sample is skewed toward participants who are attempting to incorporate CAM, and conclusions are limited due to the inherently small sample sizes. Also, since each insurer has multiple policies with different restrictions, detailed information on coverage variation within insurers was not obtained. However,

Table 5

State-mandated Reimbursement for Alternative Providers

Providers	Number of States
Acupuncturists	8
Chiropractors	41
Dietians	3
Massage therapists	1
Midwives	15
Naturopaths	3
Osteopaths	17
Physical therapists	10
Podiatrists	35

Sources: National Association of Insurance Commissioners Mandated Benefits Summary (1995); Washington Insurance Commissioner Providers Licensed Under Title 18 (1996).

Note: The National Association of Insurance Commissioners summarized state statutes or regulations mandating that "certain providers must be reimbursed if the treatment is a covered expense and is within the scope of the provider's license." Information on counselors and psychologists was excluded from this table. Also, no distinction is made in this table between nurse midwives and licensed midwives.

copies of actual policies are on file for future reference. In addition, the status of insurance coverage of CAM may be affected by changes in national legislation, such as the Access to Medical Treatment Act (H.R. 2019, S. 1035), which would allow patients to receive any medical treatment they want as long as the practitioner agrees, and the administration does not violate any licensing laws. An additional provision is that a practitioner would be able to provide any treatment as long as it is not a danger to the individual, and the individual has been informed that the treatment has not been approved. In addition, a recent statute passed by Washington state requires all insurers to cover claims for "every category of provider" but has not been received well by several of the state's health plan carriers, who have filed complaints against this law.[26,27] Despite litigation by Washington state insurance carriers, this statute was upheld by the State Supreme Court in 1998. Results of these and other legislative initiatives around the country, in California, Oregon, Arizona, and Vermont as well as in 15 other states, could alter who determines whether coverage of CAM is offered.

Recommendations for Future Research

Based on our research, the following paragraphs contain recommendations for future research focused on clinical and cost outcomes, which address some of these obstacles listed by MCO insurers that participated in this study.

Since the general area of "CAM" is very broad, a survey of what CAM therapies are considered most useful by conventional and CAM providers will help determine potentially effective treatments. Such a survey will allow researchers to determine what CAM treatments are most likely to yield clear results in controlled clinical trials. A survey of which CAM therapies are considered useful by consumers will also help determine what treatments may be worth investigating. In addition, it would be desirable to conduct a consumer survey of CAM therapy use focused on older adults (>65) since seniors use health care services the most and are instrumental in shaping future health care trends. Our research group currently has a manuscript under review that examines predictors and patterns of CAM use among a Medicare population.

Research that emphasizes the development of common terminology for CAM with both conventional and alternative providers is needed to compare outcomes. One aspect of developing common terminology is to develop CPT codes for CAM. Designation of CPT codes for CAM, even if the CPT code specifies that the treatment is experimental, would facilitate large randomized clinical trials (RCTs) as well as clinical and cost outcomes studies on the effectiveness of specific CAM therapies. The current lack of CPT codes for CAM makes it difficult to determine what CAM therapy is being used and how to determine appropriate reimbursement.

Cost-effectiveness analyses are needed on individual clinically efficacious treatments, as well as on combinations of conventional and complementary treatments. Such research could compare the success of integrated, conventional, and CAM care to conventional care only. In addition, integrated clinics serve as educational resources to help reduce ignorance about CAM.[28]

Information needs to be disseminated to combat ignorance about CAM, especially centralized information about how CAM is being considered and used by insurers, employers, and hospitals. A pilot survey by the Stanford research group suggests that an increasing number of employers are considering including CAM coverage as one of their bid specifications for competing insurance plans. This study and follow-up studies are needed to provide information on what other insurers, employers, and hospitals are offering and what seems to be successful in terms of clinical and/or cost outcomes. This information may help facilitate the responsible acceptance of CAM into conventional health care.

Longitudinal outcomes studies and the creation of outcomes assessment databases will help transcend the politics of the health care community. Evaluating standards for uniform reporting of outcomes such as those under the National Committee for Quality Assurance (NCQA) and the Health Plan Employer Data and Information Set (HEDIS) will increasingly include areas of prevention and ultimately CAM therapy outcomes standards. In Oregon, the Foundation for Accountability (FACCT), incorporated in 1995, could prove particularly useful in this endeavor. According to the FACCT brochure, this organization is a nonprofit organization that will "endorse a series of health system performance measures, advocate widespread adoption of those measures by existing oversight, contracting, and consumer organizations, and promote consumers' use of the data that arise from these measures to make better healthcare decisions." They also state specifically that "the diverse arrangements for delivering and financing healthcare call for measures that are universal in their recognition of the human experience, not specific to any particular

setting or system."[29] With this model to evaluate health care, the distinctions among "conventional," "complementary," "alternative," and "integrative" health care will be irrelevant. According to a recent editorial in the *New England Journal of Medicine*. "There cannot be two kinds of medicine—conventional and alternative—there is only one kind of medicine that has been adequately tested and medicine that has not, medicine that may work and may or may not work. Once a therapy has been tested rigorously, it no longer matters whether it was considered alternative at the outset. If it is found to be reasonably safe and effective, it will be accepted."[30] This is a position with which we concur, with the one caveat and observation that the vast majority of conventional medical care fails to conform to this standard of quality.

Providers of CAM need to develop standards of practice and licensing, which will help them fit into the existing diagnosis-based system.[1,16,31,32] This is more easily stated than accomplished. Many complementary therapies are predominantly used as preventive medicine and therefore cannot be easily evaluated by a diagnosis-based system. In addition, many CAM practitioners emphasize unique treatments for each patient, which makes it difficult to develop standards of practice guidelines.[31] Thus, the integration of complementary therapies that emphasize preventive medicine and a focus on individual variation in treatments would inevitably change either or both the complementary therapy and conventional medical model.

Advocates of CAM agree that there is a need for research on CAM standards of practice and licensing, but research funding is already very competitive and even more so for interventions that are less mainstream. In addition, a great deal of medical research is funded by pharmaceutical and medical equipment companies, who have less to gain from proving the effectiveness of mind/body techniques or herbs that cannot be patented. Surely, the NIH NCCAM, which has already funded 12 research centers as well as over 45 pilot studies and three major ongoing RCTs, will be helpful in facilitating the evaluation of CAM. However, with a relatively modest budget of only $50 million in fiscal year 1999, additional funding sources are clearly required.

SUMMARY AND CONCLUSIONS

An increasing number of MCOs, insurers, and hospitals are including CAM to meet consumer demand. Motivations for offering CAM range from thorough searches of available clinical efficacy research to questionable attempts to capture market share, attract new enrollees, and/or to retain enrollees by offering what may be inadequately documented services. Both federally funded and managed care/insurance provider research is needed to determine what constitutes clinically effective services versus token services that may not provide adequate time or intensity of the CAM offering to be effective in terms of clinical and cost outcomes. Despite these research caveats, it is equally certain that there is a rapidly growing consumer demand for CAM with or without research evidence and with or without reimbursement, due to consumer willingness to pay out of pocket and purchase over-the-counter remedies. However, there needs to be a great deal more research on clinical efficacy and cost outcomes in order to responsibly incorporate CAM into mainstream health care. Emphasis on what is validated by sound clinical and cost outcomes research rather than what is considered "alternative" vs. "conventional" will be critical to reducing excessive medical care utilization and containing rising medical care costs.

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Appendix

Interview Questions for MCO Insurance Companies

Coverage

- Do you cover chiropractic, acupuncture, nutritional, etc.? For each field of practice covered, what are your policies? Copies of those policies? Do you serve different states? Does your coverage of CAM vary by state? Why? Does your coverage of CAM vary with different employers? Why? What alternative fields of practice do you anticipate covering? Why? When? Do you have a wellness plan? If not, do you anticipate developing one? Why? When?

Coverage: Areas of Investigation

- How do you decide what fields of practice to cover? What information do you need? In what form do you need this information? Do you have a database to evaluate clinical and cost outcomes of CAM? Would you be interested in codeveloping or using such a database?

Criteria for Reimbursement

- How do you determine whether a patient can be reimbursed for CAM therapy and how much to reimburse? Is there portability of care; that is, if a patient chooses a chiropractor who does not help his condition, can he then go to an acupuncturist or orthopedic surgeon? What kind of coverage limits are imposed? Number of treatments? Cost? What kinds of preauthorizations are required? Do recipients self-refer? Are alternative therapies restricted to specific conditions, for example, a patient can only see an acupuncturist if s/he has chronic pain, or are they broadly available? How does your CAM coverage vary, if at all, with the age of the patient? What age-related factors influence your coverage of CAM?

Definitions

- Do you believe that currently acceptable CPT is used when in fact alternative medicine procedures are being administered? How often? Do you believe that specific DRGs are used to describe undiagnosed conditions (e.g., "dry wind" described as "sinusitis")? How often? Do you anticipate developing CPTs/DRGs for alternative medicine?

Providers

- How do you select providers? What training do you require of providers? MD? RN? PhD? OD? DO? PA? Other? How do you monitor their effectiveness?

Issues and Obstacles

- What is your motivation for covering CAM? Are you influenced by lobbying groups? Which ones? What do you perceive to be the greatest obstacles to integrating alternative medicine into mainstream insurance coverage?

Please comment on the future of alternative medicine in mainstream insurance coverage.