

*Methods, Issues, and Results in Evaluation and Research*

# Current Trends in the Integration and Reimbursement of Complementary and Alternative Medicine by Managed Care, Insurance Carriers, and Hospital Providers

*Kenneth R. Pelletier, Ariane Marie, Melissa Krasner, William L. Haskell*

## Abstract

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

**Methods.** A literature review and information search was conducted to determine which insurers had special policies for CAM and which hospitals were offering CAM. Telephone interviews were conducted with a definitive sample of 18 insurers and a representative subsample of seven hospitals.

**Results.** A majority of the insurers interviewed offered some coverage for the following: nutrition 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 potential cost-effectiveness based on consumer interest, demonstrable clinical efficacy, and state mandates. Some hospitals are also responding to consumer interest in CAM, although hospitals can only offer CAM therapies for which local, licensed practitioners are available. 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 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. (*Am J Health Promot* 1997; 12[2]:112-123.)

**Key Words:** Managed Care, Insurance, Hospital, Reimbursement, Complementary Medicine, Alternative Medicine, Providers, Disease Management, Health Promotion

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Use of CAM does not significantly vary by gender or insurance status, but use is more frequent for highly educated, high income, nonblack Americans who live in the western U.S.<sup>1</sup> 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.<sup>6</sup> Major users of CAM are either between the ages of 25 and 49 years or over 65.<sup>1,7,9</sup> Data indicate that the current market for CAM is being created by middle-aged and older individuals, who are investing to improve their health, and by indi-



viduals suffering from chronic illnesses and diseases that are not adequately treated by conventional medicine.

Demand for CAM by the general public is increasing, despite the fact that its use is largely paid for by consumers "out of pocket" without coverage or reimbursement 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.<sup>1</sup> In 1991, the market for herbal therapy was \$1.3 billion and growing at a rate of approximately 20% per year.<sup>7</sup> In 1990, sales of homeopathic medicine reached \$150 million in the U.S., which was a 50% increase in sales from 1988.<sup>9</sup> 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 will depend upon the results of clinical and cost outcomes research.

There are eight frequently cited reasons for the recent increased consumer use of CAM:

- (1) consumer dissatisfaction with the limitations of conventional medicine,<sup>7-9</sup>
- (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,<sup>9,10</sup>
- (3) a greater awareness of medical practices from other cultures,<sup>7,13</sup>
- (4) a growing body of scientific literature suggesting that diseases are linked to nutritional, emotional, and lifestyle factors,<sup>7,11</sup>
- (5) a desire for and expectation of wellness by baby boomers,<sup>7</sup>
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Evolving CAM coverage is occur-

ring within the context of broader changes in the delivery of health care in the United States, and internationally throughout industrialized nations, particularly in Germany, France, the U.K., 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 managed care organizations, 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.<sup>13,14</sup> Among the things driving health care delivery reform are rising medical care costs and the aging of America's population, of which the latter also impacts health care costs since seniors are the largest utilizers of medical treatments.<sup>11,12,15</sup> This may result in a need for less expensive health care, including the appropriate use of CAM, although there are absolutely no data to support the 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, a recent study demonstrated that cardiovascular disease could be reduced through a combination of a low-fat vegetarian diet, exercise, and stress management. As a result, several insurers are funding the Ornish nutrition-based program, including Mutual of Omaha, American Medical Securities, Blue Shield of California, and Principal Mutual.<sup>16</sup> Complementary and alternative medicine 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,<sup>10</sup> which in turn may help to decrease unnecessary office visits due to anxiety or miscommunications between physician and patient.<sup>2,17</sup>

Researchers at the Stanford University School of Medicine conducted

a comprehensive database search, a literature review, and a definitive survey of 18 insurance companies and a representative subsample of seven hospitals in order to determine the current insurance coverage for CAM therapies and the profile of these being provided as a clinical service by hospitals. The main objective of this project was to review the status of reimbursement for CAM, as well as the integration of such services offered by hospitals. Results of this pilot survey are presented in two sections reflecting the main categories of the survey: insurers and hospitals. In each section, a brief literature review is presented as both the research background for determining the interview questions and as a context for the responses. This review is followed by the specific questions and responses (reported as group data only, since the survey participants requested that the research not link their names to specific outcomes). The results section concludes with a summary section on the obstacles to integrating CAM into mainstream health care. Finally, the discussion section describes the overall findings, conclusions, and next stage for research.

## METHODS

### Literature Review and Information Search

A comprehensive review of existing literature on the insurance coverage of CAM was initiated in January 1996. 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 Office of Alternative Medicine (OAM), National Institutes of Health; (3) literature sent by the OAM centers; and (4) consultation with experts at the Stan-



ford University School of Medicine, Stanford Health Systems (SHS), Stanford Graduate School of Business, and the Arizona Center for Health and Medicine of Catholic Healthcare West in Phoenix, Arizona.

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. Complementary and alternative medicine 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 will 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 and the research team identified a definitive national sample as of December 1996 offering CAM therapies by managed care/insurance providers. As a result, the managed care/insurance carrier sample is a definitive case sample subject to qualitative methods. Hospital interviews were more limited and only those seven hospitals offering the broadest array of CAM therapies were selected for a more limited qualitative analysis.

This database search, literature review, and information search could not be exhaustive because the market in the area of CAM is changing so quickly. In addition, some relevant information was not available to us due to cost, such as a book titled *Self-treatment in Managed Care: HMO Involvement in OTC and Alternative Therapies*, which is sold for \$3000 by Decision Resources of Boston, Massachusetts, as well as a newsletter titled *Business Report on Alternative and Complementary Medicine* marketed by St. Anthony's Publishing (J. Elkis, unpublished data). Nonetheless, the completeness of the information search is suggested by the fact that

the researchers began to receive referrals to the same insurers or hospitals that were already identified earlier in our search.

### Sample

Based upon our literature review and information search, the research team identified insurers that had or were developing policies to cover CAM. Telephone surveys were conducted of those companies between April and October 1996. The companies interviewed were: Alliance for Alternatives in Healthcare Inc. (Alternative Plan), American Medical Securities, American Western Life Insurance (Wellness Plan), Blue Cross of Washington and Alaska, Kaiser of Northern California, King County Medical Blue Shield in Washington, Mutual of Omaha, and Oxford Health Plans. Researchers also interviewed The Alternare Group, which was contracted by one of the above insurers to facilitate the development of their policies for CAM coverage.

In addition, researchers added insurance or managed care companies that did not have proactive policies to cover CAM, but were of interest because they represent major national managed care and insurance providers. After identifying large national carriers, the following companies were identified and interviewed based upon the information search and their large advertisements in the yellow pages of a Santa Clara County, California, telephone directory: Aetna, Blue Cross of California, Blue Shield of California, CIGNA, Foundation Health Corporation, HealthSource Provident Administrators, Medicare, NYLCare, Principal Mutual Life Insurance, and Prudential.

Also, the research team conducted interviews with representatives of hospitals associated with CAM centers. We were interested in understanding why these hospitals were offering CAM therapies and how they chose those particular therapies. Based upon the literature review and information search, the researchers identified hospitals that have incorporated several modalities of CAM. Our respondent hospitals are the American Holistic Center in Chicago, Ancilla System's Healing Art Center, North

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## RESULTS

### Literature Review of 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. Complementary and alternative medicine 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



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## RESULTS

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Mind/Body Institute has reported as many as five calls a week from HMOs that are considering teaching relaxation techniques to their members.<sup>18</sup> 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."<sup>19</sup> 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. One is that 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 was about one-tenth the cost of allopathic care.<sup>7</sup> 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.<sup>10</sup> 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.<sup>18</sup> 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 treat-

ments. Preliminary information suggests that insurers that cover CAM along with major medical expenses, such as American Western Life 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.<sup>20,21</sup> 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.<sup>22</sup>

### Interviews with Insurers

A total of 18 insurance companies were contacted for telephone interviews, and interviews were completed at all 18 companies. The number of insurers 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 insurers sampled offered extensive coverage of CAM. Of the insurers sampled, the smaller companies offered more extensive coverage of CAM (Figure 1). Twelve of the 18 insurers said that market demand was their primary motivation for offering CAM.

Nine out of the 18 insurers were looking into coverage of additional therapies as follows: acupuncture (2), hypnotherapy (2), naturopathy (2), Qi Gong (1), craniosacral therapy (1), reiki (1), homeopathy (1), guided imagery (1), biofeedback (1), psychotherapy (1), and chiropractic (1). Three insurers did not disclose which therapies they were looking into for possible coverage. Five companies stated that they did not anticipate additional coverage of CAM. Four other companies said that they might consider additional coverage for one of the following reasons: (1) a particular therapy was proven effective in peer-reviewed medical literature; (2) coverage was mandated by state law; (3) there was high market demand; or (4) there existed potential cost-savings. Two insurance companies have retracted some of their CAM benefits (specifically, massage and health foods) due to the difficulty in estimating and controlling utilization.

**Table 1**  
**Coverage Reported by Insurers to Any Extent on Any Policy (n = 18)**

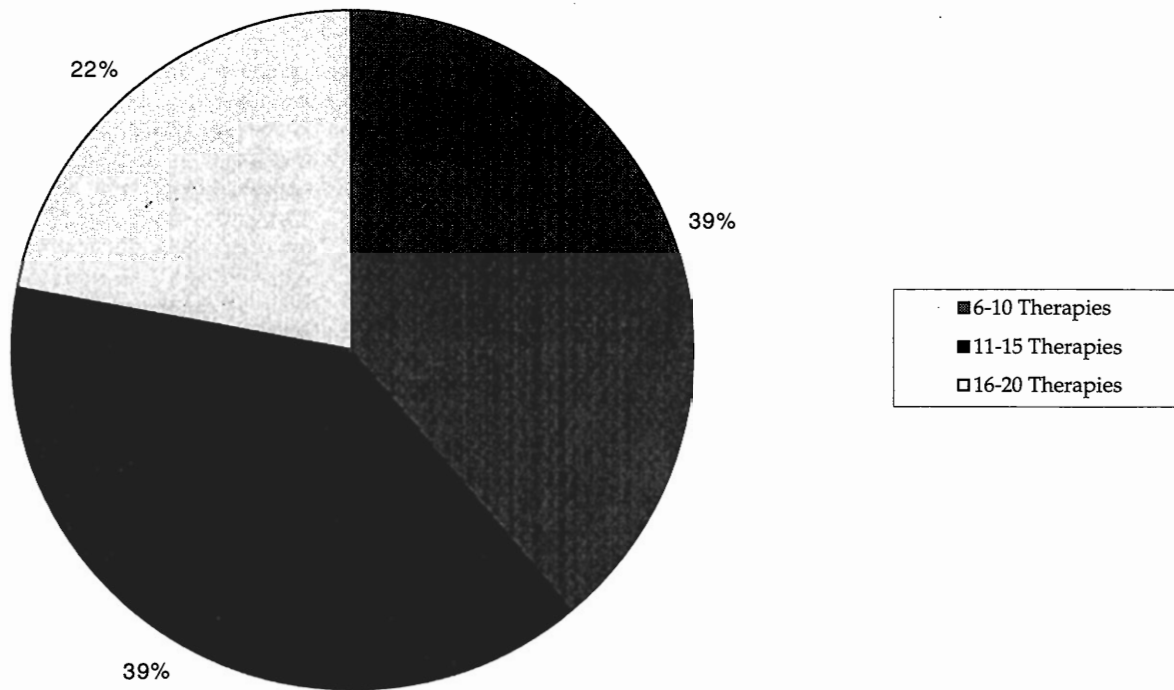
Complementary Medical Practices	Number of Insurers
Diet, nutrition and lifestyle changes:	
Herbal medicine	4
Nutrition counseling	12
Ornish program	6
Mind/Body control:	
Aromatherapy	0
Art therapy	0
Biofeedback	16
Guided imagery	5
Hypnotherapy	10
Martial arts	0
Meditation	4
Psychotherapy	17
Qi Gong/Ch'i Kung	1
Support groups	4
Yoga therapy	2
Alternative systems:	
Acupuncture	17
Ayurveda	3
Homeopathy	8
Naturopathy	7
Tibetan medicine	1
Chinese medicine	4
Preventive medicine	15
Manual healing:	
Acupressure	9
Alexander technique	1
Chiropractic	18
Craniosacral	2
Massage therapy	11
Naprapathy	1
Osteopathy	18
Physical therapy	18
Reflexology	2
Reiki	1
Rolfing	2
Shiatsu	4
Tragerwork	2

However, to promote wellness, these insurance companies are offering a discount on health foods and vitamins.

Several insurers have developed major medical plans that specifically include coverage of CAM. For example, subscribers to American Western Life Insurance's (AWLI's) Wellness Program are encouraged to visit a wellness doctor, who may be an allopathic doctor, Ayurvedic doctor, acupuncturist, hypnotherapist, or other type of provider. A comprehensive health history is taken initially by a wellness doctor, and suggestions are

Figure 1

Managed Care and Insurance Plan Coverage of Complementary and Alternative Medicine (n = 18)



made for healthy lifestyle changes. Naturopathic doctors staff a 24-hour holistic hotline, give suggestions for self-care, and operate as gatekeepers for additional office visits. According to one spokesperson, less than 2% of callers intended to self-treat when they called for a referral, but almost 19% elected self-care after speaking with a Wellness Line doctor (J. Elkis, unpublished data). AWLI's Wellness Program pays for herbal and homeopathic medicines, as well as for vitamins that are prescribed for certain conditions. Alliance for Alternatives in Healthcare Inc. offers the Alternative Plan, which pays for services provided by "any licensed physician acting within the scope of their license, both office and hospital visits, to treat any illness or injury or to provide preventive services," and pays for up to \$500 a year for homeopathic and herbal medicine prescribed by a licensed physician. A few other insurers are currently experimenting with plans specific to CAM, such as Blue Cross of Washington and Oxford Health Plans.<sup>20,23</sup> Most of the insurers interviewed did not have spe-

cial health plans for CAM, but included coverage of some CAM in their regular plans.

Important factors determining coverage decisions as listed by insurers included: (1) consumer interest indicated by quantitative consumer research or employer demands. All of the insurers interviewed said that large employers in particular could customize their plans. Furthermore, 12 of the 18 insurers said that market demand was their primary motivation for offering coverage of CAM; (2) proof of clinical efficacy as indicated by randomized controlled trials in peer-reviewed journals or consultation with regional and national experts; and (3) state-mandated coverage of CAM (Table 2).

Reimbursement was described as depending on: (1) market-driven rates; (2) the practitioner's license; (3) Current Procedure Terminology (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 proce-

Table 2

State-mandated Reimbursement for Alternative Providers

Providers	Number of States
Acupuncturists	8
Chiropractors	41
Dietitians	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.

dures are being administered. They did not think this was 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. Most of the insurers did not believe that the American Medical Association (AMA) would develop CPT codes specific to CAM any time soon. Five insurers said that they use "dummy" CPT codes for CAM. The Alternare Group has developed a conversion method for reimbursing CAM based on CPT codes.

Overall, a vast majority of CAM is covered by insurers only if the treatment is medically necessary for a specific diagnosis, and reimbursement is given only for a certain number of visits or dollar limit. Defining "medical necessity" varies from insurer to insurer, but in general 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."<sup>22</sup> Also, in general, 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 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.

### Literature Review of Hospitals and CAM

From our research, we learned that several hospitals are collaborating with centers that offer CAM or actually have a clinic providing CAM within the hospital. Of the 14 hospitals identified that offer CAM, the most common types offered are eight hospitals with meditation, acupuncture, massage, and nutrition counsel-

**Table 3**  
**Therapies or Systems Designated as Having "Licensed Practitioners" 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 Dietetic Association, Midwifery Alliance of North America, Upledger Institute, Touch Research Institute, American Osteopathic Association, American Physical Therapy Association. Note: Many states certify practitioners of biofeedback, massage, and other alternative and complementary therapists. However, this table is specifically listing 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.

ing; seven with guided imagery; and six with t'ai chi chuan. Not listed in Table 4 are medical centers that offer an 8-week stress reduction and mindfulness course based on the work of Dr. Jon Kabat-Zinn at the University of Massachusetts Medical Center in Worcester, Massachusetts. Also, several centers offer a behavioral medicine program developed by Dr. Herbert Benson, which includes elicitation of the relaxation response, cognitive-behavioral strategies to enhance coping skills, exercise/activity programs, and nutrition management (Morristown Memorial Hospital in New Jersey, Riverside Methodist

Hospital in Ohio, Mercy Hospital and Medical Center in Illinois, Memorial Healthcare System in Texas, Baptist Hospital in Tennessee, and St. Peter's Medical Center in New Jersey). Other hospitals have an acupuncture clinic or offer acupuncture, such as Johns Hopkins in Maryland, University of California at Los Angeles, Kaiser in Vallejo, California, and Cooper Hospital in New Jersey. In addition, other major hospitals are currently considering the addition of a clinic for CAM, such as the Stanford University Hospital of Stanford Health Services (SHS), Mount Diablo Medical Center, Marin General Hospital, and Cornell Medical College.

Some of the hospitals in Table 4 have business relationships with third-party insurers. For example, the Integrated Health Services PPO is capitalizing on the relationship between Grant Hospital and the Chicago Holistic Center.<sup>24</sup> Within the Samaritan Health Systems, Arizona's third largest HMO, members are allowed to pick primary care providers at the Arizona Center for Health and Medicine.<sup>25</sup> Also, participants in the California Pacific Medical Center community wellness center receive a 50% discount if they are HealthNet members.

### Interviews with Hospitals

Hospitals from Table 4 that offered the largest number of CAM therapies were selected for interviews. A total of nine hospitals were contacted for interviews, and interviews were completed at seven of these hospitals. Hospital CAM program directors were asked how the collaboration between the hospital and the CAM center was initiated. Two of the programs were started by a senior medical director in one site and one by a senior vice president administrator who was helped by personal clinical success with CAM. Two were started after CAM practitioners suggested the idea to hospital administrators, two were started by hospital administrators interested in responding to consumer demand, and one was started as an expansion of a pre-existing pain management program in response to consumer interest. Complementary and alternative medicine program directors were also



**Table 5**  
**Obstacles to Incorporating CAM into Mainstream Healthcare**

Obstacles	Number of Responses		
	Total (n = 25)	Insurers (n = 18)	Hospitals (n = 7)
Need more research on efficacy	9	8	1
Economics	8	4	4
Ignorance about CAM	6	3	3
Provider competition and division	6	4	2
Need standards of practice and licensing	6	6	0
Fear of change by medical establishment	4	1	3
Cultural biases and prejudice	2	2	0
Lack of utilization data on CAM	2	2	0
Lack of consumer or employer demand for CAM	2	2	0
Lack of insurance reimbursement for CAM	1	0	1
Lack of provider networks including CAM	1	1	0
Resistance to methods of medical establishment	1	1	0

Note: "Economics" refers to any response indicating that financial considerations limited the willingness of insurers, employers, or health care providers to participate in offering CAM. "Provider competition and division" refers to the lack of collaboration and cooperation both among and between CAM and allopathic healthcare providers.

asked how they decided what therapies to include in their programs. Reasons given and the number giving the reasons are as follows: availability of licensed or certified practitioners (5), advice from a committee of experts (3), therapies supported by scientific research (2), therapies familiar to medical staff and public (2), director's personal experience and interest (2), therapies specific to needs of patients (1), and compatibility with hospital's overall mission (1). None of the seven clinic directors interviewed had any conclusive results yet on the clinical or cost-effectiveness of their CAM programs, but all said that their programs were extremely popular with both patients and hospital administrators, the latter because of the potential of the program to be used as a marketing tool and an additional source of revenue. Three of the directors mentioned in particular that the physicians in their hospitals, some of whom were initially skeptical, were referring an increasing number of patients to CAM providers because of the favorable outcomes.

#### Summary of Obstacles to Integrating CAM

Table 5 lists the responses of insurers and hospital CAM program di-

rectors 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 5 list the 12 reasons that were most often cited in descending order of frequency, with "Need more research on efficacy" cited most frequently.

#### DISCUSSION

In the interviews with insurers, the researchers inquired about 34 specific therapies from the OAM classification of alternative medical practices. The results indicate that some of these therapies are now covered by most insurers (e.g., osteopathy, physical therapy), while other therapies are covered only by a few, smaller insurance companies (e.g., Tibetan Medicine, 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 covered only if treatment is medically necessary for a specific diagnosis, and reimburse-

ment 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 efficacy and cost-effectiveness.

#### CAM Coverage

Nonetheless, half of the 18 insurers interviewed are currently looking into additional coverage of CAM. Furthermore, 12 of the 18 insurers interviewed said that market demand is 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 is 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 did not work, when the actual cause was inadequate or token provision of such services. Relevant issues for such scenarios are what constitute an adequate length of care for chronic pain with acupuncture; how effective is homeopathy vs. antibiotics for children with otitis media; 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, insurer, and hospital providers. Alternatively, the pressure to differentiate from other third-party payors may convince some insurers to offer coverage of a CAM therapy that has not been proven 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 findings.

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. Also, in general, insurers reimburse services that are provided by a licensed practitioner, although the definition of a "licensed practitioner" varies from state to state. 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.

From the database search, literature review, and selected interviews, we found that several hospitals are collaborating with centers that offer CAM and several others are including stress reduction and behavioral medicine programs in their services. In our interviews with seven hospital CAM directors, the research team inquired why they decided to offer CAM therapies and how they selected particular therapies. Four of the seven CAM programs were started by individuals or practitioners specifically interested in CAM, and three were started to meet consumer interest in CAM. The majority of hospital CAM directors interviewed selected particular therapies based upon availability of licensed or certified practitioners. This suggests that some hospital administrators, like insurers, are responding to consumer interest in CAM. However, hospitals can only offer CAM therapies for which local, licensed practitioners are available. All of the seven program directors said that their programs were growing in popularity among the hospital administration and staff primarily because of the enthusiastic response of their patients. However, since none of the programs have been in existence more than a year, none of the directors could offer any conclusions on the outcomes of their programs.

### **Obstacles to Using CAM**

Among the primary obstacles to incorporating CAM into mainstream health care as listed by insurers and CAM program directors that participated in our study were: (1) lack of research on efficacy; (2) economics; (3) ignorance about CAM; (4) provider competition and division; and (5) lack of standards of practice. Of the obstacles listed, the only one unique to CAM is ignorance about CAM. Research on efficacy is lacking in much of conventional medicine as well as in 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, etc., as well as between conventional and CAM providers. Finally, studies of conventional medicine show 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.

### **Study Limitations**

Eight of the 18 insurers and all of the seven hospitals were selected specifically because they are 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, copies of actual policies are on file for future review. In addition, the status of insurance coverage of CAM may be affected by changes in legislation, such as the Access to Medical Treatment Act (H.R. 2019, S. 1035, referred to committee as of September 1996), which would allow patients to receive any medical treatment they want so 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 so 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.<sup>26,27</sup> Results of these and other legislative initiatives around the country, in California, Oregon, Arizona, and Vermont as well as 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 insurers and CAM program directors 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 allopathic and CAM providers will help determine potentially effective treatments. Such a survey will allow researchers to determine which 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 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.

Research that emphasizes the development of common terminology for CAM with both allopathic and nonallopathic doctors is needed to compare outcomes. One aspect of developing common terminology is to develop CPT codes for CAM. Although the AMA is likely to be resistant to this idea, the designation of CPT codes for CAM (even if the CPT code specifies that the treatment is experimental) will allow large studies on the effectiveness of specific CAM. The current lack of CPT codes for

CAM makes it difficult to determine which CAM is being used and what the appropriate reimbursement should be.

Cost-effectiveness analyses are needed on individual clinically efficacious treatments, as well as on combinations of allopathic and complementary treatments. Some of the hospitals associated with centers for CAM (identified in Table 4) may be ideal settings for researchers to test the clinical efficacy as well as the costs and benefits of a variety of treatments. Also, such research could compare the success of integrated allopathic and CAM care to allopathic care only. In addition, integrated clinics serve as educational resources to help reduce ignorance about CAM.

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 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 mainstream 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. The Foundation for Accountability (FACCT), located in Oregon and incorporated in November 1995, should prove particularly useful in this endeavor. According to the FACCT brochure, this is a non-profit organization that will "endorse a series of health system performance measures, advocate wide-

spread 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."<sup>28</sup> With this model to evaluate health care, the distinctions among "conventional," "complementary," and "alternative" health care will be irrelevant.

Providers of CAM need to develop standards of practices and licensing, which will help them to fit into the existing diagnosis-based system.<sup>1,15,28,29</sup> This is easier said than done. For example, some 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.<sup>28</sup> 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 the current 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 in general, and even more so for methods 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. The NIH Office of Complementary and Alternative Medicine, which has already funded 10 research centers as well as over 45 independent studies, will be helpful in facilitating the evaluation of CAM. However, with a budget of only \$7.4 million in fiscal year 1996, additional funding sources are clearly required.

### **SO WHAT? Implications for Health Promotion Practitioners and Researchers**

An increasing number of insurers and hospitals are including CAM in order 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 inadequately documented services. Both federally funded and managed care/insurance provider research is needed to determine what differentiates clinically effective services from token services, which 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, a great deal more research on clinical efficacy and cost outcomes is needed in order to responsibly include CAM in mainstream health care. Emphasis on what is validated by sound clinical and cost outcomes research rather than what is considered "alternative" or "conventional" will be critical to reducing health care utilization and containing rising medical care costs.

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#### **References**

1. Eisenberg DM, Kessler RC, Foster C, et al. Unconventional medicine in the United States. *N Engl J Med* 1993;328:246-52.
2. Singh N, Squier C, Sivek C, et al. Determinants of nontraditional therapy use in pa-



tients with HIV infection. *Arch Intern Med* 1996;156:197-201.

3. Coleman LM, Fowler LL, Williams ME. Use of unproven therapies by people with Alzheimer's disease. *J Am Geriatr Soc* 1995;43:747-50.
4. Fawcett J, Sidney JS, Hanson MJ, et al. Use of alternative health therapies by people with multiple sclerosis: an exploratory study. *Holistic Nurs Pract* 1994;8:36-42.
5. Sutherland LR, Verhoef MJ. Why do patients seek a second opinion or alternative medicine? *J Clin Gastroenterol* 1994;19:194-7.
6. Cohen CJ, Eisenberg DM, Mayer J, et al. Prevalence of non-conventional medical treatments in HIV-infected patients: implications for primary care. *Clin Res Abstr* 1990;8:692A.
7. Perelson GH. Alternative medicine: what role in managed care? *FHP J Clin Res* 1996;5:32-8.
8. Carey TS, Garrett J, Jackman A, et al. North Carolina Back Pain Project. The outcomes and costs of care for acute low back pain among patients seen by primary care practitioners, chiropractors, and orthopedic surgeons. *N Engl J Med* 1995;333:913-17.
9. Mitchell S. Healing without doctors. *Am Demographics* 1993;15:46-9.
10. Ullman D. The mainstreaming of alternative medicine. *Healthcare Forum J* 1993;3:24-30.
11. Sabatino F. Mind and body medicine: a new paradigm? *Hospitals* 1993;67:66-72.
12. Brown E. Alternative medicine converts its skeptics. *Managed Healthcare* 1996;6:24,27.
13. Southwick K. Kaiser showcases innovative research projects. *Managed Healthcare* 1995;5:6-8.
14. Edelson M. Can the new medicine cure you? *Washingtonian* February 1996:68-85.
15. Gruman JC. Should alternative medicine stay alternative? *Advances: J Mind-Body Health* 1995;11:65-9.
16. *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*. Washington, DC: Public Health Service, 1979; DHEW Publication No. (PHS) 79-55071A.
17. Lloyd P, Lupton D, Wiesner D, et al. Choosing alternative therapy. *Aust J Public Health* 1993;17:135-44.
18. Russell S. HMOs try dose of alternative medicine. *San Francisco Chronicle* 22 Jan. 1996: 1,4.
19. Simmons SJ. The economics of prevention. *Am Nurses Assoc Pubs* 1993;(CH-27 5M):1-9.
20. Austin P. As demand for alternative therapy grows, coverage lags behind. *Maine Times*. 4 Apr. 1996:2.
21. Baar K. Insurance coverage for all healthcare. *Nat Health* 1995;25:74.
22. Padgug RA. Alternative medicine and health insurance. *Mount Sinai J Med* 1995;62:152-62.
23. Petrakos C. Taking root: more insurers find alternative medicine grows on them. *Chicago Tribune* 2 Aug 1995:1.
24. Jaspen B. Holistic-care PPO tested in Chicago. *Mod Healthcare* 1994;24:44-6.
25. Philp T. Vision of future rises in desert: from prescription drugs to prayer, Phoenix clinic offers mixed medical bag. *The Sacramento Bee* 2 June 1996; A:12.
26. Mahry M. Insurance companies study their alternatives. *News Tribune* 1 Jan 1996.
27. Knickerbocker B. Who pays for alternative medical care? *Christian Science Monitor* 11 March 1996.
28. Colgate MA. Gaining insurance coverage for

alternative therapies. *J Health Care Market* 1995;5:24-8.

29. Johnson NP. Insurer endorses alternative care. *Business Insurance* 1993;27:1,7.

## Appendix A: Interview Questions for Insurance Companies

CAM = Complementary and Alternative Medicine.

### Coverage

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

### Coverage: Areas of Investigation

1. How do you decide what fields of practice to cover?
2. What information do you need?
3. In what form do you need this information?
4. Do you have a database to evaluate clinical and cost outcomes of CAM?
5. Would you be interested in co-developing or using such a database?

### Criteria for Reimbursement

1. How do you determine whether a patient can be reimbursed for CAM therapy and how much to reimburse?
2. 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?
3. What kind of coverage limits are imposed? Number of treatments? Cost?
4. What kind of pre-authorizations are required? Do recipients self-refer?
5. 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?
6. How does your CAM coverage vary, if at all, with the age of the patient?
7. What age-related factors influence your coverage of CAM?

## Definitions

1. Do you believe that currently acceptable Current Procedural Terminology (CPT) is used when in fact alternative medicine procedures are being administered? How often?
2. Do you believe that specific Disease Related Groups (DRG) are used to describe undiagnosed conditions (e.g., "dry wind" described as "sinusitis")? How often?
3. Do you anticipate developing CPTs/DRGs for alternative med.?

## Providers

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

## Issues and Obstacles

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

## Comments

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

## Appendix B: Interview Questions for Hospitals

CAM = Complementary and Alternative Medicine.

1. How was the collaboration between the hospital and your CAM center initiated?
2. How did you decide which complementary and alternative therapies to include in your program?
3. What additional complementary and alternative therapies do you anticipate including in your program?
4. Would you say that including complementary and alternative therapies has been successful clinically?
5. Would you say that including complementary and alternative therapies has been cost-effective?
6. How are you evaluating the success of your program?
7. What do you perceive to be the greatest obstacles to integrating complementary and alternative medicine into mainstream health care?