Withdrawal/Redaction Sheet
Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. memo	Kenneth Pelletier to Stephen Groft re White House Commission (partial) (1 page)	08/25/2000	b(6)

COLLECTION:
Federal Records
White House Commission on Complementary and Alternative Medicine Policy [WHCCAMP]

OA/Box Number: 43233

FOLDER TITLE:
Issue: Access To and Delivery Of Complementary and Alternative Medicine
[December 4-5, 2000]

2011-0568-S
kc832

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.
PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).
RR. Document will be reviewed upon request.

Freedom of Information Act - [5 U.S.C. 552(b)]

b(1) National security classified information [(b)(1) of the FOIA]
b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

10/17/2003 Tom Bodenheimer / Physicians for a National Health Plan

Richard Miles - Reorganization in structure - and Kaiser Permanente

(Jim Gordon - Known

Get Comments to Meeting — more Explicit vs more Demanding

Summary — + then Questions
5 minutes
1 minute portion —
Policy Recommendations

deadline →
Following our meeting + then meeting in October

CAM studies | Utilization data
by Patients
Physicians
Copies of Papers

* Medline Search
Insurers — Physician Regional National
NCCAM — Qualified Med
Utilization
Cost Effectiveness / Clinical Effectiveness

Call

Modality	Eisenberg	Pelletier	Gordon	Kaczmarczyk
Chiropractic	Bill Meeker or Brian Holden	Bill Meeker	Ian Colter	
Acupuncture	Brian Berman	~~Brian Berman~~ or Joe Helms November 97 TAC	- 5 element - 8 principles -	Medical: Joe Helms; TCM: Acupuncture Guild
Massage		Glasgow	Tiffany Fields	
Homeopathy	David Reilley Klauss Linde Ask Brain Berman	Bill Gray Wayne Jonas Jennifer Jacobs		Dana Ullman Jennifer Jacobs
Herbs/Botanicals	Michael Smith Claire Blume Ask Ellen Hughes	Mark Blumenthal Adrianne Fugh-Berman	Mike McGuffin Joe Betz	Chinese Ayurveda
Dietary Supplements		~~Varo Tyler~~ (?) Fredi Kroneneberg	Michael Murray Bastyr	Paul Coates Cost Effectiveness
Nutrition	Jeff Bland PhD			
Self-Care Mind Body		~~David Sobel~~ John Fries		

Health Care
Functional Foods
Functional medicine

Annette Dickinson!

Allen Gaby Clinical

Steve / Call - Paul Coates
Brian Berman

17 Oct 00

DRAFT

Preliminary Agenda for 4-5 Dec 00 Meeting on Access and Delivery

DAY ONE: Monday, December 4, 2000 7:30 am – 5:30 pm
DAY TWO: Tuesday, December 5, 2000 8:30 am – 4:00 pm

7:30-9:00 am Breakfast [Commissioners: "Getting to Know You."]

9:15 am Welcome and Introductions
Dr. James Gordon

Session I: Overview CAM Utilization Survey Data [Emphasis on Access & Delivery]
Dr. James Gordon

Session II: Overview of Effectiveness of CAM
CAM therapies with sufficient evidence for integration and demonstrated cost-effectiveness
TBA ?????????
Clinical effectiveness, Cost effectiveness and Role Implications
Cost-Effectiveness of Mind-Body approaches for somatic illnesses
Dr. David Sobel (Kaiser-Permanente)
Panel Discussion

Session III: CAM Access and Delivery: Current data and future policy issues:
Chiropractic—
Acupuncture
Medical—
TCM—
Massage Therapy—
Panel Discussion

Session III: CAM Access and Delivery: Current data and future policy issues continued:
Homeopathy—
Herbs/Botanicals--
Dietary Supplements (vitamin, minerals, amino acids, etc)--
Nutrition--

Self-Care--
Panel Discussion

Session IV. CAM Access and Delivery: ~~Alternative view of current data and~~ future policy issues:
Speaker suggested by Wallace Sampson, MD
Panel Discussion ???????????

Session V. Disease-specific examples of effectiveness of CAM therapies
[2-3 illnesses (e.g., cancer, HIV/AIDS, addiction) with a program representative and a patient/client speaking about each condition.]
Need suggested conditions and speakers.

Panel Discussion

[Systems of Delivery sessions on CAM Integration or CAM Separatism: Should or shouldn't CAM be integrated... and lesson learned: What worked & why/why not?]

Session VI. Sytems of Delivery: Private Sector Panel
Private Practice ["entrepreneurial CAM"]
    Robert Adkins, MD
Free-standing for-profit practice-based
    [Suggestion: Len Wisneski, MD]
Community hospital-based CAM center/clinic
    Cancer Center
Academic health/medical center
    [Suggestion: David Eisenberg, MD- service delivery research or Woodson Merrill, MD]
    [Suggestion: Sam Benjamin, MD- unsuccessful program]
Managed Care Organizations
    [Two representative examples]
    Suggestions: Oxford & ask George DeVries
American Association of Health Plans (AAHP)
Panel Discussion

Session VII: Systems of Delivery: State & Local Government Panel
King County Natural Medicine Clinic, Kent, WA
Country Doc Community Health Center, Seattle, WA
Washington State Insurance Commissioner
Minnesota Complementary and Alternative Health Care Freedom of Access Act [unlicensed CAM practitioners]
    Minnesota Natural Health Coalition

Ohio House Bill 90 [licensed physicians integrating CAM]
Panel Discussion

Session VIII: Systems of Delivery: Federal Sector Panel
SAMSHA
HRSA
(Suggestions:
Marilyn H. Gaston, MD, Director of Bureau Primary Health Care,
Joseph O'Neill, MD, Director of HIV/AIDS Bureau,
and possibly Peter Van Dyck, MD, MPH, Director of the Maternal Child Health Bureau)
PHS Office on Women's Health
(Suggestion: Dr. Wanda K. Jones)
OPM (Federal Employees' Health Benefits Program)
DOD
Suggestion: (Acting Assistant Secretary for Health, Health Affairs)
Panel Discussion

Session VII: Private Foundations and Novel Systems of CAM Delivery Panel
[e.g., George Foundation, Robert Wood Johnson, National Integrative Medicine Council (NIMC), Fetzer, and ...]
Panel Discussion

Session IX. Commissioners' Discussion of Access to and Delivery of CAM Practices and Products

DRAFT

Overview

John Wash. - Fwd to Hop, Linda Logan, Candace Campbell

(Due)

Wallace Sampson - Nat Braden, Dont Fx

→ Why & What are Policy Implications

Legislative Legislation - Lessons Learned

- Private
- Public
- Federal - ~~HRSA~~
  - ⇒ SAMSA
  - ⇒ VA
  - ⇒ DoD

Julia Scott -
George DeVries -
Conchita Poy -

Access To, Delivery Of, Reimbursement For - Joe Fuss, Office Chair - Jim Gordon

Access

- model systems → Kaiser
- Existing System
- Individual
- Group Service
- George DeVries Contract Services
- Who does/who doesn't access

Collaborative Search

← Consumer
← Payor
← Healthcare Provider

~~Aging~~
~~Aged~~
~~Children~~
~~Pregnant~~
~~Immigrants~~
HIV/AIDS
Traditional Healers
Inplace Population
Special Population
~~ethnicity/cultural~~
Access - CAM
No Access
Exclusive CAM Users

Delivery ~~Total~~ Specialty Practitioners

Malpractice

Licensure / Certification

Who - Providers

DeVries ~~Accountability~~ Quality of ~~Delivered~~ Services/Delivery

Kaiser
Kent County
Winslow, AZ traditional Healers

consumer, health care providers (3)
(2) Linda Bedell Payor
(1) John Weeks, ...

Reimbursement

= Medicare / Medicaid | HCFA
= 3rd Party Payor | 3rd coverage | Not Covering
= Out of Pocket Expenses

Aetna

Wallace Sampson (1) No
(2) maybe
John Weeks (3) yes

Current
2 Panels
Future

White House Commission on Complementary and Alternative Medicine Policy

Work Groups

WORK GROUP 1. Coordinated research to increase knowledge about complementary and alternative medicine practices and products.

I	II	III	IV
Bill Fair	Joe Fins	Julia Scott	Conchita Paz
Buford Rolin	Effie Chow	George DeVries	
Dean Ornish	Tom Chappell	George Bernier	
Wayne Jonas			
Effie Chow			

WORK GROUP 2. Guidance for appropriate access to and delivery of complementary and alternative medicine.

I	II	III	IV
Julia Scott	Dean Ornish	Joe Fins	Tom Chappell
George DeVries	Bill Fair	Effie Chow	Buford Rolin
Conchita Paz		Tom Chappell	George Bernier

WORK GROUP 3. The provision to health care professionals of reliable and useful information about complementary and alternative medicine that can be made readily accessible and understandable to the general public.

I	II	III
George Bernier	Buford Rolin	Dean Ornish
Julia Scott	Bill Fair	Joe Fins
George DeVries		Effie Chow
Conchita Paz		Tom Chappell
Tieraona Low Dog		

WORK GROUP 4. The education and training of health care practitioners in complementary and alternative medicine.

I	II	III	IV
George Bernier	Buford Rolin	Conchita Paz	Julia Scott
Effie Chow		Dean Ornish	George DeVries
Tom Chappell			Bill Fair
Joe Fins			

research. He asked if it would be in the public domain, and who would be the forces against this knowledge. There is a private property issue concerning what is patentable. If the research results are not patentable, he pointed out, those who base their illness-related business on their knowledge being private property might perceive a threat in an openly marketed product. Therefore, he would like to identify the forces that would prefer that this research not become available.

At 5:15 p.m., the meeting adjourned for the day.

The meeting resumed at 8:40 a.m. on July 14. Dr. Gordon reminded the commission that they had three more areas to discuss, in addition to logistics and the public comment period. Ms. Chow asked if they could solicit testimony instead of relying so much on research at first. Dr. Gordon assured her that they would consider both qualitative and quantitative research. He then introduced the next area of discussion.

2) Access and Delivery

The commission was charged with considering "Guidance for appropriate access to and delivery of complementary and alternative medicine." Mr. DeVries asked if this topic included insurance coverage, supervision of physicians, and the like. Dr. Gordon said that his interpretation was the answer to the question "what can we expect when we go to the doctor?" He asked the commission to think about what they needed to know to make policy recommendations to Congress to ensure that every patient's care includes CAM. This would include coverage issues related to Medicare and insurance, as well as staffing patterns and so forth. Dr. Ornish said that the entities charged with overseeing reimbursement would be concerned with fraud and abuse, which opened the issue of how to reassure them. Currently, he explained, these organizations deal with a level of certification that is not common in CAM, where standardization is not the norm. It is a legitimate concern that vulnerable people might go to unqualified persons calling themselves CAM practitioners. Therefore, it would be helpful to talk to other groups that offer standardization. Some CAM groups are attempting that already, and some insurance providers cover certain CAM therapies. The commission might talk to them to find out what obstacles they have found and, conversely, what has been useful. These will be major issues for those charged with reimbursement.

Mr. Chappell noted that products at present must fit the guidelines of a food, drug, or supplement, and there are very particular vocabularies that must be used with these products. FDA has no real domain for CAM, which is at present an aberration in the FDA system. Therefore, manufacturers are limited in what they can say when they market their products. What they need is a domain that houses the standards and claims of CAM. The commission should hear from FDA and the Federal Trade Commission (FTC), and get their thoughts on this emerging field. They should also solicit comments from manufacturers and retailers. Many new herbal products lead consumers to wonder about the purpose of the product, since the manufacturers are not allowed to make statements regarding purpose. This puts the consumer in the position of doing research on each product of interest. Therefore, there is a need for a body to oversee CAM product issues.

Mr. DeVries said they needed to recommend that individual states enact minimum licensure requirements for CAM providers. Credentialing is a problem and can be very complex. State requirements currently vary greatly, and access diminishes with more restrictive licensure requirements. Some cities and counties also license. Dr. Ornish repeated his concern that a limiting factor will be reimbursement. He perceives a consistent fear of covering alternative approaches on the part of reimbursers. He believes they feel they are opening Pandora's box with CAM. But to mainstream CAM, reimbursement is essential. Dr. Paz agreed, stating that opening hospitals to some of these alternative practitioners, such as chiropractors, is a related issue.

Ms. Chow pointed out that CAM is a very broad concern, and some practitioners fear credentialing, especially in the mind and spiritual areas. She suggested they examine all different aspects of CAM and determine what is critical to licensing rather than talking about CAM as a whole. She added that regulation can lead to regulating the effect rather than the practice. She was wary of squeezing CAM into the medical model. Mr. DeVries noted that credentialing thus far has addressed acupuncture and massage. The commission might look at reimbursement practices in California and Washington. Currently, products must be considered medically necessary for coverage. A bill in Congress focuses more on wellness, correcting this problem; the legislation is oriented to giving employers tax breaks. Dr. Ornish said that there is a window of opportunity now with credentialing organizations. He noted that while many CAM practitioners fear they might lose their creativity under mainstreaming, that issue could be addressed.

Dr. Fins brought up the issue of malpractice, which is currently a deviation from common standards. Mainstreaming of CAM could raise both expectations and insurance costs. Dr. Gordon dislikes the way malpractice is addressed in this country. He suggested that they investigate other countries that set up a fund and a system for reprimand. Dr. Fins agreed that they had an opportunity to create a new model that is less adversarial than the present one. He wondered if they might model best practices on a smaller scale for the whole health care industry.

Ms. Scott observed that many feel the medical system has failed them. CAM offers an opportunity to change the prevailing mind set from an illness perspective to a wellness perspective; malpractice is the former. Dr. Ornish added that there is a growing trend to litigate for failure to provide a full range of treatment options; this trend may work in favor of CAM. As CAM approaches become more mainstream, physicians will have to include CAM as part of informed consent. Mr. Chappell said that it was becoming clear that defining their world view must precede anything else the commission does. Dr. Gordon speculated that they had a need to learn about state of the art. Since the commission can bring in experts, they should consider what areas are of interest. Dr. Groft added that the staff could handle that.

Dr. Fins suggested that they could not expect the reimbursers to pay for everything, so they should set priorities for coverage, which is already done in Oregon, with diagnosis and treatment pairs. At town meetings, they found that the public wanted mental health services, which therefore rose on the priority list. Ms. Chow suggested that since the commission will be looked at as an example, they should try to create new system of health care, even while keeping the

terminology of the current system. Dr. Gordon agreed that they should examine model programs, which often possess a vitality that can be inspiring. Ms. Chow cautioned against getting caught up in the economics of the current system. Dr. Gordon agreed, noting that they must strive to preserve the spirit of the work, not just the practices.

Dr. Fair reminded the commission that in terms of informed consent, CAM options are generally not mentioned. Physicians tend to focus on what they know, saying it is the only thing they can do, but this is not true. Insurance companies will pay for bone marrow transplants that have not been proven to provide a benefit, but not for group support, which has been proven effective. Therefore, he said, it is not just economics driving current practice. Physicians are trained to do something, and they set out to do that. Ms. Chow said that it is physician education at issue, not their aim and spirit. Physicians can only do what they know. Dr. Ornish added that reimbursers often have the preconceived notion that CAM is ineffectual, which turns into catch-22 of no money for reimbursement. He believes that despite other considerations, they will need to hold CAM therapies to some kind of standard.

3) Provision of Information

The third topic for commission discussion was "The provision to health care professionals of reliable and useful information about complementary and alternative medicine that can be made readily accessible and understandable to the general public." As examples of the government role in providing information, Dr. Gordon mentioned the NCCAM database, various NCI papers, and statements from the surgeon general's office, along with sponsorship of conferences. The commission can recommend legislation, and they can also recommend that other organizations provide education and information. He suggested they consider what information needs to be available and where that information should reside. Dr. Groft thought this might be a good question for the town meetings. Dr. Paz cautioned that sometimes town meetings attract the knowledgeable rather than those who need the information, so they should assume more basic information that what the town meetings will indicate.

Dr. Gordon noted that children do not know how their bodies work. It is essential to teach them about the body and mind. If they know their own capacity to understand themselves, they will cede less control to the doctor as only person who understands the body. Dr. Fair agreed, but added that the school smoking prevention programs do not work well. Dr. Gordon suggested that those programs are misdirected; instead of telling children not to smoke, they should tell children to pay attention to the experience of smoking. Children respond to their own experience. Dr. Fins would like a study to see how the public learns about CAM and to show the availability of this information for the entire U.S. population. Mr. Chappell approved of the focus on children. The illness model puts the physician as the authority, whereas the wellness model places the person in charge. The commission has an opportunity to give children the notion of health as their area of expertise. Addiction recovery experts can testify as to how the authority is the individual, not the physician. Ms. Chow preferred a focus on all ages, with different approaches for different groups. They should ask about this at the town meetings. She felt that the information that exists should be made available. Many people do not even know that NCCAM exists. Dr. Gordon noted that some CAM issues will fall outside NCCAM's purview.

Groft, Steve (NCCAM)

From: Chang, Michele (OD)
Sent: Wednesday, August 09, 2000 5:35 PM
To: 'hpi.b.klepper@worldnet.att.net'
Subject: RE: Observations on CAM's Progress in the U.S. Health Care Marketplace

Dr. Klepper:

Thank you very much for your informative message. The access, delivery and accountability of CAM practices are very much within the purview of the White House Commission on Complementary and Alternative Medicine Policy. I will pass your comments onto the Commissioners for their further consideration and deliberation.

Michele Chang, MPH
Executive Secretary, WHCCAMP

----Original Message-----
From: Brian Klepper [mailto:hpi.b.klepper@worldnet.att.net]
Sent: Wednesday, August 09, 2000 5:27 PM
To: Chang, Michele (OD)
Subject: Observations on CAM's Progress in the U.S. Health Care Marketplace

Dear Ms. Chang:

My friend Melinna Giannini of Alternative Link mentioned her correspondence with you regarding the WHCCAMP. I thought I would take the initiative to offer a few observations to the Commission. I hope this is not too forward, but as a regular medical business practitioner working outside the politics of CAM, I don't know another approach.

For the last dozen years, I have led a business development firm, Healthcare Performance, Inc. (HPI), that works with established and startup enterprises in the payor, provider and management support health care sectors, both in the U.S. and abroad. While I have a relatively low profile within CAM/Integrated Medicine, I have a number of clients in this sector, and have tried to pay close attention to the larger issues impacting CAM's influence in the larger U.S. health care market dynamic.

At this time, the most significant issues facing the progress of Integrated Medicine have to do with whether the health plans will incorporate alternative services into their benefit structures. This transition to third party financing is more important than simply giving patients coverage for alternative medical services. This is the mechanism necessary for CAM to extend beyond a parallel primary care approach, and to become part of the seamless flow of full continuum medical services covered by conventional financing vehicles.

For this to happen – for health plans to begin to assess the risk and the cost-benefit of including these services - the CAM community will need to develop data that clearly demonstrates it's efficacy. Also, the CAM community will need to find ways both to work with each other and interact with mainstream health care in ways that facilitate alternative medicine's integration into full continuum care. These are tall orders.

I have counseled my clients not to expect a positive reception from health plans for several more years. Health plans have their backs up against the wall. They have HIPAA compliance, the transition from client-server to web-based information systems, the anticipated movement of employers from defined benefit to defined contribution. They haven't made any money in 4-5 years. There's anti-managed care legislation in Congress

and virtually every state, and there are anti-managed care class action suits on the horizon.

This is not intended to be a blanket statement; while CAM remains relatively unpenetrated overall in the country, there are significant moves afoot to mandate CAM services in many states and in government-sponsored health programs. In many areas of the country – Washington State, for example, is the most demanding – coverage of certain CAM services is mandated, and so there is already a need to deploy systems that will help us understand the impact of that experience. Many more CAM services every year are becoming mandated both legislatively and through the courts. Also, many self-funded employers have elected to incorporate CAM services into their basic offerings, and so they represent a significant opportunity to move the sector along as well.

Still, despite the mainly background stirrings, CAM is hardly on the radar screen right now for most health plans. Hospitals and other providers are better targets, because they are interested in the out-of-pocket revenues associated with CAM. However, they too are busy unwinding their system integration efforts of the last decade. They may not be able to focus their attention on CAM either.

Accordingly, the CAM establishment needs to change its focus and communications to adapt current strategies to the market dynamics. If health plans aren't going to play ball for awhile (This is on the group health side. There's lots of coverage going on within Property & Casualty), and if hospitals are not going to aggressively pursue CAM either, then the onus falls back on the individual CAM provider community.

Personally, I think that an enforced waiting period is a good thing. As far as I can tell, CAM providers are not yet particularly collaborative. There is conflict and competition between different CAM specialties, and the sector as a whole doesn't share a common vision of CAM or it's more evolved counterpart, integrated medicine. There's also still a lot of cosmic whoopy out there that passes in lieu of science. And there is still an emphatic orientation toward a professional caste system, promoted most vigorously by certain visibly prominent CAM docs.

From this perspective, the meltdown in the health plan sector and the rejection by institutional providers is a good thing because it buys time. Time to become more collaborative, among practitioners of all types and from all disciplines. Time to develop data on efficacy. Time to deploy systems that can help practitioners become more capable of negotiating the mainstream medical business paradigm. Time to embrace and convert the growing number of mainstream practitioners who want to learn about CAM because they think it offers a better way. And time to begin developing integrated protocols.

The development of low cost, web-based practice management solutions are a key strategic element here. These system not only let a caregiver manage his/her practice, but also have the capacity to place him on the same "platform" as his peers, with dramatic improvements in real time communication and collaboration. The beauty here is that, for the first time and extremely inexpensively, the caregiver doesn't need to surrender the geographic or organizational autonomy that he holds so dear to refer, consult, argue, negotiate collaboratively, and most importantly, aggregate and evaluate data that can demonstrate efficacy. Systems like those offered by CareNet, eMedSoft, Navimedix and others can help bring cohesion and mainstreaming to CAM with very little pain.

Without question, the code set developed by Alternative Link is also a technology essential to melding CAM with traditional medicine. This development will facilitate an Integrated Medicine model that broadens the diagnostic/treatment options available to rank and file patients and caregivers. Alternative Links' code set is necessary to precisely describe the range of CAM procedures. (Using existing codes to describe this set of services compromises the record of what has taken place. It also confuses and dramatically slows

the claims/reimbursement processes.) Without appending these codes to existing coding technology, it will be difficult to gather full continuum data that will allow determinations of the efficacy of CAM approaches. It will also be virtually impossible to establish norms and benchmarks of performance that can be used to judge the value of different clinical approaches and the performance of individual integrated medicine practitioners. For these reasons, Ms. Giannini's contributions are immense and eventually will be recognized as such.

Next, I think that educational programs – both face-to-face and web-based distance learning - will attract many, many doctors, nurses and other practitioners who have been trained traditionally but have a nagging suspicion that there's a better way. The bottom-up cultural evolution that will result from programs like this will be far more potent if we give the trend time to take place within the society. It's happening far more than ever before and is accepted as a common thing now; the day before yesterday it was still largely taboo.

There will be other dynamics as well. As the country moves into the more individual and choice-laden coverage associated with defined contribution programs, many barriers will drop, giving caregivers more latitude to provide integrated care, and patients more latitude to seek it. That's will be one of the positive aspects of what's coming down the pike. I'm not as optimistic about many of the other ramifications of this trend.

Most CAM/Integrated Medicine caregivers are mission-driven, if independent in the extreme, and my guess is that the really good ones will continue to be busy and make good livings from patients who will pay out of pocket for their care. This sector is maturing, subjected to the forces of non-subsidy (from health plans), increased visibility, heightened competition from other similarly minded caregivers, and the delineation between the approaches that work and those that don't. CAM will be pulled irresistibly toward an integrated medicine process, if only by the influx of traditionally trained caregivers who won't turn their backs on the entire paradigm of traditional medicine but will seek solutions to its limitations.

All this will happen within the next 5 years or so. By that time, the financing systems should be ready to accept integrated medicine, integrated medicine will have more data to demonstrate its value, and the integrated medicine sector should be far less dysfunctional.

I hope this is useful. If I can be of service in any way to the Commission, I hope you will not hesitate to contact me.

Warm Regards.

Brian R. Klepper, Ph.D.
Principal
Healthcare Performance, Inc.
Jacksonville, FL
904-246-9643
hpi.b.klepper@worldnet.att.net

Groft, Steve (NCCAM)

From: Chang, Michele (OD)
Sent: Wednesday, September 13, 2000 5:55 PM
To: Kaczmarczyk, Joseph (NCCAM); Groft, Steve (NCCAM); Pollen, Geraldine (NCCAM)
Subject: Notes for future meetings

Please note the following from Joe Fins, one of our Commissioners:

(1) Please include the issue of hospice care, i.e., care for the dying, in our discussions/agenda about access and delivery. There are quite a few appropriate CAM practices that can be and are being used for and by the terminally ill and dying, including massage, visualization, therapeutic touch and others that should be addressed. Dr. Fins would like to hear from hospice workers as well as the people facing terminal disease. He knows of some integrative programs, such as at Memorial Hospital (Bill Fair may know more), and thinks exploration of such systems is very relevant. He also provided an amusing categorization of primary CAM users, which he cautioned should remain somewhat internal colloquialism: "the Worried Well," "the Health Nuts," and "The Dying."

(2) Also, when we hit Education, please note that Joe has identified Mike Woodgum, the VP of the AAMC here in DC, as someone who has directly expressed his interest in our issues.

Thanks for your attention! :-)

Michele M. Chang, MPH
Executive Secretary
White House Commission on Complementary
and Alternative Medicine Policy
(tel) 301-435-7592
(fax)301-480-1691

American Medical News

PROFESSIONAL ISSUES

AMNews home

Search
Past issues
Columns
Letters
Mobile edition
E-mail alert
About AMNews
Contact us

Getting tough on alternative medicine

State medical boards continue to look at ways to guide -- and in some cases regulate -- the practice of complementary medicine.

By Jay Greene, *AMNews* staff. Sept. 18, 2000. Additional information

Kirk W. Morgan, MD, injected one of his patients with hydrogen peroxide to treat what he had diagnosed as silicone leakage, *Candida* infection and lupus erythematosus.

Stephen S. Kiteck, MD, treated several patients with thyroid preparations for what the medical board in Kentucky concluded appeared to be euthyroid conditions. When hyperthyroid conditions developed, Dr. Kiteck gave his patients injections of B-complex vitamins, B-12 and magnesium solutions.

After complaints were filed, both doctors were placed on probation. Those complaints, along with three others for inappropriate use of chelation for cardiovascular conditions, led the Kentucky Medical Licensure Board in 1998 to create the first board policy on complementary care.

Now, more than 10 other states have approved or are considering licensure regulations governing complementary and alternative medicine, mostly in an effort to ferret out consumer fraud. Medical boards in Alabama, Illinois, Kentucky and Texas are among those who have developed guidelines to educate doctors.

"We have seen doctors over the years who are using methods of treatment that we feel are totally inappropriate," said Danny Clark, MD, president of the Kentucky medical board. "They tell us there are natural ways to treat their patients. We don't discipline doctors for using alternative medicine. We discipline them for practicing bad medicine."

Boards develop policies

In Tennessee, the medical board in July approved a prohibition on chelation therapy for conditions other than heavy metal poisoning, said Daniel Starnes, MD, board president.

"We have been approached by a person asking to study chelation in a community setting," Dr. Starnes said. "I am willing to talk about it, but we want to try to get an academic setting involved. There have been some nonreferreed studies showing some benefit and anecdotal evidence showing harm, but there hasn't been a strict study to show benefits."

The Tennessee regulation bans chelation therapy unless it is part of an approved clinical investigation or until evidence proves the treatment is beneficial.

In Texas, the medical board in 1998 adopted standards for physicians practicing integrative and complementary medicine that include a customized informed consent form. The policy allows doctors latitude in offering therapies to patients if standards of good practice are followed, said Texas State Board of Medical Examiners spokeswoman Jill Wiggins.

Like all boards, Texas reminds doctors they should evaluate patients and document the assessment in charts. "Such a documented treatment plan shall consider pertinent medical history, previous medical records and physical examination, as well as the need for further testing, consultations, referrals or the use of other treatment modalities," the board said.

Too tough?

But legislative actions proposed by boards to govern alternative medicine also have failed. In North Carolina this year, a bill that would have made it a felony to offer treatments that injure the public didn't make it out of a legislative committee.

Supporters of the bill pointed to the death of an 8-year-old girl with diabetes. Her parents discontinued her insulin injections on the advice of a man claiming to be a naturopath. The man, Laurence N. Perry, awaits trial on charges of manslaughter and practicing medicine without a license -- a misdemeanor.

"We need a tough bill because we are seeing health care revert back to where the public is in a 'buyer beware' situation," said Andrew Watrey, executive director of the North Carolina Medical Board. "If a doctor is practicing forms of alternative medicine that are not harmful, then the board will not revoke or deny a license. But if competent evidence indicates the treatment has a safety risk, then we want additional criminal penalties for practitioners and the right to impose fines."

To help boards deal with the issue of acceptable medicine in integrative practices, the Federation of State Medical Boards is developing model guidelines. The guidelines will outline physician responsibilities when co-managing patients with licensed alternative health care providers.

"Boards should wrestle with this and develop policies and be willing to change those policies as alternative and complementary medicine evolves and new research comes out," said Donald Swikert, MD, a member of the Kentucky medical board who also served on a state task force that studied alternative medicine.

Some states also are considering bills to expand the use of alternative medicine. In California, a proposed bill would allow physicians to practice alternative cancer therapies alongside conventional treatment. Food and Drug Administration policy requires cancer patients to undergo chemotherapy and radiation before receiving alternative treatments.

"We do not believe it is appropriate to allow doctors to use alternative cancer treatments" before a state task force studies the issue, said Linda Whitney, chief of legislation with the Medical Board of California. "We license and discipline doctors. We don't get into the therapies they use."

But the bill also would require the medical board to conduct a comprehensive study on alternative medicine and develop guidelines for physicians who integrate complementary medicine into their practices.

"We are already working on guidelines for doctors," Whitney said. "We have problems with doing the study because we don't think we are the appropriate agency to do that."

Kentucky's 1998 policy describes various complementary and alternative medicine treatments as invalidated, nonvalidated or validated.

But unlike Illinois, which actually categorized such treatments that way, Kentucky wanted to wait until more definitive research proves or disproves unconventional therapies.

In its policy, Kentucky listed more than 25 therapies that could fall into any category. They include homeopathy, chiropractic, acupuncture, aromatherapy, art therapy, biofeedback, body work, botanicals, herbs, hypnosis, light therapy, magnetic stimulation, music therapy, nutrition, traditional Chinese medicine, yoga, supplements, chelation, massages and reflexotherapy.

"We did not lump the therapies into categories because research is just starting to address these treatments," said Dr. Clark. "As studies come out, we will be able to decide if these methods have any validity."

Meanwhile, Dr. Clark said the guidelines give physicians information to consider.

"When I give lectures on the board policy, some physicians don't feel we went far enough and others think I am a heretic and went too far," Dr. Swikert said.

"We want to promote responsible use of complementary medicine."

Back to top.

Complementary consent

The Texas State Board of Medical Examiners includes this patient consent form as part of its guidelines for integrative and complementary treatments.

Disclosure and Consent

TO THE PATIENT: You have the right, as a patient, to be informed about your condition and the recommended integrative and complementary procedure to be used so that you make an informed decision whether or not to undergo the procedure after knowing the risks and hazards involved. This disclosure is not meant to scare or alarm you; it is simply an effort to make you better informed so you may give or withhold your consent to the procedure.

NOTICE: Refusal to consent to the integrative and complementary procedure should not affect your right to future care or treatment.

I (we) voluntarily request Dr. _____ as my physician, and such associates, technical assistants and other health care providers as they may deem necessary, to treat my condition which has been explained to me as: _____.

I (we) understand that the following integrative and complementary procedure(s) is planned for me and I (we) voluntarily consent and authorize these procedures: _____.

I (we) understand that no warranty or guarantee has been made to me as to result of care.

I (we) realize that just as there may be risks and hazards in continuing my present condition without conventional medical treatment, there are also risks and hazards related to the performance of the integrative and complementary procedure(s) planned for me.

I (we) have been given an opportunity to ask questions about my condition, conventional treatment, integrative and complementary treatment, alternative forms of treatment, risks of treatment, risks of nontreatment, procedures to be used, and the risks and hazards involved, and I (we) believe that I (we) have sufficient information to give this informed consent.

I (we) certify this form has been fully explained to me, that I (we) have read it or have had it read to me, that the blank spaces have been filled in, and that I (we) understand its contents.

Source: Texas State Board of Medical Examiners, 1999

Back to top.

Terry, FYI. Steve

NOTE FROM THE DESK OF JOSEPH M. KACZMARCZYK, DO, MPH

27 Sep 00

Attached is the information which I located on the George Foundation.

I presume that this is the "correct" George Foundation.

FYI,
Joe

george

Our Mission

is to foster human development — spiritual, intellectual, physical and psychological — and to enhance the work of people and organizations devoted to exemplary service in the community.

Our Guiding Philosophy

is to invest in values, ethics and character formation; to support the efforts of those who are successfully making a difference in people's lives; and to help build the communities in which we live. We believe in sharing the blessings which have been bestowed on us and in celebrating the spiritual reciprocity between donors and receivers working collaboratively to make the world a better place.

Our Interests

Integrated Healing

Programs and initiatives which promote an integrated approach to healing mind, body, heart and spirit.

Educational Opportunity

Scholarship programs for talented individuals leading to personal growth, societal impact, and a deeper understanding of the world and its diverse cultures.

Youth Development

Programs focused on human development, leadership and mentoring.

Overcoming Barriers
Programs which help women and people of color overcome societal barriers and realize their full potential.

Collaboration
Programs characterized by the synergy which results when people and organizations cooperate to address community needs.

Our Restrictions

We do not give to:
- Endowment or capital campaigns.
- Programs in which the family has no active interest or involvement. • Individuals.
- Memberships, special events or other fundraisers.
- Retire debt or cover operating losses.

For further guideline information, please call (612) 285-5435

Penny Pilgram George
PRESIDENT

William W. George
VICE PRESIDENT

George Family Foundation
2925 Dean Parkway
Suite 811
Minneapolis, Minnesota
55416

612 285-5435 PHONE
612 285-5437 FAX

Application Requirements **Grant Application Cover Page** **back to George Main Page** ***back to F.P.A.***

Stanford Center for Research in Disease Prevention

DR. KENNETH R. PELLETIER, DIRECTOR
STANFORD CORPORATE HEALTH PROGRAM
CLINICAL PROFESSOR OF MEDICINE

STANFORD UNIVERSITY SCHOOL OF MEDICINE
730 WELCH ROAD - SCRDP
STANFORD, CALIFORNIA 94304-1583
PHONE: (650) 725-7257
FAX: (650) 723-7018
INTERNET: kpelletier@SCRDP.Stanford.EDU

Withdrawal/Redaction Marker
Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. memo	Kenneth Pelletier to Stephen Groft re White House Commission (partial) (1 page)	08/25/2000	b(6)

COLLECTION:
Federal Records
White House Commission on Complementary and Alternative Medicine Policy [WHCCAMP]

OA/Box Number: 43233

FOLDER TITLE:
Issue: Access To and Delivery Of Complementary and Alternative Medicine
[December 4-5, 2000]

2011-0568-S
kc832

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.
PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).
RR. Document will be reviewed upon request.

Freedom of Information Act - [5 U.S.C. 552(b)]

b(1) National security classified information [(b)(1) of the FOIA]
b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

[001]

Stanford Center for Research in Disease Prevention

STANFORD UNIVERSITY SCHOOL OF MEDICINE

730 WELCH ROAD, SUITE B
PALO ALTO, CA 94304-1583
TELEPHONE: 650 723-6254 FAX: 650 723-7018

MEMORANDUM

TO: Dr. Stephen C. Groft

FROM: Dr. Kenneth R. Pelletier:gm

CC: NA

SUBJECT: WhiteHouse Commission

DATE: 25 August 2000

Steve ...

Enclosed are a few articles relevant to "Item # 2 on Reimbursement" for your San Francisco agenda. Although I would be happ to give ad hoc comments on # 1 on Research and/or # 4 on Reliable Information, it might be most productive if I focus on # 2.

I must leave at 12 noon for a meeting of 10 medical school Deans on the CAM area by 12 noon on Friday (Sept 8) but I could be there anytime between 9AM-12 Noon.

Just let me know how I can help and thank you and Jim again for the kind invitation.

Also, I am on sabbatical so the best address for me is:

Dr. Kenneth R. Pelletier
(b)(6)
Alamo, CA 94507

See you next week.

Ken

Stanford Center for Research in Disease Prevention

STANFORD UNIVERSITY SCHOOL OF MEDICINE

730 WELCH ROAD, SUITE B
PALO ALTO, CA 94304-1583
TELEPHONE: 650 723-6254 FAX: 650 723-7018

STANFORD CORPORATE HEALTH PROGRAM

Stanford Center for Research in Disease Prevention
Stanford University School of Medicine

At the present time there is an unprecedented upheaval in American business seeking creative solutions to the unchecked rise in medical benefits costs. Although some managed care procedures have slowed the trend, they are not adequate. A complete resolution requires effective programs in three areas: 1) Quality medical care and medical outcome studies; 2) Managed care systems with utilization review to insure neither over or under utilization; and, 3) Comprehensive health promotion and disease prevention programs. All three aspects require objective, longitudinal evaluations of both health and cost outcomes to determine what does and does not work as a database for formulating corporate and public policy. This comprehensive approach has an economic dimension as well since excessive medical costs have added a disproportionate share to the cost of every product and service during the last decade. Since as much as 37% of the United States annual medical budget of $1.3 Trillion (15.3% of 1998 GDP) is in the hands of private corporations, there is a major movement underway to determine the relative portion to be expended on true health care, rather than exclusively on disease treatment.

Toward this end, the Stanford Corporate Health Program of the Stanford University School of Medicine is engaged in an ongoing program since 1984 to develop and evaluate innovative medical and health promotion programs in the workplace as an integral part of managed care for both purchasers and providers. Under the direction of Dr. Kenneth R. Pelletier, the research program involves a unique collaboration between the Stanford Center and twenty (20) major corporations.

Overall, each project develops over a period of three to five years:

Year 1: Identification of areas of mutual interest in the coalition of university and corporate representatives through a series of needs assessments and structured planning meetings.

Year 2-3: Develop, implement, and evaluate mutually agreed upon programs in health promotion, with the criteria that these be workable in any business or organization nationwide, and that self-care and employee leadership be emphasized. Focus is upon both health and cost benefit analysis.

Year 4-5: Conduct full-scale, longitudinal studies. Emphasis will continue to be on the development and evaluation of practical programs in health promotion for business, industry, and other organizations including government and school systems with emphasis on managed care.

Among the areas of research and development in the program are:

1. Disease management of hypertension and coronary heart disease;
2. Computer and/or telephone health delivery systems;
3. Early cancer screening, especially mammography for women;
4. Smoking cessation and policy development;
5. Health promotion programs to reach minorities, dependents, and retirees;
6. Alcohol and substance abuse programs;
7. Dietary and nutritional counseling;
8. Physical fitness and back saver programs;
9. AIDS prevention and policy formation;
10. Applications of meditation and relaxation for stress management;
11. Reaching small and/or remote worksites; and,
12. Comprehensive program evaluation.

Results of the Stanford Corporate Health Program are utilized to determine which health promotion programs can work most effectively in the managed care, business environment and how such programs can be developed and evaluated in a practical, cost-effective manner. Finally, the results of this program are disseminated to business and other national and international organizations. Once initiated, such programs are self-sustaining as well as a source of financial support for an ongoing program of research and evaluation to improve the delivery and efficacy of medical and health promotion programs.

Participating Corporations:

American Airlines
ASHP
AT&T
Disney
Health Net (FHS)
IBM
Levi-Strauss
Medstat Group
Merck
Motorola
Rite-Aid/PCS Health Systems
San Mateo County
Shaklee/Yamanouchi
United Behavioral Health
Xerox

Pacific Business Group on Health
Washington Business Group on Health
U Texas Med Center, Galveston

Core funding for the project from the participating companies is used to maintain the ongoing meetings, pilot projects, data exchanges, and consultations between these major corporations and the Stanford Corporate Health Program. When projects of mutual interest are identified, grants are written conjointly between the corporations and the program to private foundations and government agencies for major research and development support.

KRP:csw
5/16/00

Stanford Center for Research in Disease Prevention

STANFORD UNIVERSITY SCHOOL OF MEDICINE

730 WELCH ROAD, SUITE B
PALO ALTO, CA 94304-1583
TELEPHONE: 650 723-6254 FAX: 650 723-7018

BIOGRAPHY

Dr. Kenneth R. Pelletier -- is a Clinical Professor of Medicine, Department of Medicine, Stanford Center for Research in Disease Prevention, Stanford University School of Medicine; serves on the Board of Directors of Health; and is a Vice President with Healthtrac Incorporated. At the Stanford University School of Medicine, Dr. Pelletier is Director of the Stanford Corporate Health Program, a collaborative program between Stanford and 20 major corporations including American Airlines, AT&T, Bank of America, Merck, Blue Shield, IBM, Levi Strauss, Motorola, Rite Aid/PCS, United Behavioral Health, and Xerox. Also he is Director of the NIH funded Complementary and Alternative Medicine Program at Stanford. Since 1990, Dr. Pelletier has served as President of the American Health Association; was a Founding Board Member and Chairman of the Board of the California Wellness Foundation; and served on the Board of Directors of Health Systems International (HSI). From 1974 until joining Stanford University, Dr. Pelletier served as an Associate Clinical Professor in the Department of Medicine and the Department of Psychiatry, University of California School of Medicine in San Francisco (UCSF). He was a Woodrow Wilson Fellow, studied at the C.G. Jung Institute in Zurich, Switzerland and has published over 200 professional journal articles in behavioral medicine, health promotion, and psychoneuroimmunology. At the present time, Dr. Pelletier is an advisor to the U.S. Department of Health and Human Services (ODPHP), Blue Cross/Blue Shield, the Canadian Ministry of Health, and the World Health Organization. Dr. Pelletier serves as a medical and business consultant to the Washington Business Group on Health and major corporations including Disney, American Medical International (AMI), General Motors, Monsanto, the Pasteur Institute of Lille, France and the Alpha Group of Mexico. He also serves on the boards of the **Healthtrac Foundation, American Institute of Stress, American Journal of Health Promotion** and **Integrative Medicine**. Dr. Pelletier is listed in **Who's Who in America** and in **Who's Who in the World**. His research, clinical practice, and publications have been the subject of numerous national television programs including several appearances on the **ABC World News**, the **Today** program, **Good Morning America**, the **CBS Evening News**, **48 Hours**, the **McNeil-Lehrer Newshour**, **Hour Magazine**, the **Time/Life** video series, the award winning BBC series **The Long Search**, and the five-part Blue Cross/Blue Shield sponsored PBS series **Healthy People, Healthy Business**. Dr. Pelletier is the author of seven (7) major books including the international best seller **Mind as Healer, Mind as Slayer** (New York: Delacorte and Delta, 1977 and Revised in 1992); **Holistic Medicine: From Stress to Optimum Health** (New York: Delacorte and Delta, 1979); **Longevity: Fulfilling our Biological Potential** (New York: Delacorte and Delta, 1981 and Revised in 1991); **Healthy People in Unhealthy Places: Stress and Fitness at Work** (New York: Delacorte, Delta, and Doubleday, 1984); **Sound Mind - Sound Body: A New Model for Lifelong Health** (New York: Simon & Schuster, 1995); **The Best Alternative Medicine: What Works? What Does Not?** (New York: Simon & Schuster, 2000); and the forthcoming **Alternative, Complementary, and Integrative Medicine: An Evidence-Based Approach** (Stanford University Press, 2001

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

Kenneth R. Pelletier, John A. Astin, 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 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

Kenneth R. Pelletier, PhD, MD (hc), John A. Astin, PhD, and William L. Haskell, PhD, are at the Stanford University School of Medicine, Stanford, California.

Send reprint requests to Dr. Kenneth R. Pelletier, Stanford Center for Research in Disease Prevention, Stanford University School of Medicine, 730 Welch Road, Stanford, CA 94304-1583.

This manuscript was submitted February 16, 1999; revisions were requested June 30, 1999; the manuscript was accepted for publication July 30, 1999.

Am J Health Promot 1999;14(2):125–133.

0890-1171/99/$5.00 + 0

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, semi-structured, 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

Obstacles	Percentage of Companies that Cited		
	% 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.

Acknowledgments

Research supported by a grant (AR43558) from the National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, National Center for Complementary and Alternative Medicine (NCCAM), the Fetzer Institute, and the American Health Association. We are grateful for the support of the National Institutes of Health (NIH): National Center for Complementary and Alternative Medicine, Cindy Wood, Adeline Hwang, and Ellen DiNuzzo.

References

1. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, JAMA 1998;280:1569–75
2. Astin JA. Why patients use alternative medicine: results of a national study. JAMA 1998; 279:1548–53.
3. Singh N, Squier C, Sivek C, et al. Determinants of nontraditional therapy use in patients with HIV infection. Arch Intern Med 1996;156:197–201.
4. Coleman LM, Fowler LL, Williams ME. Use of unproven therapies by people with Alzheimer's disease. J Am Geriatr Soc 1995;43:747–50.
5. 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.
6. Sutherland LR, Verhoef MJ. Why do patients seek a second opinion or alternative medicine? J Clin Gastroenterol 1994;19:194–7.
7. Cohen CJ, Eisenberg DM, Mayer, et al. Prevalence of non-conventional medical treatments in HIV-infected patients: implications for primary care. Clin Res 1990;8:692A. Abstract.
8. Perelson GH. Alternative medicine: what role in managed care? FHP J Clin Res 1996;5:32–38.
9. Mitchell S. Healing without doctors. Am Demogr 1993;15:46–49
10. 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;333:913–7.
11. Ullman D. The mainstreaming of alternative medicine. Healthcare Forum J 1993;3:24–30.
12. Sabatino F. Mind and body medicine: a new paradigm? Hospitals 1993;67:66–72
13. Brown E. Alternative medicine converts its skeptics. Managed Healthcare 1996;6:24–27.
14. Southwick K. Kaiser showcases innovative research projects. Managed Healthcare 1995;5: 6–8.
15. Edelson M. Can the new medicine cure you? Washingtonian Feb. 1996;68–85
16. Gruman JC. Should alternative medicine stay alternative? Adv J Mind–Body Health 1995;11: 65–69.
17. Ornish D, Brown SE, Scherwitz LW, et al. Can lifestyle changes reverse coronary heart disease? The lifestyle heart trial. Lancet 1990; 336:129–133.
18. Ornish D, Scherwitz LW, Billings JH, et al. Intensive lifestyle changes for reversal of coronary heart disease. JAMA 1998;280:2001–7.
19. Lloyd P, Lupton D, Wiesner D, et al. Choosing alternative therapy. Aust J Public Health 1993;17:135–44.
20. Pelletier KR, Marie A, Krasner M, et al. Current trends in the integration and reimbursement of complementary and alternative medicine by managed care insurance carriers, and hospital providers. Am J Health Promot 1997; 12:112–23.
21. Russell S. HMOs try dose of alternative medicine. San Francisco Chronicle 22 Jan. 22, 1996 1:4.
22. Simmons SJ. The economics of prevention. Am Nurs Assoc Publ 1993;(CH-27 5M):1–9.
23. Austin P. As demand for alternative therapy grows, coverage lags behind. Maine Times 4 Apr. 1996:2.
24. Baar K. Insurance coverage for all healthcare. Nat Health 1995;25:74.
25. Padgug RA. Alternative medicine and health insurance. Mount Sinai J Med 1995;62:152–62.
26. Mabry M. Insurance companies study their alternatives. News Tribune. 1 Jan. 1996.
27. Knickerbocker B. Who pays for alternative medical care? Christian Science Monitor 11 Mar. 1996.
28. Gaudet TW. Integrative medicine: the evolu-

tion of a new approach to medicine and medical education. Integrative Med 1998;1: 67–73.
29. Foundation for Accountability Backgrounder. Leaflet.
30. Angell M, Kassirer JP. Editorial. N Engl J Med 1998;339:241-2.
31. Colgate MA. Gaining insurance coverage for alternative therapies. J Health Care Marketing 1995;5:24–8.
32. Johnson NP. Insurer endorses alternative medicine. Business Insur 1993;27:1,7.

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.

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

Kenneth R. Pelletier, PhD, MD (hc), Ariane Marie, BS, Melissa Krasner, MA, and William L. Haskell, PhD, are at the Stanford Center for Research in Disease Prevention, Stanford University School of Medicine, Stanford, California.

Send reprint requests to Dr. Kenneth R. Pelletier, Stanford Center for Research in Disease Prevention, Stanford University School of Medicine, 1000 Welch Road, Stanford, CA 94304-1825.

This manuscript was submitted for publication December 26, 1996; revisions were requested February 27, 1997; the manuscript was accepted for publication June 17, 1997.

Am J Health Promot 1997;12(2):112–123.

0890-1171/97/$5.00 + 0

INTRODUCTION

Complementary and alternative medicine (CAM) can be defined as "medical interventions not taught widely at U.S. medical schools or generally available at U.S. hospitals."[1] The most commonly used practices are consumption of vitamins and health foods, herbal therapy, chiropractic, relaxation techniques, massage, and acupuncture.[1–5] In 1990, approximately one in three persons in the U.S. adult population used CAM, and the estimated number of visits to CAM providers was greater than the number of visits to all primary care medical doctors in that year.[1] Five surveys conducted since 1990 report frequent use of CAM, ranging from 30[1,2] to 73%[6–8] by patients suffering from conditions such as cancer, arthritis, acquired immunodeficiency syndrome, multiple sclerosis, and acute back pain.

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.[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.[6] Major users of CAM are either between the ages of 25 and 49 years or over 65.[1,7,9] 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.[1] In 1991, the market for herbal therapy was $1.3 billion and growing at a rate of approximately 20% per year.[7] 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 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,[7–9]
(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,[9,10]
(3) a greater awareness of medical practices from other cultures[7,13]
(4) a growing body of scientific literature suggesting that diseases are linked to nutritional, emotional, and lifestyle factors,[7,11]
(5) a desire for and expectation of wellness by baby boomers,[7]
(6) consumer desire, especially in seniors, to take fewer medications and decrease side effects[9]
(7) consumer desire to reduce personal health care spending, especially seniors,[9] and
(8) support of nationally renowned clinicians.[12]

Evolving CAM coverage is occurring 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.[13,14] 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.[11,12,15] 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.[16] 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,[10] which in turn may help to decrease unnecessary office visits due to anxiety or miscommunications between physician and patient.[2,17]

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 Hawaii Community Hospital, Center for Health and Well-Being at St. Luke's Hospital, Center for Complementary Medicine and Pain Management at St. Vincent's Hospital, The Franciscan Wholistic Health Center in Cincinnati, and the University of Miami Courtelis Center. We did not interview hospitals that offer three or fewer CAM therapies. Therefore, the sample universe of hospitals is small, since there are few hospitals that have chosen to incorporate several CAM therapies.

Interviews

Research team members informed the potential respondents of the survey that this is 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. Interviews were conducted by two Stanford researchers by telephone, with follow-up calls to clarify specific points. All participants also sent actual copies of their policies and materials, which are on file in the CAMPS office. We asked about 34 specific therapies from the OAM classification of alternative medical practices. Interview questions were both structured for baseline information and open ended in order to allow participants to express their beliefs and experiences without the constraints imposed by closed questions.

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

Mind/Body Institute has reported as many as five calls a week from HMOs that are considering teaching relaxation techniques to their members.[18] 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."[19] 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.[7] 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.[10] 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.[18] 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 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.[20,21] 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.[22]

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)

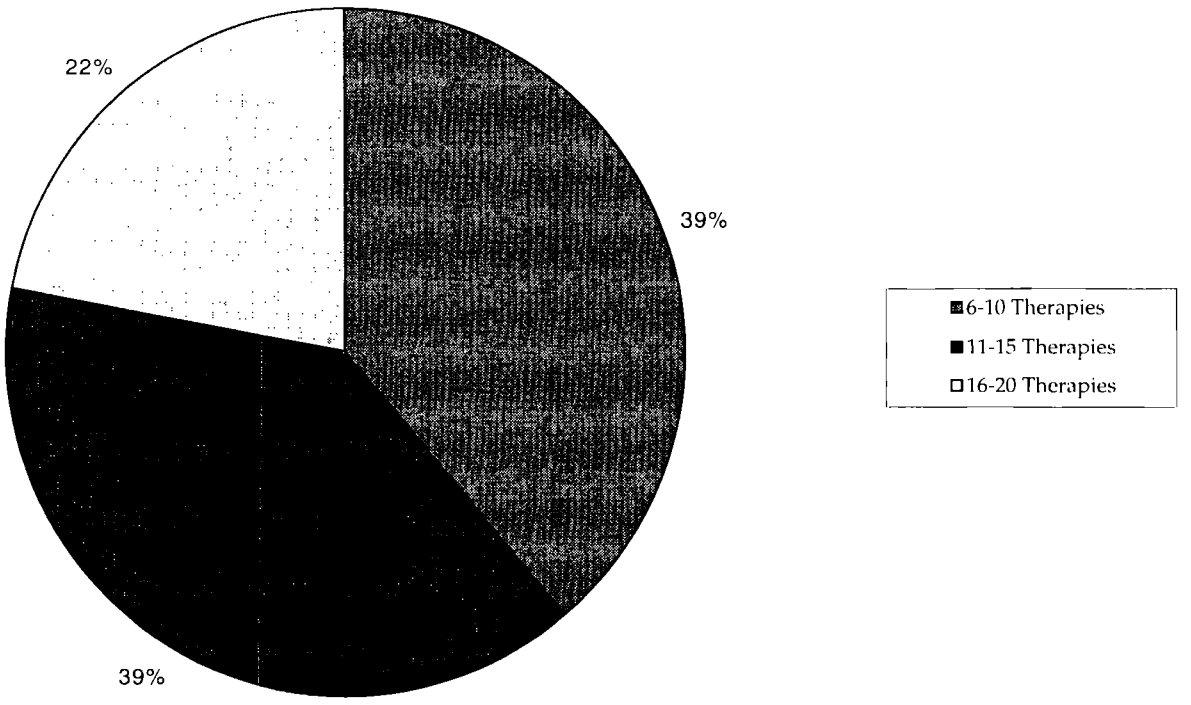
Complementary Medical Practices	Number of Insurers
Diet, nutrition and lifestyle changes:	
Herbal medicine	4
Nutrition counseling	12
Ornish program	6
Mind/Body control:	
Aromatherapy	0
Art therapy	0
Biofeedback	16
Guided imagery	5
Hypnotherapy	10
Martial arts	0
Meditation	4
Psychotherapy	17
Qi Gong/Ch'i 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.[20,23] Most of the insurers interviewed did not have special 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
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.

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."[22] 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.

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.

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 counseling; 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.[24] 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.[25] 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 preexisting pain management program in response to consumer interest. Complementary and alternative medicine program directors were also

Table 4

Hospitals Associated with Centers and CAM Offered

Name of Hospital and Center	CAM Offered			
Columbia/HCA Grant Hospital and American Holistic Center Chicago	Alexander technique Ayurveda Bach flower counseling Biofeedback Body centered therapy Chiropractic	Craniosacral therapy Educational therapy Guided imagery/visualization Homeopathy Hypnotherapy Massage/Shiatsu	Meditation/Relaxation Midwifery/Doula services Naprapathy, naturopathy Nutrition counseling Oriental medicine Psychoneuroimmunology	Psychotherapy Reflexology Reiki, skin care T'ai Chi Chuan Wellness counseling Yoga
Ancilla Systems and Healing Art Center in Mishawaka, Indiana	Acupuncture Aromatherapy Art therapy Ayurveda Biofeedback	Energy work, flower essence Healing touch Herbal therapy Homeopathy Lymphedema treatment	Massage/Shiatsu Meditation/Visualization Mental health counseling Nutrition counseling Reflexology	Reiki Spiritual counseling Stress reduction program T'ai Chi Chuan Yoga
Franciscan Hospital Mount Airy and Franciscan Wholistic Health Center in Cincinnati, Ohio	Acupuncture Aromatherapy Alexander technique Art therapy Biofeedback	Craniosacral therapy Feldenkrais method Guided imagery Healing touch Massage	Meditation Reflexology Self-hypnosis Spiritual counseling T'ai Chi Chuan	Yoga Zero balancing
Mercy Healthcare Arizona of Catholic Healthcare West and Arizona Center for Health and Medicine	Acupuncture Aromatherapy Biofield healing Feldenkrais method	Guided imagery Herbal therapy Homeopathy Mind/Body medicine	Massage Nutritional counseling Craniosacral therapy Spiritual counseling	T'ai Chi Chuan Tragerwork Yoga
St. Vincent Hospital and Center for Complementary Medicine and Pain Management in Indianapolis, Indiana	Acupuncture Art therapy Biofeedback Craniosacral therapy	Energy work Guided imagery Herbal therapy Hypnotherapy	Massage Meditation Nutrition counseling Mental health counseling	Relaxation methods Support groups
University of Miami Hospital and Clinics and The Courtelis Center, Sylvester Comprehensive Cancer Center	Acupuncture Biofeedback Guided imagery	Massage Meditation Mental health counseling	Nutrition counseling Spiritual counseling Physical therapy	Self-hypnosis Support groups
California Pacific Medical Center and Institute for Health and Healing in San Francisco	Art/Movement therapy Guided imagery	Living stories project Psychoneuroimmunology	Stress reduction programs Support groups	T'ai Chi Chuan/Qigong Yoga
St. Luke's Hospital in Cedar Rapids, Iowa, and Center for Health and Well-Being	Healing touch Holistic nurse consultation	Massage Meditation	Reflexology Support groups	T'ai Chi Chuan Yoga
North Hawaii Community Hospital	Acupuncture Chiropractic	Healing/Therapeutic touch Massage	Mental health counseling Naturopathy	
Deaconess Hospital and Division of Behavioral Medicine at Harvard in Massachusetts	Cognitive therapy Exercise	Meditation Nutrition counseling	Relaxation methods Yoga	
Kaiser in Vallejo, California, Vallejo Alternative Medicine Clinic	Acupuncture	Acupressure	Meditation/Relaxation	Nutrition counseling
Imperial Point Medical Center and Center for the Healing Arts in Fort Lauderdale, Florida	Biofeedback	Guided imagery/visualization	Relaxation methods	Support groups
Community Health Center of King County and Bastyr University in Seattle, Washington	Acupuncture	Naturopathy	Nutrition counseling	
Mercy Hospital and Medical Center and Wellspace Program in Chicago, Illinois	Feldenkrais method	Meditation/Visualization	Zero balancing	

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 directors 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 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 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 sited 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.[26,27] 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 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."[28] 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.[1,15,28,29] 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.[28] 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.

Acknowledgments

Research was supported by a grant (#AR43558) from the National Institute of Arthritis and Musculoskeletal and Skin Diseases; National Institutes of Health—Office of Alternative Medicine; the Fetzer Institute; the Nathan Cummings Foundation; and the American Health Association.

We are grateful for the support of the NIH Office of Complementary and Alternative Medicine, Adeline Hwang, Ann Fyfe, Penny Stroud, Sara Singer, Ellen DiNucci, and Dr. David Eisenberg.

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?

Journal of Gerontology: MEDICAL SCIENCES
1999, Vol. 54A, No. 12, M000–M000

Complementary and Alternative Medicine Use Among Elderly Persons: One-Year Analysis of a Blue Shield Medicare Supplement

John A. Astin,[1] Kenneth R. Pelletier,[1] Ariane Marie,[2] and William L. Haskell[1]

[1]Stanford Center for Research in Disease Prevention, Stanford University School of Medicine, Palo Alto, California.
[2]University of Southern California, School of Medicine, Los Angeles.

Background. Large scale surveys in the United States and abroad suggest that 35–60% of adults have used some form of complementary/alternative medicine (CAM). However, no studies to date have focused on predictors and patterns of CAM use among elderly persons.

Methods. The population surveyed were Californians enrolled in a Medicare risk product that offers coverage for acupuncture and chiropractic care. Surveys were mailed to 1597 members in 1997 and responses received by 728 (51% response rate). Health risk assessment data were also obtained at baseline and 12–15 months following enrollment in the plan. Multiple logistic regression analyses were carried out to examine predictors of CAM use.

Results. Forty-one percent of seniors reported use of CAM. Herbs (24%), chiropractic (20%), massage (15%), and acupuncture (14%) were the most frequently cited therapies. CAM users tended to be younger, more educated, report either arthritis and/or depression/anxiety, not be hypertensive, engage in exercise, practice meditation, and make more frequent physician visits. Use of CAM was not associated with any observed changes in health status. Respondents also expressed considerable interest in receiving third-party coverage for CAM. Although 80% reported that they had received substantial benefit from their use of CAM, the majority (58%) did not discuss the use of these therapies with their medical doctor.

Conclusions. Findings suggest that there is significant interest in and use of complementary/alternative medicine among elderly persons. These results suggest the importance of further research into the use and potential efficacy of these therapies within the senior population.

USE of complementary or alternative (CAM) therapies by large segments of the United States adult population is well documented. Beginning with the landmark study by Eisenberg and colleagues in 1993 (1), findings suggest that 30–50% of the population has used some form of unconventional medical care (2,3), and the most recent surveys suggest that CAM use in the United States is continuing to increase at a rapid rate (4,5). Public interest in unconventional forms of health care prompted the legislature to establish the Office of Alternative Medicine (now the National Center for Complementary/Alternative Medicine—NCCAM) in 1992 as part of the National Institutes of Health to begin assessing the safety and efficacy of CAM therapies. In addition, primarily due to consumer interest (and, to a lesser extent, legislative mandate and demonstrated efficacy), several prominent insurance companies and managed care organizations have begun offering coverage for CAM (6,7).

Rates of CAM utilization vary depending on the particular geographic region and the ways in which "alternative/complementary medicine" is defined. Although some studies suggest that CAM use is greatest among those between the ages of 35 and 50 (1), a recent multivariate analysis found no significant effect of age on CAM utilization (2). To date, there have been no studies focusing on CAM use among elderly persons. The present study was carried out to better understand patterns of and reasons for CAM utilization among an elderly population of Medicare patients enrolled in a supplement plan provided by Blue Shield of California. This focus seems particularly important given the disproportionate amount of health care expenditures that go toward treating the medical needs of this age group as well as the predictions that by the year 2020, seniors over the age of 60 will account for approximately 25% of the population (8).

Along with describing more specifically the patterns of CAM utilization among elderly persons, logistic regression analyses were carried out to test several possible predictors of CAM use identified in previous research. These hypothesized predictors included age (1), income (9,10), educational level (2,10–12), ethnicity, gender, health status (measured by a five-point scale, and the SF-12 (13), and specific health-related problems) (2), and several health and lifestyle habits (2,14–16).

In addition, using health risk assessment data taken from two time points, the study sought to examine whether CAM use is associated with positive or negative changes in health status. Finally, data were collected that assessed the extent to which coverage for CAM factored into these seniors' choice of health plan, as well as the degree to which they desired additional third-party coverage for CAM therapies.

Method

For the present report, one data set consisted of responses to a 10-page written survey developed by researchers at the

Complementary and Alternative Medicine Program (CAMPS) at the Stanford University School of Medicine. The population surveyed were voluntary enrollees in a then new Blue Shield plan—"Shield 65"—a Medicare risk product that offers CAM coverage for acupuncture and chiropractic care. For each of these therapies, members are allowed 20 self-referred visits per calendar year, with a $3 co-pay per visit. (For chiropractic care, this is over and above the standard Medicare coverage involving a $3 co-pay for physician-referred visits deemed medically necessary.)

Surveys were mailed to 1597 plan members in California. In an effort to maximize response rate, a reminder postcard was mailed out to these individuals approximately 1 month following the initial survey mailing. From this second mailing, it was determined that 159 individuals (10%) had disenrolled from the plan. Five postcards were returned undeliverable. Completed questionnaires were received from 728 individuals yielding a response rate of 51% (i.e., 728/1433). In addition, Blue Shield had previously obtained health risk assessment (HRA) data on their plan members. HRA data were available for 675 of the 728 members who completed our survey on CAM use. These data were collected between April and July of 1997. (Blue Shield was not able to provide us with the precise dates of individuals' enrollment in Shield 65 nor their initial HRA assessments, but only this range of dates.) Study participants were mailed a second HRA in July of 1998, approximately 12–15 months following their initial risk assessment and enrollment in "Shield 65." At Time 2, 140 members had disenrolled from the plan. Of the remaining 588 study participants, 496 (84%) responded to the second HRA.

The 25-item questionnaire assessed use of the following 10 CAM therapies: acupuncture; ayurveda (traditional East Indian medicine); chelation therapy; traditional Chinese medicine; chiropractic; guided imagery; herbal medicine; homeopathy; massage; and naturopathy. Brief definitions of each therapy were provided (e.g., "acupuncture—an ancient method of restoring 'chi' or energy, usually by inserting needles at specific points on the skin"). The survey also explored reasons for use of CAM therapies (a close-ended list of 10 health-related problems), self-care activities (e.g., exercise, blood pressure monitoring), health status (5-point scale), and the extent to which they desired reimbursement for CAM.

Data were analyzed (using SPSS statistical software) in an effort to better understand the level of involvement in alternative/complementary therapies by elderly persons and to examine factors that predict use of CAM among this population.

Results

Patterns and Predictors of Use

Table 1 summarizes the demographic characteristics of the sample. When compared to representative national samples of elderly persons, there is a slight overrepresentation of higher income, better educated individuals. The sample also overrepresents Asians and underrepresents African Americans.

Forty-one percent of respondents reported using some form of CAM in the previous year. The most frequently used therapies were herbal medicine (24%), chiropractic (20%), massage (15%), and acupuncture (14%) (Table 2). Of those who used CAM, the majority (80%) reported at least some improvement in symptoms as a result of these therapies. Percentages of respondents reporting "a lot" or "quite a lot" of symptom relief ranged from highs of 86 and 82%, respectively, for homeopathy and imagery, to 57 and 58%, respectively, for acupuncture and traditional Chinese medicine. The majority of CAM users (58%) in the present study did not discuss use of these therapies with their medical doctor or other health care practitioner.

CAM users reported paying, on average, $699 per year out-of-pocket for all visits to CAM providers (e.g., chiropractors, acupuncturists, massage therapists). They made on average 26 visits to CAM practitioners in the previous year and paid on average $71 per visit.

Respondents were also asked to specify the types of over-the-counter herbal medicines and nutritional supplements they used. Among the most frequently used herbs were ginko biloba (3.2%), garlic, and ginseng (1.8% each). Though not considered "complementary/alternative" medicine in the present study, the most frequently used vitamin/mineral supplements were multivitamins (26%), vitamin E (21%), and vitamin C (20%).

The most frequently cited medical reasons for seeing a CAM provider were back problems (43%), chronic pain (26%), general health improvement (25%) and arthritis (20%). For both acupuncturists and chiropractors, the top reasons cited were chronic pain, back problems, arthritis, and general health im-

Table 1. Demographic Characteristics of Survey Sample

Variable	Percent of Sample	Percent Who Used Alternative Medicine
Age ($n = 668$)		
< 65	4	67
65–69	46	46
70–74	24	37
75–79	15	28
80–84	8	31
> 85	5	23
Race/ethnicity ($n = 693$)		
White	76	40
Black	3	47
Hispanic	6	50
Asian/Pacific Islander	11	41
Other	4	38
Gender ($n = 675$)		
Males	45	41
Females	55	40
Education ($n = 707$)		
High school or less	25	25
Some college	38	45
College degree	15	48
Graduate work	7	41
Graduate degree	15	53
Household income ($n = 632$)		
< 10,000	13	37
10,000–14,999	15	35
15,000–24,999	15	53
25,000–34,999	18	42
35,000–49,999	17	45
50,000–74,999	12	44
> 75,000	14	38

Table 2. Frequency of Use of Specific CAM Therapies

Therapy	Percent Used
Herbal medicine	24.1
Chiropractic	20.3
Massage	14.7
Acupuncture	13.5
Naturopathy	9.3
Chinese medicine	9.1
Guided imagery	6.5
Homeopathy	5.8
Ayurvedic medicine	3.8
Chelation therapy	1.0

provement. For massage therapists, the most frequently cited reasons were general health improvement, back problems, chronic pain, and stress reduction. Respondents were also asked what factors influenced them to use CAM therapies in general (i.e., either provider *or* self-care based). The most frequently cited reasons were general health improvement, dissatisfaction with conventional medicine, pain management, and fear of drug side-effects (Table 3).

Bivariate correlations between the hypothesized predictors and the dependent variable were calculated. The variables with significant correlations with the dependent variable were as follows (Table 4): being more educated or younger, having poorer physical health (SF-12); reporting pain, arthritis, depression/anxiety, or memory difficulties; engaging in exercise, monitoring of blood pressure, or practice of meditation; not being hypertensive, greater alcohol consumption, poor health interfering with one's social activities or daily tasks; and more frequent visits to physicians.

Those variables that correlated significantly ($p < .05$) with use of CAM (operationalized as use of any of the previously discussed modalities within the last year) were then entered into the multiple logistic regression. The following factors emerged as significant predictors: being younger, more educated, reporting either arthritis and/or depression/anxiety, not being hypertensive, engaging in exercise, practicing meditation, and making more frequent doctor visits (Table 5). Among those with graduate degrees or higher, 53% reported using CAM as compared with 25% of respondents who had received a high school degree or less. One sees a clear trend with respect to age and CAM use as well with older respondents reporting significantly less use of these unconventional therapies. For example, among those aged 65–69, 46% reported CAM use compared with 31% among the 80–84 age group.

The relationship between health status and use of CAM is somewhat more ambiguous. For example, although there was not a significant correlation between self-reported health status (on a 5-point scale) and CAM use, CAM users *did* tend to make more physician visits and were more likely to suffer from health-related problems such as arthritis or depression/anxiety. Among those reporting making six or more doctor visits in the previous year, 56% used CAM, whereas 36% of those individuals visiting a doctor three times or less used CAM. (It is important to note that the observed correlation between greater number of doctor visits and higher CAM use could be an artifact resulting from respondents interpreting "doctor" visits as visits to CAM providers.) Among those reporting depression/anxiety, 59% used CAM; of those reporting arthritis 47% were CAM users.

CAM users in this study population were also more likely to engage in various self-care activities. For example, 77% of CAM users reported engaging in exercise as compared with 59% of nonusers. Among users, 21% reported engaging in meditation, whereas only 4% of nonusers were involved in this

Table 3. Factors Influencing Use of CAM Therapies

General health improvement	45%
Dissatisfaction with conventional medicine	36%
Pain management	34%
Fear of drug side effects	32%
Friend or family member	28%
Stress reduction	20%
Chronic medical problems	18%
Desire for personalized attention	13%

Table 4. Correlations of Hypothesized Predictors With Use of CAM

Variable	Simple *r*
Age	−.18***
Education	.17***
Income	.00
Gender	−.03
Health Status	−.02
SF-12 (Physical)	−.08*
SF-12 (Mental)	−.05
Pain symptoms	.11**
Smoking	−.05
Alcohol consumption	−.08*
Exercise	.19***
Meditation	.28***
Arthritis	.08*
Depression/anxiety	.11**
Memory problems	.08*
Hypertension	−.08*
Loss of social functioning	.09*
Less able to work	.08*
Daily activities limited	.09*
Doctor visits	.14***

*$p < .05$; **$p < .01$; ***$p < .001$.

Table 5. Significant Predictors in the Multiple Logistic Regression ($n = 644$)

Variable	Adj. Odds Ratio	95% CI	*p*
Education	1.2	1.1–1.3	<.01
Being younger	1.4	1.3–2.4	<.0001
Depression/anxiety	2.0	1.1–3.7	<.04
Arthritis	1.7	1.2–2.6	<.01
Hypertension	.60	.24–.55	<.05
Meditation	5.9	3.2–11.1	<.0001
Exercise	1.6	1.1–2.3	<.05
Physician visits	1.4	1.1–1.7	<.001

self-care activity. There was also a nonsignificant trend in the direction of CAM users being less likely to smoke cigarettes or drink alcohol and more likely to monitor their blood pressure.

To test the validity of the logistic regression model, the following technique was employed. Predicted values from the multivariate equation were divided into quintiles. The percentage of respondents within each quintile who used CAM was then calculated. This analysis is typically used to assess the extent to which there is any clinical/policy relevance to the predictor variables beyond their being statistically significant (17). Within the quintile of lowest predicted value scores, 15% used alternative medicine; within the highest quintile, 73% were users. These results suggest the model is fairly strong and has good predictive value along with its being statistically significant.

Effects of CAM Utilization on Health Status

Based on health risk assessment data taken from two time points (between 12 to 15 months, depending on the subject's date of enrollment in the plan), changes in health status were operationalized as changes in any of the following: global self-rating of health (5-point scale); specific health-related problems (arthritis, depression, asthma, hypertension); pain symptoms; social functioning; and ability to carry out work-related activities. Changes in health status, whether in a positive or negative direction, were not associated with use of CAM on any of the risk assessment parameters (i.e., use of CAM did not predict health status at Time Point 2, controlling for Time Point 1 scores). Specifically, among those who used CAM (N=180), 12% reported a negative change in or worsening of arthritis symptoms, 6% reported a positive change, whereas 82% reported no change. Similar patterns were observed on other risk parameters. Changes in overall self-reported health status showed no significant association with CAM use. Among those using CAM, 26% reported a worsening of health status, 7% an improvement, and 67% no change. A similar trend is observed in nonusers of CAM: 28% evidenced a worsening of health status, 10% an improvement, and 62% reported no change. In terms of social functioning, among CAM users, 26% reported some decline in functioning whereas 12% reported improvement. Among nonusers, 20% reported some worsening in social functioning, and 10% some improvement.

Interest in Third-Party Coverage

Modalities for which most members wanted third-party coverage were: chiropractic (50%), massage (43%), acupuncture (33%), and herbs (31%). Twenty-seven percent of respondents stated they had actually joined the plan because of its coverage of chiropractic, whereas 20% stated they had joined because of its acupuncture coverage. Respondents who said that either or both of these therapies were influential in their decision to join the plan (31% of the total sample) were further examined in relation to their use of CAM. Among these individuals, 77% reported being CAM users, whereas 23% stated that they had never actually used CAM, despite their decision to join the plan because of its CAM coverage.

Respondents were also questioned whether they would be willing to pay per month for an optional supplemental plan that would provide coverage for other forms of complementary/alternative medicine. Of those who reported using some form of CAM, 59% said they would be willing to pay some amount, whereas 31% of nonusers stated they would be willing to pay some amount for additional CAM coverage.

Discussion

The present study adds to the growing body of research examining use of complementary and alternative forms of health care (CAM). Although the majority of these studies have typically used more heterogeneous demographic samples, the present study examined patterns and predictors of CAM utilization within a targeted population of elderly Medicare patients enrolled with Blue Shield of California.

Results suggest that substantial numbers of seniors are both interested in and actually using various forms of complementary/alternative medicine. Forty-one percent of those surveyed reported using some form of CAM within the previous year, with herbal medicine, chiropractic, massage, and acupuncture being the most frequently cited modalities. Although the majority of CAM users (58%) did not discuss their use of these unconventional therapies with their conventional physicians, a finding consistent with previous research (1,5), the vast majority (80%) reported receiving some benefit in terms of improvement in symptoms. Lack of communication between elderly patients and their providers about use of CAM is of concern for two reasons. First, it may point to generally poor communication between these patients and their physicians, and may suggest that patients are fearful of sharing such information. Second, without such open communication, doctors *and* patients will be less aware of potentially harmful interactions between their conventional and CAM treatments (e.g., herb-drug interactions). For these reasons, encouraging discussion of CAM use among the growing elderly population is essential (18,19).

Consistent with previous research (2), these elderly CAM users reported back problems, chronic pain, arthritis, and general health improvement as the top reasons for their seeking out these therapies.

Results from the multivariate analyses suggest that the following factors are predictive of CAM utilization in this population: being more educated, younger, reporting either arthritis and/or depression/anxiety, engaging in exercise, practicing meditation, and making more frequent physician visits. The relationship of higher education level but *not* income to CAM use is consistent with a recent national study examining predictors of alternative health care utilization in the general population (2). Also consistent with this study was the apparent association of poorer health status, in particular self-reported anxiety and depression in this sample of seniors, with use of CAM. However, the relationship between health status and CAM use is not entirely clear-cut. For example, although use of CAM was associated with a number of factors indicative of poorer health, CAM use was also associated with certain self-care activities such as exercise, less smoking, and alcohol consumption. These findings suggest that a subset of CAM users may in fact be healthier (or at least more health-conscious) than those who do not use these therapies. It should also be noted that the association between CAM use and more frequent physician visits could in some cases actually reflect better self-care (i.e., preventive health care) on the part of these respondents. This would be consistent with recent research suggesting that a significant portion of CAM use is for prevention and health promotion/health maintenance, rather than simply treatment of disease and illness (3–5).

The finding that CAM use was significantly higher in younger segments of the senior population surveyed may reflect a cohort rather than age effect. That is, it may be the case that recent generations have been more exposed to the phenomenon of CAM (through media, popular culture, social networks, etc.) and are therefore more likely to be familiar and open to experimenting with these therapies. Along these lines, we have unpublished data from an earlier survey (2) suggesting that the younger segments of the senior population are less trusting and satisfied with their conventional health care providers, and in turn have less unquestioning faith or belief in the efficacy of conventional medical treatment.

Finally, the finding that involvement with nontraditional spiritual practices, such as meditation, is associated with CAM use is also consistent with previous research suggesting that involvement with CAM is part of a broader value orientation that recognizes the importance of nonphysical (i.e., mental, spiritual) factors in health (2).

Although it was primarily those seniors who were actually using CAM who stated that they had joined the health plan because of its coverage of acupuncture and chiropractic, results suggest that seniors who use CAM therapies as well as those that do not are interested in having their health plans cover complementary/alternative medicine. In fact, even among those who did not use CAM, 31% stated that they would be willing to pay some additional amount to receive coverage for CAM. The most frequently cited therapies for which respondents wanted coverage were chiropractic, massage, acupuncture, and herbs.

This study also examined the extent to which use of CAM was associated with any changes in health status. No significant relationships were found between use of these therapies and health status as measured by a standard health risk assessment instrument taken at two time points approximately 12 to 15 months apart. One interpretation of this negative finding is that CAM therapies are no more or less effective than conventional approaches. However, it may also be the case that the time between risk assessments was insufficient to capture any significant changes in health status and/or that the HRA may not have been particularly sensitive to the kinds of changes CAM therapies may bring about. Finally, although such analyses that examine correlational associations between changes in health status and use of particular therapies are useful, any definitive conclusions regarding the efficacy of CAM *or* conventional approaches must be based on well-controlled, prospective clinical trials.

The sample used in the present study was not a representative sample of seniors in the United States population in so far as it was limited to one particular state, California, which previous research suggests has significantly higher rates of CAM use (1). Problems with self-selection (response rate of 51%) may also have resulted in a sample biased in favor of CAM, thus inflating estimates of CAM use and interest in such therapies. The sample also tended to underrepresent the poorer, less educated segments of the population, overrepresent Asians, and underrepresent African Americans. It is quite possible that patterns of and reasons for CAM use may vary as a function of one's ethnic/racial background (2), suggesting the need for larger samples and investigations that focus on specific cultural subgroups.

These limitations notwithstanding, we believe the present study adds substantially to our understanding of CAM use in a specific segment of the population—the elderly. Although previous research has suggested that complementary/alternative medicine is primarily used by those aged 35–50, the present study suggests that a substantial number of seniors are: (i) using CAM therapies to address a variety of health-related problems as well as prevent illness and optimize health and well-being; (ii) perceive these therapies to be efficacious; (iii) are not discussing such use with their physicians; and (iv) are interested in having their health plans offer coverage for such therapies. Significant use of and interest in approaches such as chiropractic, acupuncture, and herbal medicine by seniors—a segment of the population that is both growing exponentially as well the largest consumers of health care—suggest the need for more well-controlled studies examining the potential efficacy of these therapies.

As the 35–50 years old postwar Baby Boomers continue to use CAM with greater frequency into their advanced years, both the promise and perils of these therapies need to be further researched. Clinical and cost outcomes based on longitudinal studies need to focus on Medicare-eligible populations to determine if CAM versus conventional versus an integrated model of CAM *and* conventional care results in decreased disability and improved health status. Addressing such clinical, financial, and public policy questions becomes ever more pressing as over 15,000 people per day become Medicare-eligible.

ACKNOWLEDGMENTS

We are grateful to Blue Shield of California, the National Institutes of Health Center for Complementary and Alternative Medicine (NCCAM), and the American Health Association for their support of this study. We would also like to thank Cindy Wood, Ellen DiNucci, and Adeline Hwang for their assistance with this project.

Address correspondence to John Astin, SCRDP, 730 Welch Rd., Palo Alto, CA 94304-1583. E-mail: astin@scrdp.stanford.edu

REFERENCES

1. Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, DelBanco TL.Unconventional medicine in the United States: prevalence costs and patterns of use. *N Engl J Med.* 1993;328:246–252.
2. Astin JA. Why patients use alternative medicine: results of a national study. *JAMA.* 1998;279:1548–1553.
3. Landmark Healthcare. *The Landmark Report: Public Perception of Alternative Care.* Sacramento, CA: Landmark Healthcare; 1998.
4. Alles W. Stanford Survey on Use of Complementary Alternative Medicine. Paper presented at the Conference on Complementary and Alternative Medicine: Scientific Evidence and Steps Toward Integration; September 18, 1998; Stanford, CA.
5. Eisenberg DM, Davis RB, Ettner SL,et al. Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. *JAMA.* 1998;280:1569–1575.
6. Pelletier KR, Marie A, Krasner M, Haskell WL. Current trends in the integration and reimbursement of complementary and alternative medicine by managed care, insurance carriers, and hospital providers. *Am J Health Promot.* 1997;12:112–123.
7. Pelletier KR, Astin JA, Haskell WL. 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. *Am J Health Promot.* In press.
8. Roszak T. *America the Wise: The Longevity Revolution and the True Wealth of Nations.* Boston: Houghton Mifflin; 1998.
9. Millar WJ. Use of alternative health care practitioners by Canadians. *Can J Public Health.* 1997;88:154–158.
10. Ostrow MJ, Cornelisse PG, Heath KV, et al. Determinants of complementary therapy use in HIV-infected individuals receiving antiretroviral or

anti-opportunistic agents. *J Asquir Immune Defic Syndr Hum Retrovirol.* 1997:15:115–120.
11. Dimmock S. Troughton PR. Bird HA. Factors predisposing to the resort of complementary therapies in patients with fibromyalgia. *Clin Rheum.* 1996;15:478–482.
12. Bernstein JH. Shuval JT. Nonconventional medicine in Israel: consultation patterns of the Israeli population and attitudes of primary care physicians. *Soc Sci Med.* 1997:44:1341–1348.
13. Ware JE. Kosinski M. Keller SD. A 12-item short-form health survey (SF-12): construction of scales and preliminary tests of reliability and validity. *Med Care.* 1996:32:220–233.
14. Furnham A. Bhagrath R. A comparison of health beliefs and behaviours of clients of orthodox and complementary medicine. *Br J Clin Psych.* 1993: 32:237–246.
15. Furnham A. Smith C. Choosing alternative medicine: a comparison of the beliefs of patients visiting a general practitioner and a homeopath. *Soc Sci Med.* 1988:26:685–689.
16. Furnham A. Forey J. The attitudes behaviors and beliefs of patients of conventional vs complementary alternative medicine. *J Clin Psych.* 1994: 50:458–469.
17. Kraemer HC. Kazdin AE. Offord DR. Kessler RC. Jensen PS. Kupfer DJ. Coming to terms with the terms of risk. *Arch Gen Psychiatry.* 1997:54: 337–343.
18. Astin JA. Marie A. Pelletier KR. Hansen E. Haskell WL. A review of the incorporation of complementary and alternative medicine by mainstream physicians. *Arch Intern Med.* 1998:158:2303–2310.
19. Eisenberg DM. Advising patients who seek alternative medical therapies. *Ann Intern Med.* 1997:127:61–69.

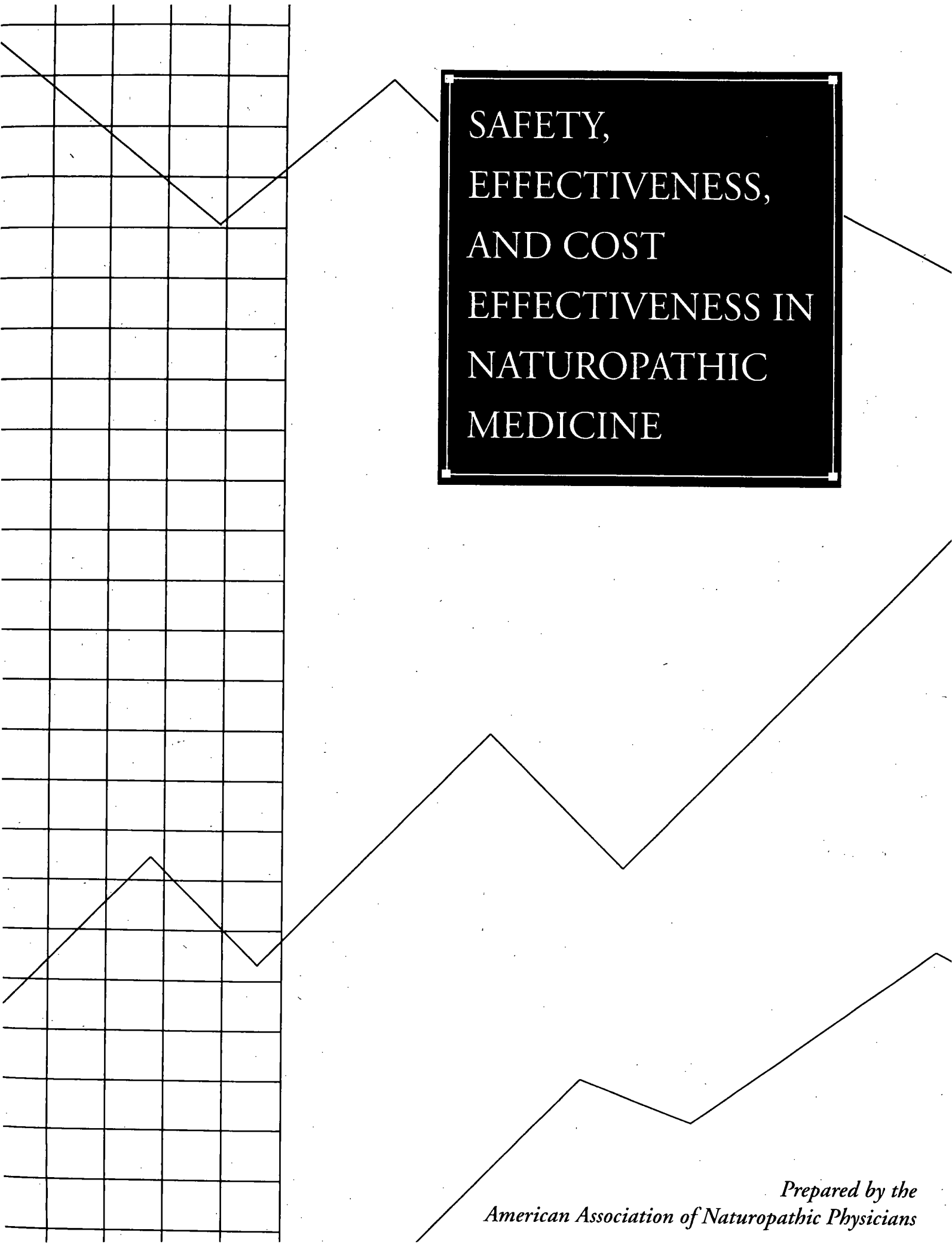
Received December 1, 1998
Accepted July 7, 1999

Clinton Presidential Records
Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a publication.

Publications have not been scanned in their entirety for the purpose of digitization. To see the full publication please search online or visit the Clinton Presidential Library's Research Room.



SAFETY, EFFECTIVENESS, AND COST EFFECTIVENESS IN NATUROPATHIC MEDICINE

Prepared by the
American Association of Naturopathic Physicians