Definition of CAM and Guiding Principles
Staff Lead: Jim Swyers
Co-Facilitators: Wayne Jonas and Tom Chappell

Summary of CAM Definition and Guiding Principles Conference Call, September, 2001:

Conference call participants: Tom Chappell, Steve Groft, Veronica Gutierrez, Wayne Jonas, Charlotte Kerr, Conchita Paz, Joe Pizzorno, Jim Swyers

Issues:

- Language Issues
- CAM Differentiation
- Summary Definition
- Next Steps

Issue 1. Language Issues

Jim Swyers began the conference call by asking if there were any general issues that work group members wanted to bring up before discussing specific issues. Veronica Gutierrez asked for rewording of several passages throughout the text and said that there appeared to be an overemphasis on the word "medicine" as opposed to healthcare and other more descriptive terms. Wayne Jonas agreed that the Commission is certainly dealing with more than just medicine as is conventionally viewed, because medicine is seen as something that only a doctor practices. He said terms such as "healthcare practices" would certainly be broader and make it clear that the Commission is not just talking about what someone who is licensed to practice medicine is doing. The Commission is really talking about all of the healthcare practices that the public engages in, he added. Jim Swyers said he would edit the draft to take into account these concerns.

There was also a discussion about the term "alternative," and whether it was a hindrance to the Commission's work. Tom Chappell said that he felt very strongly that the word "alternative" is very much an obstacle. He said the Commission's primary focus in "complementary" approaches to healthcare, not really alternative approaches. He suggested that the term "alternative" be drop from the Commission's nomenclature. Wayne Jonas argued, however, that some of the systems and modalities that are being considered by the Commission truly are "alternatives" to mainstream, conventional medicine. He said he would be reluctant to drop the term "alternative" from the definition.

Issue 2: Categorization of CAM Practitioners

Joe Pizzorno said that there is a need for language that differentiates between CAM practitioners because the Commission will not be able to come up with specific recommendations in the report without such differentiation. Because CAM practitioners are quite diverse, the differentiation is necessary, he said. Wayne Jonas expressed some

concern with the differentiation because he was not sure that the text as it stands adequately describes all of the types of CAM practitioners that exist. He said the one category that is not included in the description is someone who is a wholistic physician that uses CAM therapies but do not consider themselves as a dually trained physician. Wayne said he would like to have the categories reviewed by various types of CAM practitioners to see if the categories accurately reflect what they do. Steve Groft said that one option would be to identify all of the taxonomies available and make a recommendation that another group could develop a more definitive taxonomy of CAM practitioners. Tom Chappell said he agreed with Joe Pizzorno that there was a need for this type of differentiation in the report. However, he said it was something the work group should "wrestle" with some more, since there were concerns. After further discussion, there was consensus among the Work Group members to include a differentiation of practitioners in the report. Everyone also agreed to leave it in the definition section for now, but to let the full Commission decide where it should ultimately be placed. Wayne Jonas suggested putting it in the licensing and regulation sections of the report, since the differentiation was really regulatory language.

Issue 3: Summary Definition

Tom Chappell said the reason he asked for a summary definition was that he was trying to put himself in the "shoes of the reader." From the perspective of the readers of the report, he said it would be valuable to have something that was more cogent as a definition for them to refer to. Charlotte Kerr agreed that a summary definition would be useful and said she was particularly impressed by the Cochrane Colloboration definition, which describes CAM as "a broad domain of healing resources" "other than those intrinsic to the politically dominant." She said these words accurately describe what CAM is about. Wayne Jonas agreed that this was a good definition and said that it was actually derived from the Office of Alternative Medicine work group on definitions paper that was published in Alternative Therapies (March 1997). Jim Swyers agreed that the definition in that paper was probably the most accurate of any definition to date. However, he said that he had been at a number of scientific meetings where that definition was discussed and the phrase "politically dominant" was referred to in highly negative terms. Wayne Jonas said that immediately after that phrase in the paper is an explanation of what is meant by "politically dominant." It reads: "it must be noted that identifying a health system as `politically dominant' does not imply that it achieved its position of dominance through political means." Jim Swyers said that who new many people who read that paper who did not get that far. They stopped reading as soon as they saw the phrase "politically dominant." He suggested using the OAM work group paper as a starting point to develop a summary definition that was not so viscerally objectionable. There was agreement to do this (see Next Steps, below).

Issue 4. Next Steps

Jim Swyers offered to develop a summary definition based on the OAM working group definition and that also encompasses the Work Group's discussions. He said he would also use the footnote provided by Wayne and then send it Tom and Wayne for their

review. He will then send the revised draft of the section on definitions and guiding principles to the whole Work Group and give them 48 hours to comment. After that a draft will go out to the rest of the Commission. He said there would not be time for another conference call before then.

Groft, Stephen (WHCCAMP)

From: Jim Swyers [jpswyers@starpower.net]
Sent: Wednesday, September 05, 2001 1:56 PM
To: Kingsbury, Doris (WHCCAMP)
Cc: Tom Chappell (E-mail); Jonas, Wayne; Jonas, Wayne; 'Effie Chow (E-mail)'; Veronica Gutierrez (E-mail); 'Conchita Paz (E-mail)'; 'Joe Pizzorno'; Groft, Stephen (WHCCAMP); Axelrod, Corinne (WHCCAMP); Chang, Michele (WHCCAMP); Fisher, Ken (WHCCAMP); Kaczmarczyk, Joseph (WHCCAMP); Miller, Maureen (WHCCAMP); Pollen, Geraldine (WHCCAMP); 'Jim Gordon (E-mail)'
Subject: Re: CAM definition and guiding principles

Hi Folks,

The following is a general agenda for tomorrow's call. Hope you can make it.

Conference Call Agenda for Work Group H

1. Discussion of most recent draft of CAM definition and Commission's Guiding Principles.

2. Discussion of Joe Pizzorno's most recent draft of CAM differentiation section

3. Discussion of summary definition and mission statement

4. Update on development of history of CAM section for the report

. Discussion of next steps.

6. Other issues.

"Kingsbury, Doris (WHCCAMP)" wrote:

> To be connected to the call on Thursday, September 6, from 2:00-4:00p.m. EST
> please dial 888-942-9071 and reference the following:
> PASSCODE: 42226 / LEADER: JIM SWYERS
>
> -----Original Message-----
> From: Jim Swyers [mailto:jpswyers@starpower.net]
> Sent: Tuesday, September 04, 2001 1:51 PM
> To: Tom Chappell (E-mail); Jonas, Wayne; Jonas, Wayne; 'Effie Chow
> (E-mail)'; Veronica Gutierrez (E-mail); 'Conchita Paz (E-mail)'; 'Joe
> Pizzorno'
> Cc: Groft, Stephen (WHCCAMP); Axelrod, Corinne (WHCCAMP); Chang, Michele
> (WHCCAMP); Fisher, Ken (WHCCAMP); Kingsbury, Doris (WHCCAMP);
> Kaczmarczyk, Joseph (WHCCAMP); Miller, Maureen (WHCCAMP); Pollen,
> Geraldine (WHCCAMP); 'Jim Gordon (E-mail)'
> Subject: CAM definition and guiding principles
>
> Dear Work Group H Members,
>
> I have attached the most recent draft of the CAM Definition and Guiding
> Principles of the Commission section. This draft reflects the major
> points that we agreed on in the first conference call and input from
both Wayne and Tom on the subsequent first draft that I sent them to
review. One of the major items that Tom wants to address is the need
> for a summary definition of CAM. I agreed that a summary definition is
> useful and said that I would write one after the group has accepted,
> modified, or rejected what I have written so far. You'll note that I

> have left the summary definition section blank as well as the section
> dealing with the Mission Statement, which we still need to discuss.
>
> Our next conference call to discuss this draft will be on Thursday,
  September 6th, at 2:00 p.m. Eastern time (11:00 a.m. Pacific). I
  apologize for this short notice. If you cannot make the call, please let
> me know as soon as possible, and I will arrange for a time when you and
> I can discuss your comments and concerns, either before or after the
> conference call. If you want, you can summarize your comments and e-mail
> them to all of us, and we will put them on the conference call agenda,
> which I will send you tomorrow. Doris Kinsbury will e-mail everyone on
> this list tomorrow and give us the phone number for the conference call.
>
> I want to thank all of you for the confidence you've shown in me for
> this assignment. If you cannot make the call on Thursday, rest assured
> that I will be in touch soon.
>
> Sincerely,
>
> Jim Swyers, M.A.

Category	Regulatory Issues	Potential Solutions
Holistic MD	Licensed, but conventional licensing boards do not have knowledgebase to regulate. No education standards	Specialty boards Establish standards for modality competency
Professional CAM	Licensing required according to diagnostic and therapeutic scope of practice due to exclusionary medical practice acts Title can be misused in states with no licensing	Title acts which define education and scope of practice, provide regulation, prohibit use of title unless licensed and do not prohibit use of therapies by others. Use credentialing when diagnosis is not in scope of practice.
Traditional healer	Centuries-old traditions not amenable to conventional regulation Protection from medical practice acts.	Exemption from state regulation by those practicing in a community providing tradition and oversight.
Medical eccentric	Licensed. But practice in ways not amenable to peer-review No CAM education or adherence to CAM healing traditions	Distinguish two groups: unsafe vs. unproven practices Use multi-disciplinary boards to review. Utilize informed consent and rigorous practice data collection to monitor outcomes and identify, and stop, unsafe practices.
Emerging profession	Education, regulatory and practice standards still in development or developed and regulated in other countries	Office of emerging professions to assist development. Define stages of development.
Self-proclaimed	Healthcare freedom Misrepresentation of training and skills to unsophisticated public	Legislation to prohibit inappropriate use of titles and that ensure public fully informed of actual competencies.

Draft CAM Differentiation Recommendation
Joe Pizzorno, N.D.
September 4, 2001

Appropriate educational, licensing and practice standards depend on appropriate differentiation and definition of CAM practitioners and practices. The following the six categories are recommended. With the exception of categories 1 and 2, they are approximately rank-ordered by diagnostic ability and safety.

1. "Holistic" medical doctors with conventional training and varying degrees of competency in CAM modalities. Some may formally CAM credentialed, e.g., MD, ~~LAc.~~
2. Professional CAM practitioners with a cohesive healing philosophy, defined practice standards, accredited education, state licensing, documented safety and at least some research substantiation. Examples include naturopathic physicians and acupuncturists.
3. Traditional healers who practice within a community which provides centuries-old traditions and oversight. Examples include Native American healers and curanderos.
4. Medical "eccentrics" who are conventionally trained but utilize therapies and practices that are highly controversial or excluded from conventional standards of care.
5. Emerging professions where lay and inconsistently trained practitioners are working to establish standards. Examples include lay homeopaths and herbalists.
6. Self proclaimed or minimally educated healers who practice without apparent standards or community oversight.

The issues of education, diagnosis and safety provide important differentiation between the groups. Single standards are not applicable since, for example, while medical doctors have the highest level of training in disease diagnosis, CAM professionals have the highest level of training in the diagnostic skills appropriate to their disciplines. Diagnostic and therapeutic expertise can be improved across the range of skills of both groups. Each can help the other improve their competencies.

Groft, Stephen (WHCCAMP)

From: Jim Swyers [jpswyers@starpower.net]
Sent: Tuesday, September 04, 2001 1:51 PM
To: Tom Chappell (E-mail); Jonas, Wayne; Jonas, Wayne; 'Effie Chow (E-mail)'; Veronica Gutierrez (E-mail); 'Conchita Paz (E-mail)'; 'Joe Pizzorno'
Cc: Groft, Stephen (WHCCAMP); Axelrod, Corinne (WHCCAMP); Chang, Michele (WHCCAMP); Fisher, Ken (WHCCAMP); Kingsbury, Doris (WHCCAMP); Kaczmarczyk, Joseph (WHCCAMP); Miller, Maureen (WHCCAMP); Pollen, Geraldine (WHCCAMP); 'Jim Gordon (E-mail)'
Subject: CAM definition and guiding principles

Working Definition of CAM and ...

Dear Work Group H Members,

I have attached the most recent draft of the CAM Definition and Guiding Principles of the Commission section. This draft reflects the major points that we agreed on in the first conference call and input from both Wayne and Tom on the subsequent first draft that I sent them to review. One of the major items that Tom wants to address is the need for a summary definition of CAM. I agreed that a summary definition is useful and said that I would write one after the group has accepted, modified, or rejected what I have written so far. You'll note that I have left the summary definition section blank as well as the section dealing with the Mission Statement, which we still need to discuss.

Our next conference call to discuss this draft will be on Thursday, September 6th, at 2:00 p.m. Eastern time (11:00 a.m. Pacific). I apologize for this short notice. If you cannot make the call, please let me know as soon as possible, and I will arrange for a time when you and I can discuss your comments and concerns, either before or after the conference call. If you want, you can summarize your comments and e-mail them to all of us, and we will put them on the conference call agenda, which I will send you tomorrow. Doris Kinsbury will e-mail everyone on this list tomorrow and give us the phone number for the conference call.

I want to thank all of you for the confidence you've shown in me for this assignment. If you cannot make the call on Thursday, rest assured that I will be in touch soon.

Sincerely,

Jim Swyers, M.A.

DEFINING COMPLEMENTARY AND ALTERNATIVE MEDICINE AND ELABORATING GUIDING PRINCIPLES

Because the White House Commission on Complementary and Alternative Medicine Policy (WHCCAMP) is charged with making specific recommendations, there was consensus among Commissioner's for developing a better understanding for what is encompassed by CAM. CAM is such a diverse field that many Commission members believed it necessary to differentiate among the various types of CAM as well a to understand their underlying commonalities before they could develop final recommendations in any of the major topic areas. The Commission, therefore, assigned a Work Group to make a detailed examination of the literature and other relevant sources of information and develop a working definition of CAM to help guide the Commission's deliberations.

Commission members believed that a set of "guiding principles" was needed to serve as guideposts for its deliberations. The Commission settled on a set of 10 statements to serve as guiding principles, which were further refined by the Work Group on Definitions. This group also developed an early draft of a mission statement. All of these--the definition, guiding principles, and mission statement were more fully developed by the full Commission.

DESCRIBING AND DEFINING CAM

Complementary and alternative medicine (CAM) is a diverse set of both ancient and modern healthcare systems and practices. These systems and practices, which are not usually available or supported in most western countries, focus on the support and stimulation of healing processes and on whole person care to prevent and treat illness. The healthcare systems and practices in the U.S. that are generally recognized as being CAM are shown in Table 1:

Table 1: Common CAM Therapies and Systems of Medicine

*Acupuncture	Chiropractic	Naturopathic Medicine
*Acupressure	(Sacral) Cranial Osteopathy	Nutritional Therapy
Alexander Technique	Environmental Medicine	Osteopathic Medicine
Applied Kinesiology	*Herbal Medicine	*Qigong
Anthroposophic Medicine	Homeopathy	Reflexology
Aromatherapy	Hypnosis	Relaxation and Visualization
Autogentic Training	Imagery	Shiatsu
Ayurvedic Medicine	Iridology	Spiritual Healing
*Bioelectromagnetics	Massage and Bodywork	Therapeutic Touch
Energy Medicine	*Meditation	Traditional Chinese Medicine
	Mexican-American curanderos	*Yoga

*Many CAM therapies and practices are derived from complex systems of healthcare and healing and are typically delivered within the context of the overall care rather than as a stand-alone therapy, although they may be delivered as stand-alone treatments by those who are not trained in the particular system of medicine.

Adapted from Zollman C, Vickers A. What is complementary medicine? BMJ 1999;319:693-696

It should be emphasized that a number of CAM practices that are listed in Table 1 have gained or are increasingly gaining acceptance and recognition by mainstream medicine. Often, however, the CAM system from which the practice is derived is only marginally accepted and engaged in dialogue by main-steam medical and healthcare organizations (e.g, acupuncture and Traditional Chinese Medicine).

This marginalization results in the lack of formal recognition in medical education and research funding for most CAM systems. This exclusion of a detailed discussion of various CA M systems makes it difficult for conventional doctors to communicate with and refer to CAM practitioners. Lack of access to research funds, contributes further to this marginalization in that people researching CAM systems are not able to generate and publish the kinds of data that can convince insurance companies and third-party payers to reimburse for their services (Pelletier et al., 1997).

The marginalization of CAM systems has occurred for a variety of reasons, including:

≡ AMA ≡ General Expression

a) the lack of an explanatory model that is aligned with generally accepted scientific principles (e.g., homeopathy, chiropractic).

b) the origin of the system from cultures outside of the U.S. or from indigenous cultures (e.g., Ayurvedic Medicine, Traditional Chinese Medicine, Native American Medicine). Because these systems often rely on low technology approaches (e.g., herbs), they may be seen as primitive and unscientific.

c) the lack of sufficient data on safety, efficacy, or potential mechanism of action to support its use for treating specific illnesses (e.g., vitamin therapy).

d) the inability to easily integrate the system into the mainstream healthcare model.

e) the widespread belief that the healthcare or healing system is not practical or feasible for most people, even though there is scientific consensus that it is therapeutic (e.g. environmental medicine, therapeutic diets).

Another reason that many CAM systems have been marginalized is the difficulty of licensing and regulating their practitioners. Although some of these CAM systems lend themselves easily to certification, licensing, and regulation, others do not. Indeed, there is a great diversity of education, training, and standards of practice among CAM practitioners, ranging from highly educated and organized to self-taught and unregulated. There at least five categories of CAM practitioners based on their education, training, and regulation . These include:

1. Professional CAM practitioners with a cohesive healing philosophy, defined practice standards, accredited education, state licensing, documented safety, and at least some research substantiation. Examples include naturopathic physicians and Traditional Chinese Medicine practitioners.

2. Dually trained physicians who conventionally accepted medical practices along with therapies and practices that are highly controversial or not widely recognized by conventional standards of care.

3. Emerging professions consisting of lay and self-trained practitioners, such as lay homeopaths and herbalists. Some of these emerging professions are working to establish standards for minimum education and training.

4. Community healers who receive training through centuries-old traditions. They tend to practice solely within their community, which provides informal oversight and regulation. Examples include Native American healers and Mexican-American curanderos.

5. Self proclaimed or minimally educated healers who practice without apparent standards or community oversight.

These variations in education, training, and self-regulation impact access to and delivery of CAM systems by limiting their practitioners' ability to practice lawfully and obtain malpractice insurance. Although practitioners of some CAM systems, such as chiropractic, are licensed in all 50 states, many others are licensed in only a portion or a few states (see Section ?).

Common Characteristics of CAM Systems

Although the discussion so far has highlighted the heterogeneity among CAM systems, there are a number of similarities among the major CAM systems that point to a common origin. These similarities include a focus on:

a) Clinical observation - Many of these practices have evolved out of clinical experience, from small groups who use the intervention (e.g. neural therapy, polarity) to widely used, elaborately detailed systems such as Traditional Chinese Medicine.

b) Whole systems - CAM systems tend to emphasize a complete or combination systems approach that includes multiple simultaneous interventions with individualization, or variation, of those interventions during the course of care treatment. They often assume that the entire system is required as a package independent of the isolated effects of its individual components (e.g., the use of whole plant extracts rather than isolated active ingredients). For example, a chiropractor, in addition to providing a spinal adjustment, may also offer advice on diet and exercise, provide guidance on breathing and relaxation, and prescribe nutritional supplements.

c) Vitalism - Many CAM systems emphasize the need to achieve balance of life energy in order to promote a higher, or optimal, level of functioning above the mere absence of illness. Restoring harmony and promoting optimal functioning is a major focus of many CAM systems, including Ayurvedic Medicine, Native American Medicine, Homoepathic Medicine, Traditional Chinese Medicine, Naturopathic Medicine, and Chiropratic.

d) Stimulating Self-Healing Processes - CAM systems tend to emphasize the stimulation or support of natural healing processes, referred to as *vis medicatrix naturae* (the healing power of nature) and seek to enhance those processes in order to accelerate the natural course of recovery, rather than mask or suppress the symptoms of the disease. (e.g. nutritional & diet therapy for rheumatic diseases rather than immuno-suppressants). Even CAM modalities that are not directly evolved from traditional systems of medicine, have adopted the philosophy that the body's self-healing mechanism can be speeded up, sometimes to an astonishing degree, by the proper stimuli. Thus, many CAM practitioners employ therapies designed to stimulate the patient's constitution to fight on its own behalf, on the assumption that this emphasis on enhancing the natural healing process is the most appropriate foundation of any medical therapy (House of Lords, 2000).

e) Promoting Self Care - CAM systems tend to emphasize a practitioner-patient partnership to looking at options. There is also an emphasis on promoting self responsibility and promote interventions that incorporate quality of life, patient preferences, and patient satisfaction into the therapeutic and diagnostic decision-making processes.

f) Spiritualism - Most of the world's traditional healing systems—Traditional Chinese Medicine, Indian Ayurvedic Medicine, and Native American Medicine—are based on the assumption that humans are connected to one another, to the earth, and the spiritual world in many more ways than science

has yet uncovered. Disease, in these systems of medicine, is an imbalance within our bodies as well as between the way we live and the natural, social, and spiritual world (Gordon, 1996).

These common characteristics of the major CAM systems also are shared by many branches of mainstream medicine. For example, conventional medicine has long recognized the need for promoting a good, balanced diet as a means of maintaining health and warding off a host of nutrition-related illnesses, such as diabetes and cancer. Yet, those who promote such ideas often go largely ignored by the major medical institutions.

For example, according to a recent report by the Nutrition Education Consortium (1997), despite strong scientific data, public interest, US government reports, society studies, and congressional mandates, the teaching of nutrition in medical schools and residency programs remains "woefully inadequate." Most medical schools do not even have faculty trained specifically in nutrition (Cooksey et al, 2000), despite the fact that nutrition is one of the most significant contributors to good health.

There are a number of reasons why nutrition is not a central focus of mainstream medical education. However, the most significant barrier to revamping medical education to include such crucial information appears to be faculty resistance (Armstrong & Koffman, 1998). As Dr. Walter Willett, Professor of Epidemiology and Nutrition at the Harvard School of Public Health recently, stated before the Commission, "it is a sad

reality that nutrition is not very much a part of mainstream medicine," but is more representative of some of the CAM systems.

Other major elements of CAM systems, such as spirituality, have also begun to make their way into medical education reform. The American Association of Medical Colleges (AAMC) recently called for the incorporation of knowledge about the link between spirituality and health into medical school curricula (AAMC, 1999). However, this effort faces significant opposition by those who believe it is inappropriate, and perhaps unethical, for medical doctors to be too inquisitive or supportive of patients' spiritual beliefs or practices (Sloan et al., 2000).

Thus, although there is a great diversity among the systems of healthcare, healing, and self-care that are typically classified as CAM, there is also a great deal of similarity among them. There also is significant overlap between what is traditionally thought of as CAM and a many aspects of what is commonly referred to as mainstream medicine. These commonalities suggest to the Commission that in the not-too-distant future, divisions between CAM and conventional medicine as well as between the various CAM systems will become further blurred and that integrative medicine will become more of the norm rather than the exception.

Summary Definition of CAM

[To be discussed and drafted after the conference call]

GUIDING PRINCIPLES OF THE COMMISSION

Based on its understanding of complexities and commonalities of CAM systems and practices and their relationship to mainstream medicine, the Commission endorsed a number of principles to both guide its process for making recommendations and the recommendations themselves. These Guiding Principles, include a commitment to promoting:

Health and Healing. The body has a remarkable capacity for recovery and self-healing and a major focus of healthcare is to support and promote this capacity.

Wholeness. Health involves all aspects of life – mind, body, spirit, relationships and environment - and quality healthcare must support care of the whole person in this context.

Individuality. Every person is unique and has the right to have healthcare customized to that uniqueness, respecting their preferences and preserving their dignity.

Choice. People have the right to choose freely among therapies and qualified practitioners who are responsive to their needs and accountable for their claims and actions.

Scientific Evidence. Quality healthcare is based on rigorous scientific evidence and that evidence-base should be understandable and easily accessible to the public.

Education and Empowerment. Education about prevention, healthy lifestyles and the power of self-care and healing capacity should be made an integral part of curricula for both health care professionals and the public at all ages.

Public Involvement. Public and consumer views and participation must be included in all research and healthcare prioritizations and decisions.

Partnerships. Integrated health care requires collaborative teamwork between conventional and complementary practitioners, researchers and patients committed to the creation and delivery of optimal healing environments.

These Guiding Principles are remarkably consistent with the core values of the National Academy of Sciences' Institute of Medicine report ways to improve healthcare in the 21st century. The IOM report, entitled *Crossing the Quality Chasm: A New Health System for the 21st Century*, list 10 core beliefs that healthcare processes should be designed to reflect:

- Continuous healing relationships
- Customization based on patient needs and values
- The patient as a source of control
- Shared knowledge and the free flow of information
- Evidence-based decision-making
- Safety as a system of property

- Transparency
- Anticipation of needs
- Continuous decrease in waste, and
- Cooperation among clinicians

Because of the significant overlap of its Guiding Principles with the core beliefs of the IOM report, the Commission sees its mission as being complementary to such efforts. In particular, the Commission's recommendations will focus heavily on supporting efforts to make the nation's healthcare system more centered around and tailored to consumer preferences, particularly those with chronic, debilitating conditions.

Mission Statement

[To be discussed and drafted after the conference call]

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Complementary and Alternative Medicine—An *Annals* Series

Aware of the prevalent and increasing use of complementary and alternative medical (CAM) therapies, we became convinced that discourse about the effectiveness and safety of commonly used CAM therapies would be of value to the *Annals* readership—hence, the series of papers on the topic that begins in this issue (1, 2). This special series of invited papers consists of reports of original health services research, critical reviews of the literature, and commentary on a variety of CAM-related issues. It does not include original research that directly addresses the clinical effectiveness of specific CAM therapies, but that is not our purpose. Our intention is rather to provide physicians with synoptic reports of the state of the science for commonly used CAM therapies, thought pieces addressing the broader social aspects of CAM therapy (including credentialing of practitioners, legal and ethical concerns), and discussion of topics pertaining to CAM research (including placebos, medical pluralism, taxonomy, pharmacology of herbal products, and the rules of scientific evidence). Taken together, the articles in this series are intended both to provide useful information to practicing clinicians and to stimulate further research and policy development in this area. Publication of the series reflects *Annals'* continuing interest in the practice of medicine in the broadest sense. As always, we encourage readers to share their reactions and comments with us.

David M. Eisenberg, MD
Ted J. Kaptchuk, OMD
Harvard Medical School
Boston, MA 02215

Christine Laine, MD, MPH
Senior Deputy Editor

Frank Davidoff, MD
Editor Emeritus

Requests for Single Reprints: David Eisenberg, MD, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, W/K-400, Boston, MA 02215.

Current Author Addresses: Drs. Eisenberg and Kaptchuk: Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, W/K-400, Boston, MA 02215.
Drs. Laine and Davidoff: American College of Physicians–American Society of Internal Medicine, 190 N. Independence Mall West, Philadelphia, PA 19106.

Ann Intern Med. 2001;135:208.

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2. **Kaptchuk TJ, Eisenberg DM.** Varieties of healing. 2: A taxonomy of unconventional healing practices. Ann Intern Med. 2001;135:196-204.

Varieties of Healing. 2: A Taxonomy of Unconventional Healing Practices

Ted J. Kaptchuk, OMD, and David M. Eisenberg, MD

The first of two essays in this issue demonstrated that the United States has had a rich history of medical pluralism. This essay seeks to present an overview of contemporary unconventional medical practices in the United States. No clear definition of "alternative medicine" is offered because it is a residual category composed of heterogeneous healing methods. A descriptive taxonomy of contemporary unconventional healing could be more helpful. Two broad categories of unconventional medicine are described here: a more prominent, "mainstream" complementary and alternative medicine (CAM) and a more culture-bound, "parochial" unconventional medicine. The CAM component can be divided into professional groups, layperson-initiated popular health reform movements, New Age healing, alternative psychological therapies, and non-normative scientific enterprises. The parochial category can be divided into ethno-medicine, religious healing, and folk medicine. A topologic examination of U.S. health care can provide an important conceptual framework through which health care providers can understand the current situation in U.S. medical pluralism.

Ann Intern Med. 2001;135:196-204. www.annals.org
For author affiliations and current addresses, see end of text.
See editorial comment on p 208.

Defining unconventional medicine by "what it is" does not work. *Alternative medicine* is an umbrella-like term that "represents a heterogeneous population promoting disparate beliefs and practices that vary considerably from one movement or tradition to another and form no consistent . . . body of knowledge" (1). Alternative medicine is a large residual category of health care practices generally defined by their exclusion and "alienation from the dominant medical profession" (2).

Besides an absence of shared principles, an accurate definition of alternative medicine is further confounded because the boundary demarcating conventional and irregular medicine has always been porous and flexible (3). Therapies move across that border; for example, nitroglycerin (4) and digitalis (5) began as alternative drugs, just as corn flakes and graham crackers began as unconventional health foods (6). Entire professions change sides. In 1903, when the American Medical Association needed both a larger referral base for specialists and new allies in its fight with osteopaths, chiropractors, and Christian Scientists, it boldly reversed its policy and declared homeopaths to be conventional MDs (7). Likewise, osteopathy ceased being a renegade profession after World War II (8–10).

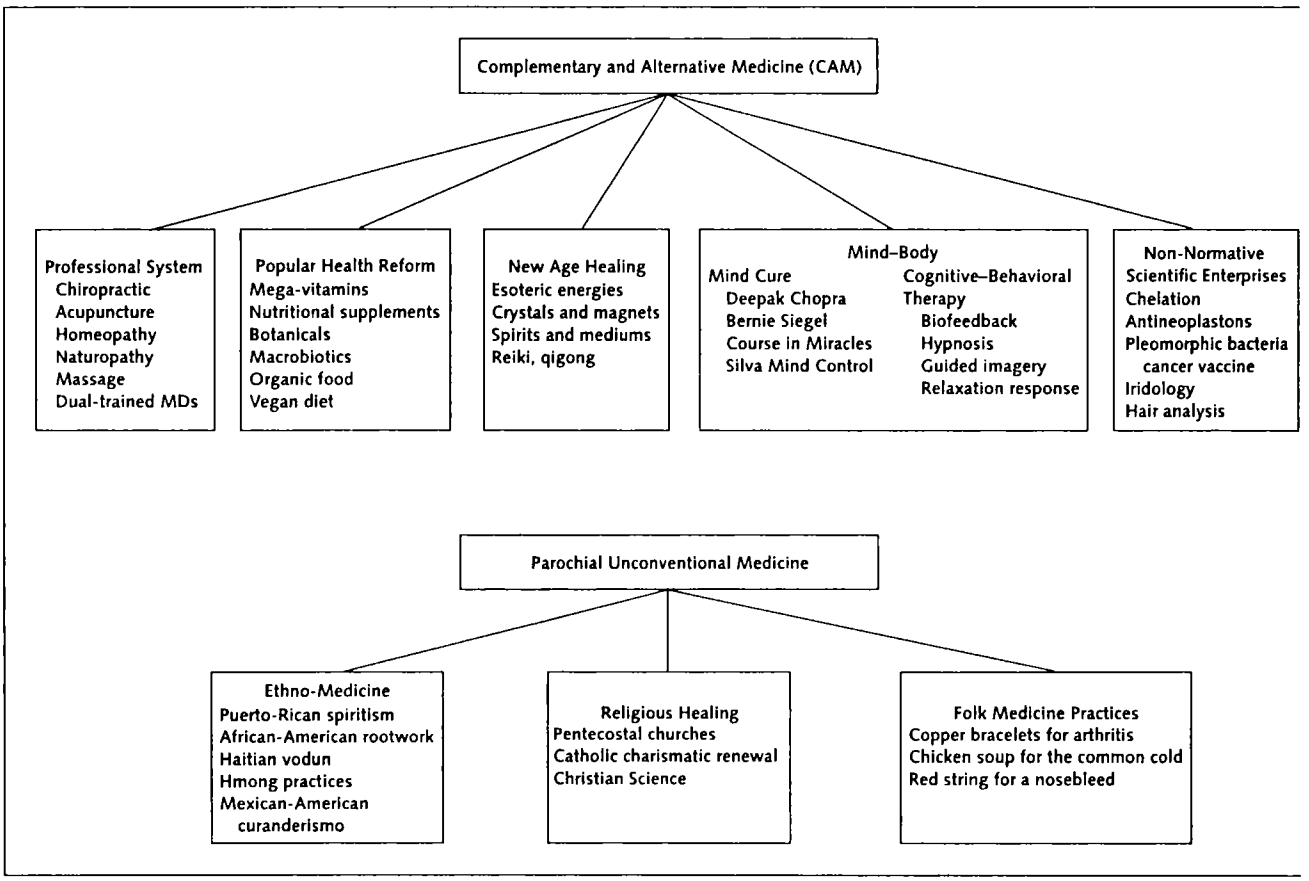
The first of two essays in this issue (pp 189-195) demonstrated that the United States has had a rich history of medical pluralism. This essay offers an overview of alternative medicine. Because of the inherent problems in defining a flexible residual category, we present a taxonomy of what is currently considered unconventional healing in the United States.

The number of named alternative therapies available in the United States easily soars into the hundreds (11–16). Many classification systems have been proposed (17–24). In an effort to further discussion, we offer a new taxonomy that we believe configures the domains of unconventional medicine across a broader spectrum of health practices. We do not expect that our attempt will be definitive (nor do we necessarily believe a perfect schema is possible). Any classification system is limited because such human phenomena resist discreteness as well as being fixed in time. As we point out, overlap often occurs. Inevitably, subjectivity affects the categorization and perceptions of "affinities." A summary of our schema is presented in the **Figure.**

Unconventional healing practices can be divided into two types: one that appeals to the general public and another that confines itself to specific ethnic or religious groups. The broadest category of unconventional medicine is easily recognized because its health care claims to be independent of any sectarian belief or faith and is said to depend on universal and even "scientific" laws (25). It is the best-known variety of unconventional medicine in the United States and recently, in a loose alliance, has become known as complementary and alternative medicine (CAM) (25).

The second kind of unconventional practice is typically confined to narrow groups, such as members of particular religions (for example, Pentecostal Chris-

Figure. **Unconventional healing practices: taxonomy with examples.**



tians), ethnic groups (for example, Puerto-Rican spiritism), or regions (for example, southern Appalachian folk beliefs). These practices are culturally self-contained, function outside any broader coalition, often lack the markings of a health delivery system, and in this essay are referred to as parochial unconventional medicine.

Complementary and Alternative Medicine

The wide-ranging category of CAM can be divided into five main sectors, which are described below.

Professionalized or Distinct Medical Systems

Probably the most recognizable alternative healing practices are those that are organized into medical movements with distinct theories, practices, and institutions. Licensure as an independent profession is a goal if not always an actuality. Medical institutions, such as schools, professional associations, and offices with secretaries and billing procedures, are readily visible. An extensive corpus of technical literature helps guide therapy and practice and sharpens distinctness. Because they are easiest to describe and define, these systems are the most prominent in discussions of CAM. The six major components of this sector of CAM are chiropractic, acupuncture, homeopathy, naturopathy, massage, and dual-functioning MDs.

Chiropractic, the largest alternative medical profession in the United States, accounts for almost a third of all visits to CAM providers (26). The body's biomechanical structure, especially the spine, is seen as basic to health, and chiropractic emphasizes spinal manipulation as treatment (27, 28). Licensed as primary health care providers in all 50 states, chiropractors especially treat musculoskeletal disorders (29, 30).

Osteopathy was once a second manual therapy competing for the same patients as chiropractic. Since World

War II, osteopathy has reconfigured itself and has become "conventional"; the status of an osteopathic physician is equivalent to that of an MD. A minority of patients (<17%) visiting DOs receives the kind of manipulative therapy that would still be considered unconventional by orthodox MDs (31, 32).

Acupuncture relies on the insertion of fine needles at well-defined specific sites to regulate and balance humoral forces and "energy" (*qi*) and to promote health (33). As a component of East Asian medicine, acupuncture is often complemented with herbal treatment. Since the 1970s, acupuncture has spread throughout the United States and is independently licensed as a health care profession in 37 states (34).

Homeopathy uses the principle of "like cures like": A substance that produces a set of symptoms in a healthy person is used to treat an identical symptom complex in a sick person (35, 36). The substance, however, is extremely diluted, often to the extent that none of the original substance is likely to remain. Currently, homeopaths can be independently licensed in only three states, but other licensed practitioners also prescribe these remedies.

Naturopathy uses a wide assortment of therapies that its practitioners call "natural." Herbs, nutritional supplements, dietary and lifestyle advice, homeopathy, manipulation, and counseling can all be components of the repertoire (37). The term *naturopathy* was adopted in 1902 to replace the old word *hydropathy*, which denoted water-cure therapy. Currently, naturopaths can be licensed as primary care providers in 11 states; naturopathy is most common in the Pacific Northwest (38).

Massage therapists can be professionally licensed in more than 25 states (39). Although massage therapists (also called "body-workers" or "hands-on therapists") clearly perform unorthodox interventions (40–42), they overlap with recognized biomedical professions, such as physical therapy, or simple attempts at relaxation. Complementary alternative medicine techniques that address body alignment and awareness (such as the Feldenkrais method [43] and the Alexander technique [44]) are often classified as massage therapy because they involve "body-work."

Medical doctors who have opted to deliver, supervise, or advocate CAM are a significant force in alternative medicine (45, 46). These dual-trained practitioners lend enormous prestige and legitimacy to alternative medicine and can be prominent spokespersons (47–50). Providing what is sometimes called "integrative" medicine, these physicians can deliver a broad range of CAM services or can focus on a single therapy.

Popular Health Reform (Alternative Dietary and Lifestyle Practices)

The health food movement, also known as alternative dietary and lifestyle practices, is an important component of CAM. Depending on how one calculates, it may in fact dwarf the professional sector (51). In the scholarly literature, this type of healing is labeled "popular health reform" because these practices are often advocated by untrained laypersons who often claim knowledge superior to that of expert scientists (6).

Popular health reform is delivered by a melange of resources, such as health food stores, popular books and journals, charismatic leaders, alternative provider recommendations, mass media attention, and a considerable amount of neighborly advice. This popular movement usually espouses a vegetarian or near-vegetarian diet, or avoidance of chemically treated and, more recently, radiated or genetically altered food. Details of particular programs tend to have enormous heterogeneity. Recommendations might range from eating only cooked food (for example, macrobiotics [52]) to eating only raw food (for example, fruitarianism) (53), or from heavy reliance on nutritional and botanical supplements or aromatherapy to their absolute prohibition. Recent shifts in biomedicine's understanding of nutrition and its role in pathophysiology have also encouraged a general social movement toward behaviors that were once thought to belong to health food "nuts" (54). This, in turn, has caused a blurring of the distinction between orthodox and unorthodox lifestyles and has helped increase the awareness of CAM in society (51).

New Age Healing

The New Age is the source of many extremely disparate beliefs and practices that can describe overlapping religious and healing movements (55, 56). Furthermore, confounding discussion, the term *New Age* may not be "adopted by a given individual (indeed, may be rejected), even though to outsiders the practice appears to fall into this category" (57). As a religious movement, the New Age is about a "new dispensation": less about law and limitation and more about unrestricted self-expres-

sion and unlimited abundance. Instead of any fixed religious doctrine, the movement emphases a fluid "spirituality." It is not uncommon to see an iconography that is a grab bag of Hindu, Christian, Buddhist, Rosicrucian, and pagan motifs (18).

The New Age is also a health care category because spiritual equanimity and physical health are considered to be linked. In fact, New Age beliefs resist any separation between spirituality and physical health or faith and medicine. Scholars point out that the New Age seeks a "third way," "a spiritual science," between revealed biblical religion and "atheistic–materialist" science (58).

A key New Age connection between the spiritual and physical realms involves esoteric energies that resemble a veritable "electromagnetic" dimension of wellness (59, 60). The names of the energies change—life force, universal innate intelligence, psychic, parapsychological, psi, astral, spiritual vital force—but they inevitably elude scientific detection (61). Healers can transmit these forces. Devices and substances that emit them, such as radionic machines, magnetic devices, pyramids, crystals, and other electromagnetic gadgets, are constantly being incarnated. The health influence of planets and stars and some medical astrology could be considered another type of such energy (62). Healing energy therapies not explicitly connected to the New Age, such as "therapeutic touch" (often applied by nurses) (63) and "laying-on of hands" (64), can ultimately be traced here. New "energy" forces are being recruited from Asia. Chinese qigong (65) and Japanese Reiki (66), while obviously not originally New Age, find it a hospitable environment for cross-cultural migration (61).

Sometimes the religious and health domains are bridged through "clairvoyant physicians" or the healing presence of the spirits, religious icons, or leaders (67–70). Best-selling books by spirit mediums who describe spiritual healing for "incurable diseases and maladies" help keep the phenomena in prominent view (71). A third type of New Age healing connection between the cosmos and human health operates through "mind" forces and can also be considered a subcategory of CAM psychological intervention (see following discussion).

Psychological Interventions: Mind Cure and "Mind–Body" Medicine

Psychotherapeutics in CAM has two sources: one that is purely CAM and one that overlaps with conventional psychological interventions. In the scholarly literature, the exclusively CAM psychological tradition is referred to as Mind Cure or New Thought (17, 72–74). These therapies, which can include a myriad assortment of visualizations, affirmations, intentions, meditations, and emotional release techniques, all share a single point: Mental forces are the preeminent arbiters of health. Psychotherapists affiliated with CAM believe that the mind is the most dominant agency for restoring well-being and maintaining health. The notions that "What you think is what is real" and that "Your emotions determine cancer or other major disease" are dogma repeated over and over like mantras. Such bestsellers as Bernie Siegel's *Love, Medicine and Miracles* and Deepak Chopra's *Ageless Body, Timeless Mind: The Quantum Alternative to Growing Old* testify to the appeal of these beliefs.

The other sector of CAM "mind–body" therapies merges into conventional psychotherapy and cognitive–behavioral interventions. The relationship can be confusing or can produce gray areas. Generally speaking, in conventional medicine, psychotherapeutics is conceded only limited agency and is primarily used to treat psychological problems or to help patients cope when conventional treatments are not available or are insufficient. Psychotherapeutics remains a subordinate component of the conventional medical system (75, 76).

However, whenever too much power or efficacy is attributed to regular psychological therapies and they are used "off-label," they "transgress" and can become CAM. For example, most MDs would consider psychotherapy appropriate for reactive depression after a cancer diagnosis, but psychotherapy used to cure a metastatic tumor would be considered unconventional (77). The same holds true for various cognitive–behavioral therapies that use "passive nonvolitional intention," such as biofeedback, stress management, relaxation response, meditation, guided imagery, and hypnosis. When practitioners of these techniques make modest claims limited to small physiologic changes, the techniques are acceptable as subordinate components of conventional medicine. For example, biofeedback for fecal incontinence (78) or, more debatably, relaxation response for mild hypertension (79, 80) can seem legitimate or can at least achieve borderline acceptability, but both would be considered distinctly alternative if used to treat diabetes.

Another source of CAM psychotherapeutics involves the fact that between 250 (81) and 400 (82)

named types of psychological treatments are thought to exist. Any therapy deemed unacceptable by the mainstream can find a receptive home in CAM. Also, whether self-help groups, such as Alcoholics Anonymous, are CAM is highly debatable, but to the extent that they are not conventional they can automatically be described as alternative (83, 84).

Non-Normative Scientific Enterprises

Non-normative scientific enterprises typically appeal to patients with potentially catastrophic illnesses, such as cancer. These therapies can include sophisticated pharmacologic agents and often revolve around a well-known proponent who can have legitimate and even impressive scientific or medical credentials but advocates theories and practices unacceptable to the general scientific community. Examples include Dr. Stanislaw Burzynski's "antineoplastons" and Dr. Virginia Livingston-Wheeler's "pleomorphic bacteria cancer vaccine" (85, 86). Non-normative interventions can sometimes blur into the conventional practice of prescribing recognized pharmaceuticals for off-label uses (87–89). Unvalidated diagnostic methods and unconventional technological devices that diagnose or heal can be considered part of the non-normative science category. Representative examples are hair analysis, which purportedly detects a wide variety of diseases and nutrient imbalances (90); iridology, in which illness is diagnosed through a detailed examination of the iris (91); and chelation therapy to reverse the processes of arteriosclerotic disease (92).

Parochial Unconventional Medicine

Unlike CAM, parochial unconventional practices appeal to a more narrowly defined constituency. Three main parochial categories exist.

Ethno-Medicine

The healing practices of specific ethnic populations make up a critical component of U.S. community health care (93). These practices are rooted in the widely differing medical or religious traditions of various cultures. Well-known examples include Puerto-Rican spiritism, (94, 95), Mexican-American curanderismo (96, 97), Haitian vodun (98, 99), Native American traditional medicine (100), Hmong folk practices (101), African-American "rootwork" (102), and African-American spiritual church healing (103, 104). Occasionally, a culture-bound medical system ventures outside its historical sphere of influence and becomes another option available to the general U.S. population. This is true of acupuncture and seems to be coming true for India's Ayurvedic medicine as it follows in the footsteps of yoga, its pioneering offspring (105). Partly because of New Age affinities, this may also happen with Tibetan medicine and Native American ceremonies (106, 107). Nonetheless, as a general taxonomic statement, consistent with stubborn racist prejudices, one could say that medical practices of ethnic communities are described as ethno-medicine while the "ethno-medicine" of mainstream white Americans is generally classified as CAM.

Folk Medicine Practices

Folk healing practices form a deeply embedded, unorganized, and seemingly spontaneous response to illness. Many of these practices are confined to specific geographic areas, such as southern Appalachia (108) or rural New Hampshire (109). Sometimes they can be traced back to remnants of ethnic (including Anglo-Saxon) magical traditions or earlier lay forms of self-care and home remedies. Common practices include wearing copper bracelets for arthritis, covering a wart with a penny and then burying the penny, stopping a nosebleed by placing a red string around the neck, and curing a cold with chicken soup (110–113). Besides cures, folk beliefs can also generate culture-bound diseases, symptoms, and treatment-seeking behaviors (114, 115). Some folk practices have a more widespread currency and are derived from earlier layers of premodern medicine (for example, humoral Hippocratic medicine) or medieval medical schools (for example, astrological medicine) (116, 117). Examples of remnants of Hippocratic ideas include such folk wisdom as "Bundle up to prevent a cold" or "Feed a cold and starve a fever" (115, 118, 119).

Religious Healing

Many Americans rely on religion for salutary effects on their health (120, 121). Generally, normative mainstream religious institutions have seen their role as supporting the "spiritual" dimension and avoid direct overlap or competition with the biomedical system (122). This division of labor has weakened somewhat lately;

"healing" services of one kind or another have appeared even in liberal churches and synagogues (123, 124).

The most salient forms of religious healing for physical disease can be found in Christian churches that see their ministry as replicating the miraculous healings recorded in the Bible (125, 126). This is especially true of the Pentecostal and charismatic churches, which seek to encounter and affirm the divine as manifest in both physical and mental healing (127, 128). People rising from wheelchairs or discarding crutches can be convincing signs of God's power (129, 130). Christian Science, whose origins may be closer to Mind Cure than to Christianity, also continues to be an important nonnormative source of healing in the United States (131, 132). Some religious denominations are also known for nonadherence to normative procedures (for example, Jehovah's Witnesses, who routinely decline blood transfusions) (133, 134). For any of these religious approaches, genuine "faith" is required in exchange for the promised effectiveness. Also, these approaches sharply distinguish themselves from participation in any professed coalition with the CAM movement (135).

Overview

Unconventional healing is a far-flung landscape of diverse practices. A taxonomy balances distinction with commonality. Other perspectives that emphasize interconnection and common themes are possible. Healing behaviors can be grouped into those that focus on the primacy of substances to be taken orally (herbs, homeopathy, dietary supplements, or food), those that rely on the human hand (manipulation, needles, or anointing the sick), or those that emphasize words (ritual or psychotherapy) (23, 136). One could also discuss CAM approaches on the basis of shared common themes (for example, belief in nature, vitalism, and spirituality), as has been done extensively elsewhere (25). No matter how it is classified, however, this entire domain provides concrete practices and "pathways of words, feelings, values, expectations [and] beliefs" that reorder and organize the illness experience (137). Because patients include unconventional healing as an important component of their response to illness, physicians must understand this complex spectrum of health care practices.

Conclusion

A single definition of alternative medicine that tries to state "what it is" inevitably is not satisfying, since alternative healing includes a wide assortment of heterogeneous therapies and beliefs. A taxonomy of unconventional health care practices can help define alternative medicine and provide a conceptual framework for it. Such a model can help physicians understand and participate in the current discussion on unconventional healing practices as it rapidly unfolds.

From Harvard Medical School, Boston, Massachusetts.

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Requests for Single Reprints: Ted J. Kaptchuk, OMD, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, W/K-400, Boston, MA 02215.

Current Author Addresses: Drs. Kaptchuk and Eisenberg: Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, W/K-400, Boston, MA 02215.

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Long-Term Trends in the Use of Complementary and Alternative Medical Therapies in the United States

Ronald C. Kessler, PhD; Roger B. Davis, ScD; David F. Foster, MD; Maria I. Van Rompay, BA; Ellen E. Walters, MS; Sonja A. Wilkey, BA; Ted J. Kaptchuk, OMD; and David M. Eisenberg, MD

Background: Although recent research has shown that many people in the United States use complementary and alternative medical (CAM) therapies, little is known about time trends in use.

Objective: To present data on time trends in CAM therapy use in the United States over the past half-century.

Design: Nationally representative telephone survey of 2055 respondents that obtained information on current use, lifetime use, and age at first use for 20 CAM therapies.

Setting: The 48 contiguous U.S. states.

Participants: Household residents 18 years of age and older.

Measurement: Retrospective self-reports of age at first use for each of 20 CAM therapies.

Results: Previously reported analyses of these data showed that more than one third of the U.S. population was currently using CAM therapy in the year of the interview (1997). Subsequent analyses of lifetime use and age at onset showed that 67.6% of respondents had used at least one CAM therapy in their lifetime. Lifetime use steadily increased with age across three age cohorts: Approximately 3 of every 10 respondents in the pre–baby boom cohort, 5 of 10 in the baby boom cohort, and 7 of 10 in the post–baby boom cohort reported using some type of CAM therapy by age 33 years. Of respondents who ever used a CAM therapy, nearly half continued to use many years later. A wide range of individual CAM therapies increased in use over time, and the growth was similar across all major sociodemographic sectors of the study sample.

Conclusions: Use of CAM therapies by a large proportion of the study sample is the result of a secular trend that began at least a half century ago. This trend suggests a continuing demand for CAM therapies that will affect health care delivery for the foreseeable future.

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For author affiliations and current addresses, see end of text.

Community surveys done over the past decade have documented that a substantial proportion of Americans use complementary and alternative medical (CAM) therapies (1–4), which have been defined as "interventions neither taught widely in medical schools nor generally available in U.S. hospitals" (1). Many managed care organizations have responded to this evidence by providing insurance coverage for some CAM therapies (5). Furthermore, most U.S. medical schools have begun offering courses on CAM therapies (6).

These responses imply that CAM therapies are perceived to be a force to be reckoned with for some time to come. Yet, little is known about the likelihood that this will be the case. The prevailing assumption is that CAM therapies were used by a fairly narrow segment of the population until the 1970s, at which time the ideology associated with the youth counterculture led to a rapid dissemination and use of CAM therapies that has persisted through the present (7). However, lack of rigorous trend data from epidemiologic surveys have precluded evaluating this assumption rigorously or projecting the future growth of CAM therapies on the basis of evidence of past trends.

In the current report, we present nationally representative trend data of this sort from a prevalence study. The data came from retrospective self-reports of a nationally representative sample of the U.S. general population in a 1997–1998 telephone survey (4) about age at first use of 20 representative CAM therapies. In our analysis, we studied trends by examining between-cohort differences in rates of initiation of CAM therapy use (8). In the absence of prospective data, which do not exist, our results represent, to our knowledge, the most accurate information currently available on U.S. trends in CAM therapy use over the past half-century.

METHODS

Sample

The telephone survey was conducted between November 1997 and February 1998 in a nationally representative household sample. Random-digit dialing was

used to select households, and a random-selection method was used to select one respondent 18 years of age or older for interview in each sample household. Eligibility was limited to English speakers without cognitive or physical impairment that would prevent interview completion. The average administration time was 30 minutes. A $20 financial incentive for participation was offered. The Beth Israel Deaconess Committee on Clinical Investigations, Boston, Massachusetts, approved the survey methods.

Of the initial sample of 9750 telephone numbers, 26% did not work, 17% were not assigned to households, and 9% were unavailable despite six attempted follow-up contacts. Of the remaining households, 481 were ineligible because of language barrier or cognitive or physical incapacity. Of the 4167 total eligible respondents, 1720 (41.3%) completed the interview on initial request. Of a random subsample of 1066 persons who initially declined and were offered an increased stipend ($50), 335 agreed to participate. In all, 2055 interviews were completed. After we extrapolated the conversion rate to all persons who had initially declined and weighted the data for the undersampling of those who participated after initially declining, the weighted overall response rate among eligible respondents was 60%.

The data were weighted for three factors: 1) probability of selection within household as well as geographic variation in cooperation (by region of the country and urbanicity [local population density]), 2) nonresponse, and 3) post-stratification for aggregate discrepancies between the sample distributions and Census population distributions on a variety of sociodemographic variables (9, 10). More details on the sample design have been presented elsewhere (4). Age data were missing for 6 respondents; our analyses are limited to the remaining 2049 respondents.

Measures

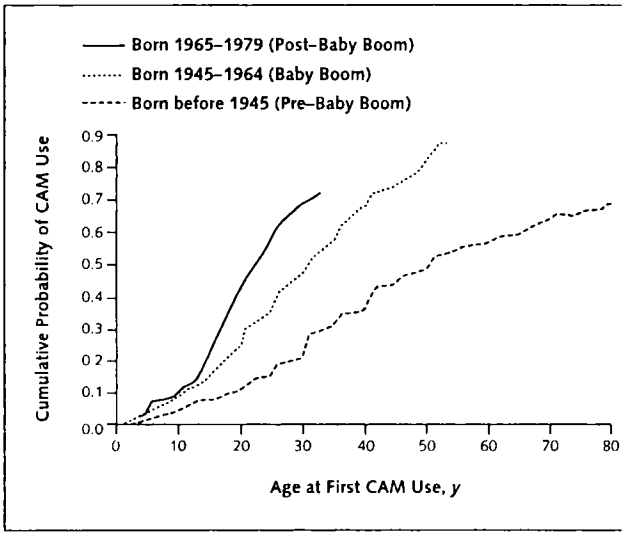
The interview was described to respondents as a survey by investigators from Harvard Medical School about the health care practices of Americans. Interviewers made no mention of CAM therapies. The first substantive questions concerned perceived health, functional impairment due to health problems, interactions with physicians, and history of chronic medical conditions. Interviewers then queried respondents about their lifetime and recent use of 20 CAM therapies—acupuncture, aromatherapy, biofeedback, chiropractic care, commercial diet programs, energy healing (for example, laying on of hands), folk remedy, herbal medicine, homeopathy, hypnosis, imagery, lifestyle diet (such as vegetarianism or macrobiotics), massage, megavitamin therapy, naturopathy, osteopathy, relaxation techniques, self-help group, spiritual healing by others, and yoga. Users of each therapy were asked their age at first use as well as details about the conditions for which the therapy was initiated. The final set of questions dealt with sociodemographic issues.

Cohorts were aggregated into three subsamples: pre-baby boom (respondents $\geq$54 years of age at interview, born before 1945); baby boom (34 to 53 years of age at interview, born 1945–1964); and post–baby boom (18 to 33 years of age at interview, born 1965–1979). For sociodemographic variables, we used two categories for sex (male or female), four for race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, or other), four for education (less than high school, high school graduate, some college, or college graduate), four for U.S. region (northeast, midwest, south, or west), and four for urbanicity (residence in a large city, small city, suburb, town/rural).

Statistical Analysis

All analyses were performed with weighted data by using SAS statistical software (11). To assess differences in trends among cohorts, the Kaplan–Meier (12) method was used to generate a graphic representation of the cumulative lifetime prevalences of CAM therapy use according to cohort. The significance of historical changes in lifetime use was estimated by using discrete-time survival analysis (13), a method of survival analysis appropriate for data in which events are recorded only at discrete time points (for example, in yearly increments). Discrete-time survival analysis was operationalized as a logistic regression with person-year as the unit of analysis and first use of CAM therapy as the outcome variable. The predictors of primary interest were a series of dummy variables for decades of historical time, and covariates included sociodemographic and dummy variables adjusted for the baseline hazard rate of each year of a person's life. This model results in an intercept for each time period, and the odds ratios (ORs) can be interpreted as the relative risk for the annual risk for use

Figure. **Weighted Kaplan–Meier estimates of age of first use of any complementary and alternative medical (CAM) therapy among lifetime users according to cohort.**



Intercohort differences are significant at the 0.001 level.

of alternative therapy. Subsample models were estimated to study sociodemographic variation in trends. Disaggregated models were estimated to study trends in the use of particular CAM therapies.

To adjust for the design effects introduced by weighting of the data, the method of jackknife repeated replications (14) was used to estimate standard errors (SEs). For this method, we used user-written macros in SAS statistical software. For this process, 50 random primary sampling units were created with two random half-samples in each unit for a total of 100 random replicates. Jackknife repeated replication is a method that uses simulations of coefficient distributions in subsamples to generate empirical estimates of SEs and significance tests. The ratios of the coefficients to these adjusted SEs are used to compute the 95% CIs of the ORs. Tests for the significance of sets of predictors taken together were computed by using the Wald chi-square test from coefficient variance–covariance matrices based on the jackknife repeated replications simulations.

Table 1. **Trends in Relative Risk for First Use of 20 Specific Complementary and Alternative Medical Therapies, according to Decade***

Therapy	1930s–1950s		1960s		1970s	
	% person-years†	RR	*% person-years†*	RR (95% CI)	*% person-years†*	RR (95% CI)
Acupuncture	0.0‡	1.0	0.1	4.3 (0.7–27.3)	0.2	7 3 (1.6–33.7)§
Aromatherapy	0.0	–	0.0	1.0 (referent)	0.2	3.5 (0.9–14.1)
Biofeedback	0.0‡	1.0	0.0‡	2.0 (0.2–21.2)	0.3	18.7 (4.4–79.3)§
Chiropractic care	0.8	1.0	0.1	1.3 (0.9–2.1)	1.5	1.7 (1.2–2.5)§
Commercial diet programs	0.1	1.0	0.4	7.0 (2.6–18.3)§	0.5	8.9 (3.4–23.3)§
Energy healing	0.0‡	1.0	0.0‡	1.9 (0.3–14.4)	0.3	9.8 (2.8–34.7)§
Folk remedy	0.1	1.0	0.1	0.5 (0.1–2.1)	0.2	2.2 (0.8–6.1)
Herbal medicine	0.1	1.0	0.1	1.6 (0.2–14.5)	0.5	8.3 (1.1–64.5)§
Homeopathy	0.0	1.0	0.0‡	1.0 (referent)	0.2	4.3 (1 0–17.8)§
Hypnosis	0 1	1.0	0.2	0.9 (0.3–2.8)	0.4	2.7 (1.3–5.6)§
Imagery	0.0‡	1.0	0.0‡	3.4 (0.6–18.3)	0.3	22.5 (5.4–93.8)§
Lifestyle diet	0.0‡	1.0	0.2	5.0 (1.3–18.4)§	0.3	10.7 (3.0–38.1)§
Massage	0.2	1.0	0.4	2.4 (1.1–5.2)§	0.4	2.7 (1.1–6.4)§
Megavitamins	0.0‡	1.0	0.2	7.8 (3.5–17.3)§	0.3	9.5 (3.6–25.6)§
Naturopathy	0.0	–	0.0	1.0 (referent)	0.0‡	1.5 (0.1–17.7)
Osteopathy	0.1	1.0	0.1	1.3 (0.4–3 8)	0.1	1.7 (0.5–5.7)
Relaxation techniques	0.2	1.0	0.3	2.3 (1.1–4.7)§	1.2	5.8 (2.9–11.3)§
Self-help group	0.2	1.0	0.1	7.1 (3.0–16.8)§	0.4	21.6 (14.9–31.3)§
Spiritual healing by others	0.1	1.0	0.1	1.7 (0.4–6 8)	0.5	5.6 (1.7–19 3)§
Yoga	0 1	1.0	0.2	2.6 (0.5–12.9)	0.4	5.7 (1.4–23.6)§
Any Therapy	1.4	1.0	2.1	1 7 (1.2–2.5)§	3.9	2.7 (2.0–3.7)§

* Relative risk was approximated by exponentiating logistic regression coefficients. RR = risk ratio.
† Indicates percentage of person-years between the ages of 20 and 40 in which a therapy was first used.
‡ Actual value is a nonzero value < 0.1%.
§ Significant at the 0.05 level by using a two-sided test.

RESULTS

Differences in Aggregate Use Trends among Cohorts

At the time of interview, 67.6% of all respondents had used at least one CAM therapy at some time in their lives. The **Figure** presents Kaplan–Meier age-of-onset curves showing trends in each cohort in the cumulative probabilities of use according to age. Of note are the dramatic differences in use among cohorts. This is seen most clearly by focusing on cumulative probabilities of use for age 33 years, the oldest age represented in all three cohorts. Approximately 3 of every 10 respondents in the pre–baby boom cohort used some type of CAM therapy by the age of 33 years compared with 5 of 10 in the baby boom cohort and 7 of 10 in the post–baby boom cohort.

Historical Trends in Aggregate Use

The aggregate data in the **Figure** are presented in a different format in the bottom row of **Table 1**, where the risk ratios are shown from a discrete-time survival model that estimated the effects of historical time in predicting age at first use of CAM therapy among respondents after adjustment for person-year and sociodemographic variables. The contrast category is first use before 1960. Consistent with the pattern in the **Figure**, the results of the model for the outcome of any therapy show monotonically increasing risk ratios in each decade from the 1960s through the 1990s.

Possible demographic subsample differences in time trends were examined by estimating separate subsample models that were identical to the discrete-time survival model for any therapy and by evaluating the statistical significance of differences in trends across subsamples. No statistically significant (0.05 level in two-sided tests) differences in trends were found for sex, race/ethnicity, education level, region of the country, or urbanicity.

Table 1—**Continued**

1980s		1990s		*P* Value
% person-years†	RR (95% CI)	*% person-years†*	RR (95% CI)	
0.2	11.6 (2.7–49.2)§	0.3	14.3 (3.4–58.9)§	<0.001
0.1	4.9 (1.3–18.2)§	0.9	32.4 (9.8–107.5)§	<0.001
0.2	12.7 (2.9–56.2)§	0.1	9.2 (2.2–38.0)§	<0.001
2.0	2.6 (1.8–3.7)§	2.9	3.5 (2.4–5.2)§	<0.001
0.6	9.5 (3.5–26.0)§	0.6	14.0 (5.4–36.3)§	<0.001
0.2	8.4 (2.1–33.0)§	0.5	28.7 (8.6–95.7)§	<0.001
0.1	1.5 (0.6–3.7)	0.1	1.4 (0.5–4.0)	>0.2
0.6	10.2 (1.4–75.9)§	1.3	27.9 (3.7–210.4)§	<0.001
0.3	8.3 (2.1–31.9)§	0.2	10.7 (2.9–39.7)§	0.001
0.5	3.5 (1.6–7.7)§	0.2	2.3 (1.2–4.3)§	0.001
0.5	40.2 (10.1–160.1)§	0.3	31.5 (8.5–117.0)§	<0.001
0.3	10.6 (3.0–37.3)§	0.3	14.9 (3.7–59.9)§	0.002
0.9	5.7 (2.6–12.7)§	1.9	13.0 (6.1–27.8)§	<0.001
0.3	15.6 (5.3–46.0)§	0.5	23.7 (9.2–60.9)§	<0.001
0.1	3.8 (1.7–8.8)§	0.1	4.2 (1.9–9.3)§	>0.2
0.1	0.9 (0.3–2.3)	0.1	0.6 (0.2–1.8)	>0.2
1.0	6.5 (3.2–13.1)§	1.4	7.8 (3.8–16.0)§	<0.001
0.8	39.3 (29.0–53.3)§	0.5	30.8 (22.3–42.5)§	0.002
0.4	4.5 (1.4–13.9)§	0.4	6.7 (2.2–20.1)§	<0.001
0.2	2.8 (0.7–11.7)§	0.4	5.5 (1.4–21.1)§	0.003
4.3	3.3 (2.4–4.5)§	6.1	5.4 (3.9–7.6)§	<0.001

Trends in the Use of Specific Therapies

Table 1 also shows the risk ratios to estimate first use of each of the 20 CAM therapies assessed. All trends are statistically significant except for those for folk remedy, naturopathy, and osteopathy; thus, in the United States over the past half-century, use of most kinds of CAM therapy has grown.

The data in **Table 1** can be transformed to yield information on changes over historical periods of time rather than across cohorts. Data resulting from this transformation (results not shown) yield interesting insights into variations in the timing of societal adoption of the different therapies. Use of all but 4 of the therapies increased in the 1960s compared with pre-1960, and the increase was with a risk ratio of 2.0 or greater for 11 of these therapies. In the 1960s, growth in the use of 4 therapies increased markedly—commercial diet programs, lifestyle diet therapy, megavitamin therapy, and self-help groups. Increased use of all 4 of these therapies is consistent with the largely increased national interest that was seen at that time in fitness and health as a result of a fitness campaign initiated by President Kennedy in the early 1960s (15).

Our analysis also shows markedly increased growth in the use of alternative therapies in the 1970s as well; use of all the therapies increased in this decade compared with use in the 1960s, and this increase was substantial for 4 of the therapies (biofeedback, energy healing, herbal medicine, and imagery). In addition, 8 of the

Table 2. **Persistence of Use among Lifetime Users, according to Time since Onset of Initial Use**

Years Since First Onset of Use	Current Use of All Complementary and Alternative Medical Therapy in Lifetime Users ± SE,* %†
1–4 y	60.2 ± 1.7
5–10 y	47.0 ± 1.6
11–20 y	48.8 ± 1.5
≥21 y	45.7 ± 1.5

* Standard error of the percentage estimate.
† Percentage of lifetime users who continue to use currently.

20 assessed therapies had their largest rate of growth during the transition from the 1960s to the 1970s (biofeedback, energy healing, folk remedy, herbal medicine, homeopathy, hypnosis, imagery, and spiritual healing by others).

The 1980s saw more modest growth in the use of CAM therapies. Use of 14 of the therapies increased compared with the 1970s, but only 2 (massage and naturopathy) had risk ratios that were markedly greater than in the 1970s. Only yoga became significantly less popular over this time period. Overall, a modest level of growth continued in the 1990s, with 16 therapies having increased use compared with the 1980s, but only 5 of these had markedly greater risk ratios than in the 1980s (aromatherapy, energy healing, herbal medicine, massage, and yoga). Aromatherapy had the most dramatic growth during this period. Although the risk ratios for use of some of the therapies during the 1990s were lower than in the 1980s, none of these declines was statistically significant.

Next, we examined the hypothesis that observed differences in trends among cohorts were primarily due to increased use of selected CAM therapies considered mainstream (as opposed to alternative). To test this hypothesis, we repeated our cohort analyses by fitting the Kaplan-Meier age-of-onset curves to two additional definitions of alternative therapy that excluded possibly mainstream therapies. The intermediate definition excluded biofeedback, commercial diet programs, hypnosis, lifestyle diet, massage, osteopathy, and relaxation techniques from the definitions used in this report; the narrow definition also excluded imagery and megavitamin therapy. The differences in trends between cohorts remained significant ($P < 0.001$) for all definitions.

Persistence of Use

Table 2 presents data on the percentage of therapies used in the past 12 months by lifetime users, who were classified according to the number of years since first use. The unit of analysis for this table is person-therapies. Of the 2049 survey respondents, 1386 reported lifetime use of at least 1 CAM therapy, with an average of 3.03 therapies used by users, for a total of 4199 person-therapies. Continued use of a specific therapy in the 12 months before the interview was 47% among therapies begun 5 to 10 years before the interview, 48.8% for therapies begun 11 to 20 years previously, and 45.7% for therapies begun more than 20 years earlier. The lack of significant difference among prevalence rates suggests that slightly fewer than half of lifetime users continued to use CAM therapies in any given year throughout their life course.

DISCUSSION

The results reported here suggest that the lifetime prevalence of CAM therapy use in the United States has increased steadily since the 1950s. This increase appears not to be concentrated in a single population sector or decade. Furthermore, the trend is seen for several therapies, although variation can be seen in the timing of the introduction of different therapies between the 1960s and 1990s. We also found powerful cohort effects that are substantial and consistent across cohorts. The post–baby boom respondents had a higher rate of lifetime use by age 33 years than the pre–baby boom respondents had by age 79 years.

These consistent and pervasive results should dispel any suggestion (16) that use has increased for only singular complementary or alternative modalities or that the use of CAM therapies is a passing fad associated with one particular generation or fringe segment of the population. On the basis of the plausible assumption that demand for CAM therapies, similar to that for conventional health care, is sensitive to how much patients must pay out of pocket (17), it seems likely that the proportion of people using CAM therapies will increase as insurance coverage for these treatments expands in the future.

Although limitations in our data do not allow examination of persistence of use over time, we found that 50% of all CAM therapy use that had been initiated at

least 5 years before the interview had persisted at the time of the interview. This finding is consistent with the finding of a previous report (18) that most CAM therapies are used, at least in part, to prevent future illness or to maintain health and vitality as part of lifestyle choices linked to the perceived value of disease prevention and health promotion. It seems reasonable to assume that individuals' interest in prevention will probably persist throughout their lifetime, and this factor may help explain the high rate of persistent use documented in Table 2.

Our results are limited by the restriction of the sampling frame to people who spoke English and who lived in households with telephones, as well as by the relatively low response rate (60%) and the use of a financial incentive (4). Furthermore, we have no data on the accuracy of self-reports on recollection of lifetime use or age at first use of a therapy. Recall bias is a possibility, and the degree of bias might be related to respondent age. Although we could not correct for these limitations, such adjustments might have made the estimated trends less pronounced.

A second potential confounding element of this study is the constant flux in the labels for and the very existence of particular CAM therapies. These may not necessarily have remained stable throughout the examined periods. For example, some unconventional medical professions, such as "drugless practitioners" and "sanipractors," which were licensed in some states in the 1930s, have since disappeared (19).

Our finding of a pervasive increase in the use of 20 CAM therapies over the past half-century warrants reflection on these trends in a historical context. History does not work statistically, and the role of chance makes prediction even more difficult. Specific historic events (such as the invention of the polio vaccination or the discovery of a link between acupuncture and endorphins) and general secular trends (such as confidence in medical progress) are all likely to influence the use or abandonment of CAM therapies. In the future, episodes of conventional or CAM practices associated with dramatic positive developments or adverse events may tip prevalence patterns in one direction or another. Also, from a historical perspective, our data may not represent a consistent trend of increased use of CAM therapies but rather a distinct peak in a longer trend of constant fluctuation in CAM therapy use. For example, survey data from the 1920s and 1930s have revealed high rates of unconventional therapy use (20), and government statistics from 1900 document large numbers of registered unconventional practitioners (21). Our data may, in fact, be demonstrating a resurgence in CAM use after a period of diminished use during the 1940s and 1950s.

The trend of increased CAM therapy use across all cohorts since 1950, coupled with the strong persistence of use, suggests a continuing increased demand for CAM therapies that will affect all facets of health care delivery over the next 25 years. Evaluations of efficacy and effectiveness by medical researchers and treating physicians' discussions with patients hold the promise of minimizing adverse effects and maximizing the usefulness of those CAM therapies that prove effective.

From Harvard Medical School and Center for Alternative Medicine Research and Education, Beth Israel Deaconess Medical Center, Boston, Massachusetts.

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Requests for Single Reprints: Ronald C. Kessler, MD, Department of Health Care Policy, Harvard Medical School, 180 Longwood Avenue, Boston, MA 02115; e-mail, kessler@hcp.med.harvard.edu.

Current Author Addresses: Dr. Kessler and Ms. Walters: Department of Health Care Policy, Harvard Medical School, 180 Longwood Avenue, Boston, MA 02115.

Dr. Davis, Dr. Foster, Ms. Van Rompay, Ms. Wilkey, Dr. Kaptchuk, and Dr. Eisenberg: Center for Alternative Medicine Research and Education, Department of Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, Boston, MA 02215.

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When any person is dangerously ill, a tla-quill-augh is consulted, and the price of his services fixed, without his ever seeing the patient. As soon, therefore, as this preliminary part of the business is arranged, the price agreed upon is forthwith sent to his abode, and he repairs to the sick person and begins his operations. He is always paid beforehand—that payment being according to the quality of the sick person; and it is believed that the more is given the sooner and the better will be the case. It is no wonder, therefore, that they should be liberal on such occasions; but if the patient dies the fee is all returned again.

When the tla-quill-augh enters the wigwam or lodge, he views the patient with an air of affected gravity, such as we see some of our own doctors assume on entering the dwelling of a sick person, and tells the bystanders, with a shake of the head and a groan, that the case is a very bad one, and that without him the patient would have surely died.

Alexander Ross
Adventures of the First Settlers on the Oregon or Columbia River, 1810-1813
Corvallis, OR: Oregon State Univ Pr; 2000:287-88

Submitted by:
Andrew Frank, MD
Portland, OR 97210

Submissions from readers are welcomed. If the quotation is published, the sender's name will be acknowledged. Please include a complete citation (along with page number on which the quotation was found), as done for any reference.—*The Editor*

Varieties of Healing. 1: Medical Pluralism in the United States

Ted J. Kaptchuk, OMD, and David M. Eisenberg, MD

Medicine has become interested in unconventional healing practices, ostensibly because of recent demographic research that reveals a thriving medical market of multiple options. This essay presents a historical overview of medical pluralism in the United States. Consistent evidence is examined suggesting that unconventional medicine has been a persistent presence in U.S. health care. Despite parallels with the past, the recent widespread interest in alternative medicine also represents a dramatic reconfiguration of medical pluralism—from historical antagonism to what might arguably be described as a topical acknowledgment of postmodern medical diversity. This recent shift may have less to do with acknowledging "new" survey data than with representing shifts in medicine's institutional authority in a consumer-driven health care environment. This essay is an introduction to a discussion of a taxonomy of contemporary U.S. medical pluralism, which also appears in this issue.

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See editorial comment on p 208.

Much recent demographic research has highlighted the extensive use of unconventional medical practices both in the United States and throughout the industrial world (1–4). The phenomenon seems to be increasing: A replication of a 1990 national survey conducted in 1997 showed a substantial increase in the use of, and expenditures for, alternative medicine (5). Specifically, the number of respondents who used at least 1 of 15 representative alternative therapies during a 12-month period increased from 34% to 42%. Such data challenge the biomedical profession's previous assumption that a single biomedical system defines our society's health care. The medical profession no longer uniformly categorizes alternative medicine as deviant, marginal, fringe, fraudulent, and of little consequence (6–10). Rather, the profession has begun to realize that it is a cohabitant in what seems to be a postmodern medical network in which consumer preferences dictate the service profile (11). Also, this survey research confirms what anthropologists have labeled "medical pluralism": People frequently adopt multiple healing practices even when biomedicine is generally available (12–16).

This essay examines the specific development of medical pluralism in the United States. A second essay in this issue (pp 196-204) presents a taxonomy of contemporary unconventional healing practices. First, however, we must caution the reader about potential semantic chaos. This subject is a linguistic minefield because there has been no agreement on terminology. Terms change through historical periods; new names arise continuously, and meanings shift. Labels often embody rhetorical stances, power relationships, and value judgments. In this essay, we have tried to use terms that are consistent with the historical time frame and specific context of the discussion. For example, depending on the situation, orthodox medicine may be called regular, mainstream, or biomedicine, while unorthodox medicine may be designated as irregular, drugless, or complementary. We have tried to avoid judgmental labels (for example, scientific, allopathic, sectarian, quackery, allopathy, unproven, natural, or integrative) unless they actually clarify the discussion. We have chosen the label unconventional or alternative medicine as a generic title for this field of inquiry.

U.S. Pluralism: Its Origins and Development

Medicine in the United States began in a rich pluralistic environment. Before the early 19th century, U.S. medicine was a shifting collection of coexisting options not rigidly or permanently defined: "A broad spectrum of practitioners—diverse in social background and intellectual attainment—shared the self-perception of being legitimate . . . practitioners" (17). The public had little conception of the medical profession as a corporate entity (18). By 1800, there were only about 200 graduates of elite U.S. medical schools in the United States, supplemented by another 300 or so immigrants with European diplomas. By 1830, there were still only 6800 MDs, serving primarily the upper classes (19). Professional care was mostly provided by botanical healers and midwives, supplemented by surgeons, barber–surgeons, apothecaries, and "uncounted cancer doctors, bonesetters, inoculaters, abortionists, and sellers of nostrums"

(20). Ethnic practitioners, such as Native American healers, slave doctors, and New Amsterdam's Zieckentroosters ("comforters of the sick") ministered to their own and to neighbors (21). Some practitioners claimed only specific skills, while others saw their competence as equivalent to that of physicians.

The fluid situation gradually hardened into sharp antagonism. The medical profession sought to extend its authority both for economic self-interest and as part of the Enlightenment's agenda for universalizing the benefits of science. Non-MD practitioners saw themselves "not merely [as] improvised substitute[s] for professional medicine [but rather they] became active rival[s] with a coherent structure of [their] own. Lay healers . . . saw the medical profession as a bulwark of privilege, and they adopted a position hostile to both its therapeutic tenets and its social aspirations" (20). By the first decade of the 19th century, "Elite educated physicians were actively conscious of their precarious cultural authority" (22).

Regular (that is, elite) medicine's plan for expansion and exclusive authority was easily thwarted. With the democratic fervor of the post-Revolution United States and the egalitarianism of the Jacksonian era, nonelite medicine had a heightened appeal and underscored the tension between professional ideals and democratic culture (22). Also, elite medicine's "heroic therapy" of bleeding and mercury provided further incentives to avoid the regular physicians. Paradoxically, after the 1820s, it was "sectarian" resistance to elite medicine's expansionist plans that allowed "a self-conscious group awareness of being orthodox to emerge among regular physicians" (17). Antagonism and competition replaced a situation of unstable coexistence. Medical systems began to collide.

In the 19th century, U.S. medical pluralism was a war zone. Beginning in the earlier 1800s, the first wave of organized opposition to orthodoxy was led by the Thomsonians (botanical healing), Grahamites (health food), homeopaths (microdilution medicine), hydropaths (water-cure therapies), and mesmerists (the "energy" healing of the time). Beginning at the end of the 19th century, a second advance was spearheaded by the osteopaths, chiropractors, drugless practitioners, and Christian Scientists.

Historically, the ammunition of the medical conflict included rhetoric, legislative maneuvers, and nonfraternizing clauses. Samuel Hahnemann (1755–1842), the founder of homeopathy, claimed that the regulars (for whom he coined the term *allopaths*) practiced a "nonhealing art . . . which shortened the lives of ten times as many human beings as the most destructive wars and rendered many millions of patients more diseased and wretched than they were originally" (23). Oliver Wendell Holmes (1809–1894), of Harvard Medical School, responded that homeopathy was "a mingled mass of perverse ingenuity, of tinsel erudition, of imbecile credulity, and of artful misrepresentation" (24). In 1847, the American Medical Association (AMA) was founded to erect a barricade between orthodoxy and the irregulars (25). The AMA's antisectarian consultation clause and later its Committee on Quackery internally policed against any collaborationist tendencies (26–29). (Even so, many MDs cooperated with the irregulars, which caused numerous conflicts within orthodox medicine [25]). Even until quite recently, the rhetoric continued. One could still read in the *Journal of the American Medical Association* (*JAMA*) announcements of meetings on "medical deviance" jointly sponsored by the AMA and the U.S. Food and Drug Administration where, in 1962, "50 government officials and representatives of private agencies concerned with quackery [met] to review advances made against the modern-day 'medicine man' " (30).

The irregulars also witch-hunted any of their own who might adopt "enemy" therapeutics or beliefs. Diatribes and discrimination against "mongrel homeopaths" (31) and "ChiropracTOIDS" (32) punished those who might borrow any "regular" methods and betray their alternative fraternities.

Cultural symbols were often more important than medical outcomes in this tug of war (33, 34). Just as regular medicine often upheld dominant cultural assumptions, unorthodox healing often became a badge for social activism and religious dissent: "Medical heretics typically doubled as heretics in politics and faith" (35). Resistance to the "system" was often a broad-based alliance: "The genius of [medical irregulars] was to express a protest against the dominant order in its therapeutics as well as its political [or religious] ideas" (20).

At the beginning of the 19th century, the alliance was more religious. At the same time that Mother Ann, the Shaker prophetess, and her successors proclaimed that Jesus would take a female form at the Second Com-

ing, the Shakers also built a sophisticated herbal delivery system to help people avoid the "pollution" of regular physicians (36, 37). By the middle of the 19th century, social reform movements that opposed the consequences of an emerging industrialization and market economy became more important than religious partnership (38). For example, when the American Vegetarian Society met in 1855, they welcomed, besides a wide assortment of healers, such enthusiastic attendees as Susan B. Anthony, the leading advocate of women's rights; Amelia Bloomer, of clothing reform fame; and Horace Greeley, a leading antislavery and spiritualist proponent, as well as pioneers for sexual emancipation and working class rights (38).

The Magnitude of Alternative Medicine in U.S. History

To what extent does the recent dramatic shift in awareness about alternative medicine describe a new phenomenon or "boom" in alternative medicine use? To what extent is contemporary alternative medicine a continuation of older oscillations and tendencies? Unfortunately, the historical magnitude of alternative medicine has rarely been studied with anything resembling modern survey methods or with the intensity of recent efforts. Nonetheless, the existing evidence shows that alternative medicine has had a pronounced presence in health care throughout U.S. history. For example, in 1924, a leading physician in Philadelphia published the results of a 4-year survey conducted as part of his intake history of all patients. Of the patients seen in his private office, 34% had, within 3 months of their first visit, "been under the care of agents of one or more of the numerous cults" (39). During the same period, 26% of patients treated at a free dispensary connected with one of the larger hospitals in Philadelphia had received treatment through "pseudo medical agencies." At approximately the same time, an Illinois Medical Society survey of 6000 people in Chicago found that 87% of those questioned had "dabbled" in cult medicine (40).

The findings of such local surveys of the late 1920s were confirmed by one of the first massive nationally representative surveys jointly undertaken by health policy planners from the U.S. federal government and professional statisticians. Between 1928 and 1931, 8758 representative families (a total of 39 183 persons) were periodically visited at intervals of 2 to 4 months for 12 consecutive months to document illness incidence and rates of health care use. Whenever possible, health care providers were contacted to confirm or adjust self-reported illnesses and visit rates. (In contrast, the two contemporary U.S. telephone surveys mentioned earlier involved 1539 adults in 1990 and 2055 in 1997 [5]). Of approximately 7800 families who received some form of medical care during a given year between 1928 and 1931, "10% resorted on one occasion or another to sectarian [alternative] practitioners" (40). The surveyed families received from nonmedical practitioners "139 home and 569 office visits per 1000 persons, or one-eleventh as many services as they received from the doctors of medicine" (41). (Approximately 85% of this particular statistic included visits to chiropractors, osteopaths [who were still considered unorthodox], Christian Scientists, faith healers, and naturopaths. The other 15% happened to include practitioners who could be considered allied health professionals [for example, midwives and chiropodists] [42]). Most of the illnesses treated by strictly defined unconventional practitioners could be classified as backache, pain (for example, neuralgia, chronic rheumatism, and arthritis), "nervousness," and "neurasthenia" (42). Visits for wellness, prevention, and health maintenance were explicitly not tabulated (42); neither was massage (which contemporary surveys usually include). Expenditures for the alternative practitioners counted represented approximately 12% of the total annual expenditure for MDs (40). (Mainstream medical costs were much lower than they are today.) Strikingly, if wellness and prevention visits, which in modern surveys comprise the bulk of visits (1), could be added, these prevalence rates would probably be similar to, or debatably even larger than, those seen in contemporary data.

Scrutinized more closely, these numbers from 1928 to 1931 are especially conservative compared with modern surveys. As the survey researchers noted, they did not include the costs of unsupervised self-care alternative medicine and " 'cure-all' frauds offered for sale at medicine shows or advertised through the mails or newspapers" (43). (In contemporary surveys, self-care can include one third to one half of the tabulated expenditures for alternative medicine.) Despite the absence of precise cost estimates for these unsupervised self-care remedies and treatments, it is likely that Americans at this time,

like the contemporary public, were enthralled with this aspect of unconventional medicine. Many of the "rich and famous" were involved; Greta Garbo, Mae West, Gloria Swanson, Paulette Goddard, John D. Rockefeller, and Bernarr Macfadden were all committed to alternative health lifestyles, and their habits were frequently covered in the media (44–46). Royal S. Copeland, the eminent New York senator and homeopathic physician, wrote a popular weekly health column for the Hearst papers devoted to the value of drugless healing (47). Also, mainstream journals of that period, such as the *New England Journal of Medicine*, continually warned physicians to protect their patients from nostrums that involved "fraudulent exploitation" (48). Editors of major medical journals felt it necessary to write popular books about the subject, such as *The Medical Follies: An Analysis of the Foibles of Some Healing Cults*, by Morris Fishbein of *JAMA*. From such anecdotal evidence, and the additional important fact that the patent medicine business was one of the largest industries in the United States (45, 47), it seems reasonable to assume that self-care aspects of alternative medicine were thriving during the 1920s and 1930s.

Looking farther back, accurate numbers tend to exist only for practitioners. In 1900, government sources found that homeopaths and eclectic physicians (the licensed botanical practitioner at this time) accounted for 12.5% of health care providers (25, 49). Undoubtedly, the numbers would further increase if the unlicensed army of magnetic healers, drugless practitioners, osteopaths, chiropractors, midwives, and faith healers was included. For 1850, the figures for registered unorthodox practitioners are essentially identical to those of 1900 (25), and again, mid-19th century observers noted that such data did not include "Indian doctors, clairvoyants, natural bone-setters, mesmerists [and practitioners of] galvanic, astrologic, magnetic, uriscope, 7th sons, etc. etc. etc [healing]" (50). In terms of total costs, estimates or guesses are the only quantification available. For example, in 1858, a leading New York State physician declared that "I believe there is not a town or city in this State, in which there is not more money paid to irregular practitioners of various names, and for nostrums and patent medicines, than is received by regularly educated physicians" (51). Numerous other early sources made similar appraisals (52–57).

While most of the historical data are not as rigorous as the survey performed from 1928 to 1931, all of the historical quantitative information taken together allows one to argue that alternative medicine has always had a persistent and powerful presence. Whether these survey data are a sign of constant high usage or happen to represent times when there were peaks in the public's interest remains unclear. Fluctuations undoubtedly occurred. Perhaps alternative medicine surveys are mainly performed during periods of high utilization, or perhaps such surveys encourage the very phenomena they study. Specific historical events (for example, the discovery of antibiotics or a linkage between acupuncture and endorphins) and general secular trends (for example, confidence in scientific progress) undoubtedly affected utilization patterns and trends. It may be that the high prevalences in the 1920s and 1930s and in the 1990s and 2000s represent two peaks within oscillations. For example, without citing its methods, one government report estimated that in 1970 "Quackery . . . cost $1-2 billion a year [and today, 1984,] it probably totals at least $10 billion" (58). Unfortunately, the data for the years between 1940 and 1990 seem to be imprecise and scanty and preclude firm conclusions. In any case, it is clear that alternative medicine has been an enduring phenomenon (with or without fluctuations) in U.S. health care.

Recent Shifts in U.S. Medical Pluralism

Until recently, the medical community has mainly sought to ignore or suppress unconventional healing. Recently, it seems, a new dialogue is emerging (59). The recent publication of data concerning the public's use of alternative medicine, however, is in itself insufficient to explain the new attitude toward alternative medicine. Any attempt to adopt such a simple argument is undercut by the fact that similar information in earlier eras was consistently used as an incentive to eradicate the threat of quackery (30, 40). Nor can recently performed randomized, controlled trials (which are definitely not uniformly positive and are often equivocal or contradictory) be considered the impetus for the realignment (60). Rather, the new biomedical discussion is probably substantially due to changes in the internal orientation of the biomedical community.

Undoubtedly, the recent discussion of alternative medicine must be related to an awareness in biomedi-

cine that its institutions (for example, the AMA, medical schools, the pharmaceutical industry, and the National Institutes of Health) have a limited ability to set the health care agenda in the face of a developing consumer-oriented health care system (11). Also contributing to the recent reconsideration of alternative medicine is a societal acknowledgment of cultural, religious, and ethnic diversity. This dissolving of a single modernist medical narrative has formed an increased awareness of medical pluralism. The old cultural war of a dominant culture versus heretical rebellion in politics and religion as well as medicine has begun to transform into a recognition of postmodern multiple narratives. Also, alternative medicine may provide a vehicle for establishment medicine to become more consumer-savvy and to "placate" public dissatisfaction with such perceived mainstream health care problems as the impersonality of medical technology or the absence of robust patient–physician relationships. In addition, emerging economic and legal forces undoubtedly play a huge role in the recent rapprochement. Perhaps because it is beleaguered from battles on other fronts, orthodox medicine has simply abandoned its crusade against alternative medicine.

Regardless of the reasons, substantial portions of the medical system have begun to seek reconciliation with alternative medicine. Managed care, insurance carriers, hospital providers, major academic medical centers, and individual MDs are increasingly receptive to developing new "integrative" models of health care that would have been unthinkable just a short time ago (61, 62). Complementary medicine has become a serious subject in medical schools (63). In 1998, the AMA initiated a coordinated theme on alternative medicine for a specific issue of each of its nine journals. In a dramatic softening of rhetoric, the lead editorial spoke of a situation in which "There is no alternative medicine. There is only scientifically proven, evidence-based medicine . . . or unproven medicine" (64). Major pharmaceutical companies now "complement" their pharmaceutical lines with herbal products (65). The National Center for Complementary and Alternative Medicine at the National Institutes of Health has exponentially increased its research fund for alternative medicine (66). The Food and Drug Administration has been more willing to facilitate research in herbal products. While some in the biomedical community yearn for a continuation of the old-fashioned dominance, or at least the appearance of it (67–69), it would be an understatement to say that, minimally, there is a widespread acknowledgment of the need for new dialogue and a new relationship between what were once regarded as opposing forces (59).

Alternative medicine has also shifted. Besides having new therapies drawn from afar (for example, acupuncture or Tibetan medicine), the current third wave of alternative medicine has left behind its old rhetoric. Instead of provoking antagonism, complementary and integrative medicine have become the new politically correct buzzwords. Many alternative providers see themselves in a partnership with biomedicine. A cease-fire, if not a complete armistice, has been declared.

The past 200 years of U.S. pluralism represent a history of conflict. The current period is one of rapid, almost breathless transition. Most participants want a peaceful and mutually advantageous reconfiguration. It is to be hoped that patients will be served. Yet many unknowns and hurdles remain, and the future is unpredictable. It is unclear how issues of power, prestige, autonomy, authority, and resource allocation will play out. Will the medical profession seek to absorb only scientifically proven therapies, or will it include therapies that provide marketing advantages? Who gets to decide? What is the role of science and evidence? Will those with less expendable income be excluded? To what extent will alternative medicine remain a distinct option or become assimilated, "co-opted," or truly integrated into a new single "system"? Does "integration" mean elimination of pluralism? Do alternative professional self-identity, patient commitment and satisfaction, and perhaps even effectiveness depend, to some extent, on the ability to represent distinct alternatives (70)? All that can be said for certain is that medical pluralism remains alive and well in the United States.

CONCLUSION

At all points in the history of the United States, several medical options have been available to its citizens. The recent increased awareness of alternative medicine represents both a historic continuation of U.S. medical pluralism and a dramatic reconfiguration away from antagonism and toward a postmodern acknowledgment of diversity. Many issues remain unresolved.

From Harvard Medical School, Boston, Massachusetts.

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Requests for Single Reprints: Ted J. Kaptchuk, OMD, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, W/K-400, Boston, MA 02215.

Current Author Addresses: Drs. Kaptchuk and Eisenberg: Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Avenue, W/K-400, Boston, MA 02215.

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8/29/01
JS

Groft, Stephen (WHCCAMP)

From: Jim Swyers [jpswyers@starpower.net]
Sent: Wednesday, August 29, 2001 5:00 PM
To: Jonas, Wayne; Jonas, Wayne; Tom Chappell (E-mail)
Cc: Groft, Stephen (WHCCAMP); Kingsbury, Doris (WHCCAMP); Chang, Michele (WHCCAMP); Axelrod, Corinne (WHCCAMP); 'Jim Gordon (E-mail)'; Kaczmarczyk, Joseph (WHCCAMP); Miller, Maureen (WHCCAMP); Pollen, Geraldine (WHCCAMP)
Subject: Definition and Guiding principles

Working Definition of CAM and ...

Hi Tom and Wayne,

I've attached my first attempt at implementing the plan that we discussed on the last conference call. What you will see is a synthesis of the background information that I provided in the black binder as well as my conversations with individual members of the working group and a careful review of comments in the transcripts on these topics. I have no territory to defend here, so feel free to be as blunt in your critiques as you feel is necessary.

Wayne, Tom said he can get his comments to me by Friday. If you can review and comment on it by then or by Monday morning at the latest, then it might be possible hold our follow-up conference call next week. The only two days that Tom is available is on either the 5th or 6th. How does this scenario fit with your schedule? If it does, are you available for a conference call either of those two days, preferably in the afternoon?

I look forward to working with you both on this important part of the report. If there are any significant differences in opinion in your responses to this draft, perhaps the three of us can get together on the phone early next week to resolve them. Take care.

Sincerely,

Jim Swyers

DEFINING COMPLEMENTARY AND ALTERNATIVE MEDICINE AND ELABORATING GUIDING PRINCIPLES

Because the White House Commission on Complementary and Alternative Medicine Policy (WHCCAMP) is charged with making specific recommendations, there was consensus among Commissioner's for developing a better understanding for what is encompassed by CAM. CAM is such a diverse field that many Commission members believed it necessary to differentiate among the various types of CAM as well a to understand their underlying commonalities before they could develop final recommendations in any of the major topic areas. The Commission, therefore, assigned a Work Group to make a detailed examination of the literature and other relevant sources of information and develop a working definition of CAM to help guide the Commission's deliberations.

Commission members believed that a set of "guiding principles" was need to serve as guideposts for its deliberations. The Commission settled on a set of 10 statements to serve as guiding principles, which were further refined by the Work Group on Definitions. This group also developed an early draft of a mission statement. All of these--the definition, guiding principles, and mission statement were more fully developed by the full Commission.

Defining CAM

Complementary and alternative medicine (CAM) encompasses a broad, diverse array of healthcare, healing, and self-care systems and their accompanying theories and

practices. The healthcare, healing, and self-care systems in the U.S, that are generally recognized as being CAM shown in Table 1:

Table 1: Common CAM Therapies and Systems of Medicine

*Acupuncture	Chiropractic	Naturopathic Medicine
*Acupressure	(Sacral) Cranial Osteopathy	Nutritional Therapy
Alexander Technique	Environmental Medicine	Osteopapthic Medicine
Applied Kinesiology	*Herbal Medicine	*Qigong
Anthroposophic Medicine	Homeopathy	Reflexology
Aromatherapy	Hypnosis	Relaxation and Visualization
Autogentic Training	Imagery	Shiatsu
Ayurvedic Medicine	Iridology	Spiritual Healing
Bioelectromagnetics	Massage and Bodywork	Therapeutic Touch
Energy Medicine	*Meditation	Traditional Chinese Medicine
	Mexican-American curanderos	*Yoga

*Many CAM therapies and practices are derived from complex systems of healthcare and healing and are typically delivered within the context of the overall care rather than as a stand-alone therapy, although they may be delivered as stand-alone treatments by those who are not trained in the particular system of medicine.

Adapted from Zollman C, Vickers A. What is complementary medicine? BMJ 1999;319:693-696

It should be emphasized that a number of CAM practices that are listed in Table 1 have gained or are increasingly gaining acceptance and recognition by mainstream medicine. Often, however, the CAM system from which the practice is derived is only marginally accepted and engaged in dialogue by main-steam medical and healthcare organizations (e.g, acupuncture and Traditional Chinese Medicine).

This marginalization results in the lack of formal recognition in medical education and research funding for most CAM systems. This exclusion of a detailed discussion of various CA M systems makes it difficult for conventional doctors to communicate with and refer to CAM practitioners. Lack of access to research funds, contributes further to this marginalization in that people researching CAM systems are not able to generate and

publish the kinds of data that can convince insurance companies and third-party payers to reimburse for their services (Pelletier et al., 1997).

The marginalization of CAM systems has occurred for a variety of reasons, including:

a) the lack of an explanatory model that is aligned with generally accepted scientific principles (e.g., homeopathy, chiropractic).

b) the origin of the system from cultures outside of the U.S. or from indigenous cultures (e.g., Ayurvedic Medicine, Traditional Chinese Medicine, Native American Medicine). Because these systems often rely on low technology approaches (e.g., herbs), they may be seen as primitive and unscientific.

c) the lack of sufficient data on safety, efficacy, or potential mechanism of action to support its use for treating specific illnesses (e.g., vitamin therapy).

d) the inability to easily integrate the system into the mainstream healthcare model.

e) the widespread belief that the healthcare or healing system is not practical or feasible for most people, even though there is scientific consensus that it is therapeutic (e.g. environmental medicine, therapeutic diets).

Another reason that many CAM systems have been marginalized is the difficulty of licensing and regulating their practitioners. Although some of these CAM systems lend themselves easily to certification, licensing, and regulation, others do not. Indeed, there is a great diversity of education, training, and standards of practice among CAM practitioners, ranging from highly educated and organized to self-taught and unregulated. There at least five categories of CAM practitioners based on their education, training, and regulation . These include:

1. Professional CAM practitioners with a cohesive healing philosophy, defined practice standards, accredited education, state licensing, documented safety, and at least some research substantiation. Examples include naturopathic physicians and Traditional Chinese Medicine practitioners.

2. Medical mavericks who are conventionally trained physicians but who utilize therapies and practices that are highly controversial or not widely recognized by conventional standards of care.

3. Emerging professions consisting of lay and self-trained practitioners, such as lay homeopaths and herbalists. Some of these emerging professions are working to establish standards for minimum education and training.

4. Community healers who receive training through centuries-old traditions. They tend to practice solely within their community, which provides informal oversight

and regulation. Examples include Native American healers and Mexican-American curanderos.

5. Self proclaimed or minimally educated healers who practice without apparent standards or community oversight.

These variations in education, training, and self-regulation impact access to and delivery of CAM systems by limit their practitioners' ability to practice lawfully and obtain malpractice insurance. Although practitioners of some CAM systems, such as chiropractic, are licensed in all 50 states, many others are licensed in only a portion or a few states (see Section ?).

Common Characteristics of CAM Systems

Although the discussion so far has highlighted the heterogeneity among CAM systems, there are a number of similarities among the major CAM systems that point to a common origin. These similarities include a focus on:

a) Clinical observation - Many of these practices have evolved out of clinical experience, from small groups who use the intervention (e.g. neural therapy, polarity) to widely used, elaborately detailed systems such as Traditional Chinese Medicine.

b) Whole systems - CAM systems tend to emphasize a complete or combination systems approach that includes multiple simultaneous interventions with individualization, or variation, of those interventions during the course of treatment. They often assume that the entire system is required as a package independent of the isolated effects of its individual components (e.g., the use whole plant extracts rather than isolated active ingredients). For example, a chiropractor, in addition to providing a spinal adjustment, may also offer advice on diet and exercise, provide guidance on breathing and relaxation, and prescribe nutritional supplements.

c) Vitalism - Many CAM systems emphasize the need to achieve balance of energy in order to promote a higher, or optimal, level of functioning above the mere absence of illness. In Traditional Chinese Medicine, for example, when an organ is considered to have an imbalance of energy, or qi (pronounced chee), energy either must be transferred to the organ if it is yin (deficient in qi) or removed from the from the organ if it yang (has too much energy). By achieving balance, or harmony, between yin and yang, optimal functioning, or vitality, is achieved. Restoring harmony is a major focus of many other CAM systems, including Ayurvedic medicine, Native American medicine, Homoepathic medicine, Naturopathic medicine, and Chiropratic.

d) Stimulating Self-Healing Processes - CAM systems tend to emphasize the stimulation or support of natural healing processes, referred to as *vis*

medicatrix naturae (the healing power of nature) and seek to enhance those processes in order to accelerate the natural course of recovery, rather than mask or suppress the symptoms of the disease. (e.g. nutritional & diet therapy for rheumatic diseases rather than immuno-suppressants.). Even CAM modalities that are not directly evolved from traditional systems of medicine, have adopted the philosophy that the body's self-healing mechanism can be speeded up, sometimes to an astonishing degree, by the proper stimuli. Thus, many CAM practitioners employ therapies designed to stimulate the patient's constitution to fight on its own behalf, on the assumption that this emphasis on enhancing the natural healing process is the most appropriate foundation of any medical therapy (House of Lords, 2000).

e) Promoting Self Care - CAM systems tend to emphasize a practitioner-patient partnership to looking at options. There is also an emphasis on promoting self responsibility and promote interventions that incorporate quality of life, patient preferences, and patient satisfaction into the therapeutic and diagnostic decision-making processes.

f) Spiritualism - Most of the world's traditional healing systems—Traditional Chinese Medicine, Indian Ayurvedic Medicine, and Native American Medicine—are based on the assumption that humans are connected to one another, to the earth, and the spiritual world in many more ways than science has yet uncovered. Disease, in these systems of medicine, is an imbalance

within our bodies as well as between the way we live and the natural, social, and spiritual world (Gordon, 1996).

These common characteristics of the major CAM systems also are shared by many branches of mainstream medicine. For example, conventional medicine has long recognized the need for promoting a good, balanced diet as a means of maintaining health and warding off a host of nutrition-related illnesses, such as diabetes and cancer. Yet, those who promote such ideas often go largely ignored by the major medical institutions.

For example, according to a recent report by the Nutrition Education Consortium (1997), despite strong scientific data, public interest, US government reports, society studies, and congressional mandates, the teaching of nutrition in medical schools and residency programs remains "woefully inadequate." Most medical schools do not even have faculty trained specifically in nutrition (Cooksey et al, 2000), despite the fact that nutrition is one of the most significant contributors to good health.

The are many of reasons why nutrition is not a central focus of mainstream medical education. However, the most significant barrier to revamping medical education to include such crucial information appears to be faculty resistance (Armstrong & Koffman, 1998). As Dr. Walter Willett, Professor of Epidemiology and Nutrition at the Harvard School of Public Health recently, stated before the Commission, "it is a sad reality that nutrition is not very much a part of mainstream medicine," but is more representative of some of the CAM systems.

Other major elements of CAM systems, such as spirituality, have also begun to make their way into medical education reform. The American Association of Medical Colleges (AAMC) recently called for the incorporation of knowledge about the link between spirituality and health into medical school curricula (AAMC, 1999). However, this effort faces significant opposition by those who believe it is inappropriate, and perhaps unethical, for medical doctors to be too inquisitive or supportive of patients' spiritual beliefs or practices (Sloan et al., 2000).

Thus, although there is a great diversity among the systems of healthcare, healing, and self-care that are typically classified as CAM, there is also a great deal of similarity among them. There also is significant overlap between what is traditionally thought of as CAM and a many aspects of what is commonly referred to as mainstream medicine. These commonalities suggest to the Commission that in the not-too-distant future, divisions between CAM and conventional medicine as well as between the various CAM systems will become further blurred and that integrative medicine will become more of the norm rather than the exception.

Guiding Principles of the Commission

Based on its understanding of complexities and commonalities of CAM systems and practices and their relationship to mainstream medicine, the Commission endorsed 10 principles to both guide its process for making recommendations and the

recommendations themselves. These 10 Guiding Principles, include a commitment to promoting:

1) Whole -Person Health Care. The Committee recognizes that quality healthcare includes attention to all aspects of life -- mental, emotional, environmental and spiritual--in addition to one's physical condition.
2) Therapeutic Relationships. An acknowledgement that each person has unique needs that must be attended to in every therapeutic setting and encounter
3) Prevention. The Committee acknowledges that good healthcare emphasizes the promotion of health in addition to the treatment of disease. There is overwhelming scientific evidence that it is significantly more humane and cost-effective to prevent illness and disease compared to treating people once they become ill.
4) Self-Care. The Commission recognizes that "self-care" practices and approaches, CAM and conventional, are a significant part of quality health care. Self-care education, therefore, needs to be an integral part all healthcare professionals' curricula as well as the basic educational curricula public education at all ages.
5) Self-Healing. The Commission recognizes that the body has a remarkable capacity for healing itself. This innate healing capacity may be augmented and enhanced by removing obstacles to healing (e.g., poor diet or stress).
6) Consumer Choice. The Commission recognizes that all people have the basic right to choose freely among healthcare providers and practitioners who are both responsive to their needs and concerns and accountable for their actions. The

Commission is committed to ensuring that the views of consumers of CAM practices and products is taken into consideration at every juncture of our decision-making process.

7) Consumer Input. The Commission is committed to including the views of consumers of CAM practices and products in every phase of its decision making.

8) Evidence-Based Research. The Commission it committed to promoting the use of science and the appropriate scientific methods to help identify safe and effective CAM services and products and generating the evidence that will enhance the development and delivery of these services and products.

9) Timely Dissemination. The Commission is committed to promoting efforts that thoroughly and thoughtfully examine the current evidence base for CAM systems and practices, and to make this evidence base widely and easily available in a timely fashion. The Committee also recognizes the need to enhance this evidence base by advocating for high-quality research.

10) Integration. The Committee recognizes that any potential benefits of CAM for the public can best be maximized through promoting collaborations between conventional and CAM healthcare professionals and researchers. These collaborations can best be encouraged by the integrated delivery of CAM and conventional medicine, where CAM practitioners work side-by-side with conventional practitioners. Integrated delivery, however, does not mean the distillation of CAM services that are then offered by conventionally trained practitioners.

These 10 Guiding Principles are remarkably consistent with the core values of the National Academy of Sciences' Institute of Medicine report ways to improve healthcare in the 21st century. The IOM report, entitled *Crossing the Quality Chasm: A New Health System for the 21st Century*, list 10 core beliefs that healthcare processes should be designed to reflect:

- Continuous healing relationships
- Customization based on patient needs and values
- The patient as a source of control
- Shared knowledge and the free flow of information
- Evidence-based decision-making
- Safety as a system of property
- Transparency
- Anticipation of needs
- Continuous decrease in waste, and
- Cooperation among clinicians

Because of the significant overlap of its Guiding Principles with the core beliefs of the IOM report, the Commission sees its mission as being very much supportive of such efforts to make the nation's healthcare system more centered around and tailored to consumer preferences, particularly those with chronic, debilitating conditions.

Mission Statement

[To be discussed and drafted]

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Groft, Stephen (WHCCAMP)

From: Jim Swyers [jpswyers@starpower.net]
Sent: Tuesday, August 21, 2001 9:43 AM
To: 'Conchita Paz (E-mail)'; 'Effie Chow (E-mail)'; Jonas, Wayne; Jonas, Wayne; Tom Chappell (E-mail); Veronica Gutierrez (E-mail); 'Joe Pizzorno'
Cc: Chang, Michele (WHCCAMP); Fisher, Ken (WHCCAMP); Groft, Stephen (WHCCAMP); Kaczmarczyk, Joseph (WHCCAMP); Miller, Maureen (WHCCAMP); Pollen, Geraldine (WHCCAMP)
Subject: Summary of Group H conference call

Summary Definition and Guiding...

CAM Definition and Guiding Principles Work Group,

I have included a summary of our conference call last Thursday below in the body of this e-mail. I have also attached the summary as a rich text file. Please let me know ASAP if you feel I have missed any major points or misunderstood the intent of any of your suggestions. Feel free to call me at 301-270-2590. As soon as I hear back from Effie and Tom, I will begin implementing the assignment you have given me. Thanks.

Summary of CAM Definition and Guiding Principles Conference Call, August 16, 2001:

Conference call participants: Wayne Jonas, Charlotte Kerr, Steve Groft, Veronica Gutierrez, Michelle Chang, Joe Pizzorno, Jim Swyers

Issues:
- Use of CAM or some other term throughout the report
- Historical Perspective
- Guiding Principles
- Plan of Action

Issue 1. Should the Commission use the term complementary and alternative medicine throughout the report or use some other term?

Discussion: Veronica Gutierrez began the discussion by offering some alternative terms to complementary and alternative medicine, or CAM, such as "comprehensive healing," "integrative healing," etc.. Wayne Jonas said he had reservations about using something other than CAM, primarily because it is widely used and generally understood. For communication purposes, he said he would be reluctance to adopt a completely new term. He agreed, however, that the definition should encompass more than medicine as it is conventionally viewed. The consensus decision was to come up with a general definition that builds on earlier efforts but that also differentiates among the different types of CAM practitioners and practices. Joe Pizzorno offered the following, which all of the participants agreed was helpful:

CAM practitioners and practices fall into the following five categories:

1. Professional CAM practitioners with a cohesive healing philosophy, defined practice standards, accredited education, state licensing, documented safety and at least some research substantiation. Examples include naturopathic physicians and acupuncturists.
2. Traditional healers who practice within a community which provides centuries-old traditions and oversight. Examples include Native American

healers and curanderos.
3. Emerging professions where lay and inconsistently trained practitioners are working to establish standards. Examples include lay homeopaths and herbalists.
4. Self proclaimed or minimally educated healers who practice without apparent standards or community oversight.
5. Medical "mavericks" who are conventionally trained but utilize therapies and practices that are highly controversial or excluded from conventional standards of care.

Charlotte Kerr said much of the language for the definition probably exists in the background materials provided to the work group members. There also was agreement that there should be an accompanying glossary at the back of the report, which would elaborate on some of the terms used in the definition.

Issue 2. Historical Perspective

Discussion: Jim Swyers provided Work Group H members with a historical perspective of the definition of CAM, which all agreed was helpful and should be incorporated into the discussion of the definition of CAM in the report. Charlotte Kerr suggested putting a discussion of the history of CAM in this country in the report. Wayne Jonas agreed that putting a brief history of CAM in the report is a good idea. He said a history would be useful because Western medicine took such a narrow focus that it excluded a vast majority of health care practices that had gone on for centuries. He said the report could point the weaknesses of such a narrow approach. There was consensus agreement that this should be done. Joe Pizzorno noted that Jim Wharton, a historian at University of Washington, is currently writing a history of CAM and suggested contacting him to consult on the report. Wayne Jonas added that there should be some discussion of the Flexnor Report and its over emphasis on the biopharmaceutical model of medicine.

Issue 3. Guiding Principles of the Commission.

Discussion: Wayne Jonas suggested that it would be useful to go through the 10 guiding principles and to prioritize and simplify them and then have a paragraph or two under each one that elaborates on what is meant. Several of the conference call participants said they were impressed by the power of the language of the guiding principles of the various organizations that took part in the recent Integrative Medicine Leadership Summit 2000 (supplied to the Commission by John Weeks). It was agreed that this document would provide a good basis for fleshing out the language needed to elaborate on the Commission's 10 Guiding Principles.

Related to the Guiding Principles, Charlotte Kerr suggested that the group needed to develop a mission statement for the Commission. Wayne said that a good place to talk about the mission would be at the end of the Guiding Principles section. It was decided that further discussion of a mission statement would be put off until the next conference call, at which time everyone would have had a chance to see a draft of the definition and a revision of the guiding principles.

Issue 4. Plan of Action

Discussion: Wayne suggested that Jim Swyers could develop a draft of the Definition and Guiding Principles that incorporates the elements agreed upon by the group. That is:

· Develop a pragmatic definition and describe its limitations

· Follow this with a fairly detailed descriptive section and a glossary that describes what is meant by some of the terms.

· Develop a refinement of values and principles.

Wayne then said that the next step would be for he and Tom Chappell (the Work Group facilitators) to review the draft and provide Jim with their input. After making revisions, Jim will send this draft to the rest of the work group. Then, there would be another conference call either in late August or early September for the group to discuss this draft and to suggest revisions before it is sent to the entire Commission in mid-September. There was consensus agreement on adopting this approach

Groft, Stephen (WHCCAMP)

H. 8/16
4-6pm

From: Jim Swyers [jpswyers@starpower.net]
Sent: Tuesday, August 14, 2001 10:52 AM
To: 'Conchita Paz (E-mail)'; 'Effie Chow (E-mail)'; Jonas, Wayne; Jonas, Wayne; Tom Chappell (E-mail); Veronica Gutierrez (E-mail); 'Joe Pizzorno'
Cc: Groft, Stephen (WHCCAMP); Chang, Michele (WHCCAMP); Fisher, Ken (WHCCAMP); Miller, Maureen (WHCCAMP); Pollen, Geraldine (WHCCAMP)
Subject: Conference call

Dear Group H (CAM Definition and Guiding Principles) Participants

Sometime today, you should receive the binder of background materials I sent you. If you do not receive it by the end of today, please let me know, and I will send it to you again.

For the conference call on Thursday, the most pressing materials for you to review are the first 20 pages.

Pages 1-4 are a summary of the key issues that were identified at our lunch meeting in March, with Wayne Jonas' responses to each of the issues.

Pages 5-9, which some of you may have already seen, is an overview of my reading of the literature on attempts to develop a CAM definition. It basically states that the tendency has been for definitions of CAM to become less focused and more expansive as time progresses.

Pages 10-12 include the former Office of Alternative Medicine's definition of CAM and a draft of one that Wayne Jonas has been working on. He will fill you in on the origins of this work. I have also included an article by Chez and Jonas published in 1997, which includes a more detailed discussion of CAM. As you can see, Wayne has spent a great deal of time and energy struggling with this issue, dating back to his tenure at OAM

Pages 13-19 include several additional definitions. These include the House of Lords report, which was recently published in the U.K., and NCCAM's definition, which is basically an expansion of David Eisenberg's definition of CAM. Also, in the appendix materials I sent you, there is an article by Zollman and Vickers (ABC of Complementary Medicine), which gives a brief overview of the Cochrane Collaboration's definition of CAM. You'll notice that it has many elements of the OAM definition.

Finally, on page 20, I've included an edited version of the Guiding Principles. I tried to take out as much of the passive voice in them as possible. However, if you feel that I've changed their meaning in doing so, please let me know. Hopefully, we can elaborate upon each of the Principles a bit more. Both Tom and Wayne are in agreement that they should have their own prominent section in the report. At the end of the briefing book, I've included a draft of the Integrated Medicine Leadership Summit 2000, which was headed up by John Weeks. Many of the organizations involved in the summit expressed a number of "values" very similar to the Commission's Guiding Principles. The staff believed this information would be useful in helping to develop additional language for the Principles.

Please be advised that Effie and Tom will not be participating in the conference call. Effie is in Spain, and Tom is on a much-needed vacation. However, they will both be reviewing all of the documents and a summary of our discussion and providing their input as soon as they return.

The following is the proposed agenda for conference call on Definition and Guiding Principles. Remember that it is begins at 4:00 p.m. Eastern Time on Thursday, August 16th, and the number to call is: 888-455-9643. The PASSCODE is: 47914 and the Conference Leader is: Michele Chang. I look forward to the exchange of ideas.

Sincerely,

Jim Swyers, M.A.

CONFERENCE CALL AGENDA

1. Objectives for the conference call and beyond

-Discuss what we want to accomplish in conference call.

-Discuss what needs to be done before October meeting.

2. Quick review and discussion of background materials for CAM definition

-Key issues from lunch meeting document (pages 1-4)
-Evolution of definitions (pages 5-9).
-Review of OAM definition (pages 10-11). (see also article by OAM definitions panel at back of book)
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-Review of NCCAM definition (pages 16-19)
-Discussion of Cochrane Collaboration definition (see Zollman and Vickers article included in back of briefing book)

3. Guiding Principles Discussion

-Discuss proposal to give Guiding Principles their own prominent section in the report
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4. Additional comments and discussion.

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TABLE OF CONTENTS FOR BACKGROUND MATERIALS

Attached Articles

Comments on Notes from discussion of CAM definition at lunch meeting on March 27th

Wayne B. Jonas

Key issues:

- Need description of way CAM has traditionally been defined

See description of previous definitions handed out. Also note below.

Complementary and alternative medicine (CAM) is defined as a subset of medical and health care practices that are not an integral part of conventional (western) medicine. This relationship occurs for several reasons including:

1. The explanatory model of the practice is not generally accepted and so additional criteria are required for "proof". (e.g. homeopathy, prayer).
2. The origin of the practice is outside of the dominant system (e.g. acupuncture).
3. The amount of data, or type of data is considered insufficient or otherwise inadequate (e.g. herbalism, megavitamin therapy).
4. The use of the practice is marginalized, in that it is not available within conventional hospitals (e.g. relaxation techniques).
5. The teaching of the practice is marginalized, in that it is not generally taught within medical, nursing or graduate schools of the dominant institutions (e.g. nutritional therapy).
6. The amount of research funding, infrastructure, and capacity for investigating the practice is low. (e.g. cancer, chiropractic).
7. The practice is not reimbursed by insurance companies and third party payers.
8. The practice is not readily used, either for feasibility, acceptability, or other reasons (e.g. clinical ecology, complex lifestyle programs).
9. The practice is not regulated or licensed in most states (e.g. naturopathy).
10. An aspect of the therapy is marginalized through it is studied under other names or subdivisions (e.g. antineoplastons, shark cartalige).

The following illustrates areas that are within or overlap with CAM.

EXAMPLE AREAS USUALLY CONSIDERED CAM	*EXAMPLE AREAS CONSIDERED CAM WHEN EXPLAINED AND APPLIED IN UNCONVENTIONAL WAYS*
• **Chiropractic Medicine**	• **Mind/body methods** (when explained with unorthdox theories or used in unconventional ways)
• **Acupuncture**	
• **Naturopathy**	• **Diet/lifestyle therapies** (extreme or unusually diets or unusual uses of diets for therapeutic and preventive purposes)
• **Homeopathy**	
• **Ayruvedic Medicine**	• **Herbal therapies** (when investigating therapeutic effects of whole plants or plant combinations rather than "active ingredients" for drug development)
• **Native American Medicine**	
• **Massage**	• **Nutritional supplements** (when used by CAM practitioners in unorthodox

- **"Healing" and Therapeutic Touch**
- **Spirituality and prayer**

ways or in "mega" doses)

- **Pharmacological therapies**
(when used by CAM practitioners and the public or in unorthodox ways)

The Spectrum of CAM

CAM involves a broad spectrum that can be divided roughly into three categories based on the degree to which the practice is generally accepted and used by conventional medicine in the United States.

I: Integrating topics - These are research on topics that may be considered conventional but are of interest for CAM practices. Examples include the action of popular supplements such as melatonin, DHEA, vitamins, minerals and anti-oxidants, dietary therapies and mind-body medicine.

II: Emerging CAM topics - Emerging CAM topics are those that involve common areas of interest for CAM and conventional medicine. Examples include acupuncture and herbalism (phytotherapy) and the use of high doses of combination nutritional supplements.

III: Frontier topics - Frontier topics are those that challenge our conceptual and paradigmatic assumptions about the nature of biological or scientific reality. Examples are homeopathy, prayer and healing practices such as therapeutic touch.

- Spell out limitations

Currently the definition revolves around the sociological phenomena of exclusion from dominant medical practice, either by availability, training, country or culture of origin, amount of research support, theoretical explanation and other factors. This approach results in a wide and diverse range of practices with no single theoretical or conceptual basis.

- Elaborate key words

The terminology used to describe unconventional medicine is varied and confusing. For the purposes of this report we use the term 'complementary and alternative medicine' (CAM) to designate practices that are not an integral part of conventional, western medicine. The terms 'conventional' and 'orthodox' are used interchangeably. 'Traditional' medicine will be used to refer to indigenous practices that are part of long-standing native healing systems. Except where noted, no distinction is implied between practices refereed to by the terms 'complementary' (when used to supplement conventional medicine), 'alternative' (when used instead of conventional medicine), or 'integrating (integral)' (when used in a coordinated fashion with conventional medicine) as any one CAM practice may be used in any or all of these ways at different times.

- Acknowledge fundamental characteristics of CAM systems—e.g., "vitalism"

While this definition results in a heterogeneous group of systems, theories, interventions, and claims, the major systems within CAM share some common characteristics:

a) Clinically derived - Many of these practices have evolved out of clinical experience, from small groups who use the intervention (e.g. neural therapy, polarity) to widely used, elaborately detailed systems such as Traditional Chinese Medicine.

b) Systems oriented - CAM systems tend to emphasize a complete or combination systems approach that includes multiple simultaneous interventions with individualization, or variation of those interventions during the course of treatment. They often assume that the entire system is required as a package independent of the isolated effects of its individual components (e.g. whole plant extracts).
c) Healing processes - CAM systems tend to emphasize the stimulation or support of natural healing processes and seek to enhance those processes in order to accelerate the natural course of recovery, rather than cure or the elimination of the disease. (e.g. nutritional & diet therapy for rheumatic diseases rather than immunosuppressants.)
d) Self Care - CAM practices tend to rely on low technology, often emphasizing procedures delivered in the context of the continuity of care. They tend to emphasize communication and interventions that incorporate quality of life, patient preferences and patient satisfaction into the therapeutic and diagnostic decision making processes. They emphasize a partnership approach looking at optoins and responsibility for self.

- Definition needs to include concept of "healing"

See above

- Scope of CAM depends on where one is: "inside" versus "outside"

See above on limitations and list of previous definitions.

- Definition that Commission uses must be focused on the outcomes of the report.

Refer to mission statement section.

Commission's Responsibility:

- To facilitate integration of CAM therapies where evidence dictates
- To establish a process for integration/dialogue/cooperation
- State explicitly that integration is a process

Points of Consensus:

- Commission should not get bogged down in trying to define CAM, but rather should focus on its mission with attention to the legislative language in the Executive Order.
- The Commission needs to develop a strategy and overall philosophy for the report

- The focus of the report needs to be integrative and catholic (i.e., broad-minded)

Next Steps:

Wayne Jonas will meet with the Commission staff to develop language on the Commission's criteria for the scope of the report and to work out a process for developing a mission statement. The Commission staff will put aside some time during the next Commission meeting (in May) to work on the mission statement.

Guidelines for Setting Priorities in by the Commission

I. Identifying priority areas: The practice:
- is extensively used by the public or CAM and traditional practitioners;
- is not an integral part of conventional practice already;
- has at least some reasonable supportive data behind it;
- may have an desired theoretical rationale or perspective on healing.

***II. Addresses important health care needs*:** The condition for which it is used produces a high burden such as:
- prevalence: the number of people with a particular problem;
- mortality: the number of deaths caused by a disease;
- morbidity: the degree of disability and suffering produced by a disease
- loss of productive years: the degree to which a disease cuts short a normal, productive, comfortable lifetime;
- costs: the economic and social costs of a disease, and
- urgency: the need to find solutions rapidly.
- Or it affects wellness and so mitigates the tendency to dis-ease in general

III. Provides the top target CAM benefits: The practice may contribute to:
- prevention, treatment or improved management of chronic disease;
- improving quality of life (increased wellness, reduced symptoms or side effects);
- reduction of health care costs;
- providing a new understanding of healing and disease mechanisms.

The Evolution of CAM Definitions (By Jim Swyers)

Ever since the use of medical treatments that fall outside of what is considered mainstream, or conventional, medicine became an internationally recognized phenomenon, various groups have attempted to develop labels and definitions for these therapies. However, as more is learned about what types of therapies are being used, who is using them, and how they are used, the trend has been to broaden these definitions to incorporate new knowledge. The result has been a blurring of the lines between what has traditionally been considered conventional and what it considered to be non-conventional medicine.

Initially terms such as "unscientific" "unorthodox" or "unconventional," were used to describe treatments for which there was not a scientific rationale for how they might work nor any studies of their safety and efficacy (Brody, 1980; Cassileth et al, 1984; Eisenberg et al, 1993). Because many in the medical community perceived that these therapies, such as acupuncture and homeopathy, were being used as alternatives to standard, allopathic health care, they became known collectively as "alternative medicine" in the late 1980s (Furnham and Smith, 1988; Murray and Shepherd, 1988).

However, in the early 1990's a variety of surveys began to demonstrate that people were increasingly using the two systems of medicine—conventional medicine and alternative medicine--side by side, essentially to complement one another (see Who Uses CAM and What Are They Using, below). As a result, the term "complementary

medicine" emerged first in Europe and adopted in this country not long afterwards to describe this "other" system of medicine (Ernst, 1995; Joyce, 1994). Yet, even this terminology was unsatisfactory for many because it did not take into account that fact that although many alternative therapies were being used to complement conventional medical care, some were being used *instead* of conventional medical care. Thus, since the mid-1990s, the phrase "complementary and alternative medicine" has been adopted in the U.S. and Europe to acknowledge this dichotomy.

In an attempt to develop a definition of CAM, a panel sponsored by the Office of Alternative Medicine of the National Institutes of Health (currently known as the National Center for Complementary and Alternative Medicine, or NCCAM), defined CAM as "a broad domain of medical or healing systems that are outside the range of those that are intrinsic to the politically dominant health system of a particular society or culture in a given historical period. CAM includes all such practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being. Boundaries within CAM and between the CAM domain and the domain of the dominant system are not always sharp and fixed" (Panel on Definition and Description, 1997).

The Complementary Medicine Field Group of the international Cochrane Collaboration (see Part I) has adopted this definition. However, Cochrane has further broadened the scope of CAM to include "all health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the politically

dominant health system of a particular society or culture of a given historical period (Zolman and Vickers, 1999)."

These latter two definitions incorporate a larger worldview than earlier definitions by acknowledging that many health care practices that are considered "complementary" or "alternative" in the United States, such as herbal medicine, are often the main system of treatment in many developing countries (Bannerman et al., 1983; WHO, 1978) and in many ethnic communities in this country (Berman, Swyers, Kaczmarczyk, 1999). These definitions also acknowledge that the boundaries between CAM and biomedicine are constantly changing and are likely to evolve even further in the years to come as therapies that are now considered CAM become integrated into mainstream medicine, while new, untested therapies appear on the horizon to take their place.

The NCCAM at the NIH has offered an even more expansive definition of CAM as both "those healthcare and medical practices that are not currently an integral part of conventional medicine" and "those treatments and healthcare practices not taught widely in medical schools, not generally used in hospitals, and not usually reimbursed by medical insurance companies." (NCCAM, 2000). This definition potentially includes many approaches to healthcare, including behavioral medicine, preventive medicine, and culturally centered medicine, which are generally accepted as important to overall health care by the conventional medical community but which are not traditionally available in hospitals nor usually reimbursed by medical insurance companies (see CAM's Focus on Health, Wellness, and Disease Prevention, below).

Thus, the terminology used to describe unconventional approaches to health and illness has evolved significantly over the past 15 years. Indeed, it began with a rather narrow focus on therapies for which there is a lack of scientific understanding and/or proof of safety and efficacy to a much broader concept of CAM. Indeed, CAM now includes some therapies where there is a both a general understanding of how they work in addition to significant evidence of proof safety and efficacy. However, many of these therapies have become associated with CAM because, for various reasons, they have been marginalized or underutilized by conventional medicine as critical ingredients to the delivery of high-quality health care.

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The Definition of CAM (From the Office of Alternative Medicine) (Provided by Wayne Jonas)

Complementary and alternative medicine (CAM) is defined as a subset of medical and health care practices that are not an integral part of conventional (western) medicine. The following illustrates areas that are within or overlap with CAM.

EXAMPLE AREAS USUALLY CONSIDERED CAM	*EXAMPLE AREAS CONSIDERED CAM WHEN EXPLAINED AND APPLIED IN UNCONVENTIONAL WAYS*
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The Spectrum of CAM Research

CAM research involves a broad spectrum that can be divided roughly into three categories. (Figure 1)

I: Integrating topics - These are research ~~on~~ topics that may be considered conventional but are of interest for CAM practices. Examples include examining mechanisms of action of popular supplements such as melatonin, DHEA, vitamins, minerals and anti-oxidants.

II: Emerging CAM topics - Emerging CAM topics are those that involve common areas of interest for CAM and conventional medicine. Examples include acupuncture and herbalism (phytotherapy) and the use of high doses of combination nutritional supplements.

III: Frontier topics - Frontier topics are those that challenge our conceptual and paradigmatic assumptions about the nature of biological or scientific reality. Examples are homeopathy, prayer and healing practices such as therapeutic touch.

DEFINITION OF COMPLEMENTARY AND ALTERNATIVE MEDICINE AT THE NIH

BACKGROUND:

Defining what exactly falls in the realm of Unconventional Medicine or Complementary and Alternative Medicine is the most crucial and most difficult issue facing this area at this time. A clear definition is needed if the OAM is to identify which areas it is to support and not support. Currently the definition revolves around the sociological phenomena of exclusion from dominant medical practice, either by availability, training, country or culture of origin, amount of research support, theoretical explanation and other factors. This approach results in a wide and diverse range of practices with no single theoretical or conceptual basis.

OAM APPROACH:

The OAM has decided to use the concept of emerging medicine to help define these areas. The concept emphasizes the idea that the detail and information about these practices us gradually changing and reflects the necessary fluctuating state of any one particular practice as it becomes more understood and more accepted in the United States. As a practice becomes more and more accepted for whatever reason the idea is that the office would have less and less involvement with this practice. This concept means that the office will always be reaching out towards those less emergent practices outside the normal paradigmatic boundaries of normal science and medicine and gradually move them towards more acceptance. While acceptance comes in many ways, the purpose of the Office of Alternative Medicine is to focus on improving the scientific and research basis of those practices.

The OAM has done this by mapping current research at the NIH onto its seven major classes and eighteen sub-categories of Complementary and Alternative Medicine. This allows for clear identification of overlap with other offices and institutes and has rapidly identified those areas in CAM currently not being supported at the NIH. When doing this it becomes clear that about 2% of current NIH efforts go to frontier areas, about 15% to emerging areas, and the remaining 83% into CAM related areas many of which are already classified as conventional medicine

Footnote 1. Terminology

The terminology used to describe unconventional medicine is varied and confusing. For the purposes of this report we use the term ▒complementary and alternative medicine" (CAM) to designate practices that are not an integral part of conventional, western medicine. The terms ▒conventional" and ▒orthodox" are used interchangeably. ▒Traditional" medicine will be used to refer to indigenous practices that are part of long-standing native healing systems. Except where noted, no distinction is implied between practices referred to by the terms ▒complementary" when used to supplement conventional medicine), "alternative" (when used instead of conventional medicine), or ▒integrating (integral)" (when used in a coordinated fashion with conventional medicine) as any one CAM practice may be used in any or all of these ways at different times.

DEFINITION OF COMPLEMENTARY AND ALTERNATIVE MEDICINE

(Provided by Wayne Jonas)

Complementary and alternative medicine (CAM) is defined as those medical systems, theories, claims, or interventions that are not part of the dominant biomedical system. They are ideas and practices that are not encompassed by current mainstream medical culture. This relationship occurs for several reasons including:

1. The explanatory model of the practice is not generally accepted and so additional criteria are required for "proof". (e.g. homeopathy, prayer).
2. The origin of the practice is outside of the dominant system (e.g. acupuncture).
3. The amount of data, or type of data is considered insufficient or otherwise inadequate (e.g. herbalism, vitamin therapy).
4. The use of the practice is marginalized, in that it is not available within conventional hospitals (e.g. relaxation techniques).
5. The teaching of the practice is marginalized, in that it is not generally taught within medical, nursing or graduate schools of the dominant institutions (e.g. nutritional therapy).
6. The amount of research funding, infrastructure, and capacity for investigating the practice is low. (e.g. cancer, chiropractic).
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10. An aspect of the therapy is marginalized through it is studied under other names or subdivisions (e.g. antineoplastons, shark cartalige).

While this definition results in a heterogeneous group of systems, theories, interventions, and claims, the major systems within CAM share some common characteristics:

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b) Systems oriented - CAM systems tend to emphasize a complete or combination systems approach that includes multiple simultaneous interventions with individualization, or variation of those interventions during the course of treatment. They often assume that the entire system is required as a package independent of the isolated effects of its individual components (e.g. whole plant extracts).

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CAM DEFINITION FROM HOUSE OF LORDS REPORT (UNITED KINGDOM)

CHAPTER 1: INTRODUCTION

What is Complementary and Alternative Medicine?

1.1 Aspirin (acetylsalicylic acid) was the first synthetic chemical drug. It was manufactured by Bayer in Germany, patented and put on the market in 1899. Until then treatment in Western medicine, as in all other forms of medical practice, including Chinese and Ayurvedic medicine, was very largely based on the use of herbs supplemented by preparations of metals and occasionally animal preparations. The preparations in the Herbal of Dioscorides published in 55AD remained largely unchanged in Western pharmacopeias until the twentieth century. There was very considerable variation in the range of herbs available in Eastern countries and their pharmacopeias reflected this. But apart from such differences, the aims were the same, namely to use the herbs that were available for their effects in ameliorating the symptoms of disease.

1.2 In virtually all systems of medicine the claims made for the efficacy of such preparations in treating a wide range of diseases and symptoms usually lacked any clear supporting evidence or a sound foundation. This was reinforced by the tendency, still found in the Eastern systems of medicine today, to prescribe a mixture of many different herbs rather than a single remedy. Quinine (derived from cinchona bark) for malaria, digitalis (from the foxglove) for heart failure and opium (from the poppy) for pain relief were exceptions but even their efficacy was only established after many years of empirical use. Before the introduction of the National Health Service (NHS) in 1948, the provision of primary medical care in the United Kingdom was very uneven. Nevertheless, many doctors were able to find ample time to spend with their patients. They made many house visits and came to know much about the families for whom they cared, both medically and socially. Their principal method of caring for their patients, apart from using the range of herbal remedies available, was the provision of what has been referred to commonly as "tender loving care" (TLC) to aid natural recovery, namely to supplement the "vis medicatrix naturae"[1].

1.3 The rate of development in Western countries of new synthetic chemical drugs has increased steadily since the introduction of aspirin. Western medicine now has an armamentarium of remedies that provides the means of preventing or curing many specific diseases and also of mitigating the symptoms of many more. This has not happened to any major extent in any other systems of medicine, although new and effective herbal remedies are still being discovered and are becoming available to complement the enormous variety of effective synthetic drugs which are now being used in conventional Western medicine.

1.4 In parallel with the increased availability of synthetic drugs, there have been remarkable developments in surgery. These escalated following the development of effective anaesthesia, which made complex surgery possible for the first time. The range of feasible surgical interventions has increased dramatically and offers a new prospect of

radical cures or mitigation of many maladies. There has also been a dramatic increase in knowledge of the biochemical or molecular origin of many diseases so that new diagnostic tests have emerged, many dependent upon measuring the concentration of various chemical entities in the blood stream, or upon the use of DNA recombinant technology.

1.5 There are however many common diseases, mostly chronic, for which new drugs and surgical interventions have so far failed to provide outcomes that are satisfactory for many patients. Among these are the various forms of arthritis, low back pain, asthma, some forms of cancer and many more.

1.6 Modern Western medicine is both complex and expensive. Increasing pressures on an under-doctored National Health Service (NHS) are now such that the average primary care physician has very little time to spend with each patient in consultation in order to offer the attention and 'tender loving care' which were important therapeutic weapons for his predecessors. When he or she diagnoses a serious or acute condition known to be amenable to modern treatment, the patient will usually be referred to an appropriate specialist, although some such problems can increasingly be handled effectively in primary care. When a chronic complaint is diagnosed it is often treated symptomatically with a prescription drug. Furthermore in a group practice patients may sometimes see different doctors on each occasion they attend, and thus lack a close therapeutic relationship with a single doctor. Added to this is the fact that many conventional medical and surgical interventions, as well as effective synthetic drugs, and even some of herbal origin, produce in some patients troublesome and distressing side-effects which may occasionally even have fatal consequences. Such adverse reactions are usually less common with complementary and alternative therapies. The benefit-risk ratio must be taken into account.

1.7 It is not, therefore, surprising that the satisfaction expressed by many patients with conventional medicine is often not as good as it was in the past. It is probable that this is one of the principal reasons why there has been such a marked increase in the numbers of people who turn to other systems of medicine or to complementary or alternative medicine to replace or supplement their conventional medical advice. It is these complementary and alternative disciplines that we examine in this report.

1.8 Complementary and Alternative Medicine (CAM) is a title used to refer to a diverse group of health-related therapies and disciplines which are not considered to be a part of mainstream medical care. Other terms sometimes used to describe them include 'natural medicine', 'non-conventional medicine' and 'holistic medicine'. However, CAM is currently the term used most often, and hence we have adopted it on our Report. CAM embraces those therapies that may either be provided alongside conventional medicine (complementary) or which may, in the view of their practitioners, act as a substitute for it. Alternative disciplines purport to provide diagnostic information as well as offering therapy.

1.9 This Inquiry was mounted because there is a widespread perception that CAM use is

increasing not only in the United Kingdom but across the developed world. This appeared to raise several important questions of substantial significance in relation to public health policy.

1.10 Before assessing how CAM use could, or should, influence public health policy, a more quantitative picture of use in this area would be desirable. However, quantitative survey data in this area are somewhat patchy and are beset by questions of definition which are hard to resolve.

1.11 Several professional bodies have attempted to define CAM. The British Medical Association (BMA) report Complementary Medicine: New Approaches to Good Practice suggests that although the term 'complementary therapies' is familiar to the public, a more accurate term might be 'non-conventional therapies'. The BMA defines these as: "those forms of treatment which are not widely used by the conventional healthcare professions, and the skills of which are not taught as part of the undergraduate curriculum of conventional medical and paramedical healthcare courses"[2]. This definition is now unsatisfactory as the use of some of the therapies traditionally considered to be non-conventional is growing amongst doctors (although practice varies widely). Some medical schools are now offering CAM familiarisation courses to undergraduate medical students while some also offer modules specifically on CAM.

1.12 Professor Edzard Ernst, who holds a Chair in CAM at Exeter University, provided the following definition: "Complementary medicine is diagnosis, treatment and/or prevention which complements mainstream medicine by contributing to a common whole, by satisfying a demand not met by orthodoxy or by diversifying the conceptual frameworks of medicine"[3]. This definition helps to elucidate the aims of complementary medicine, but it does not cover alternative therapies which do not seek to contribute to a common whole but which are offered by their practitioners as an alternative to conventional medicine. A more encompassing definition of CAM is provided by the Cochrane Collaboration as: "a broad domain of healing resources that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health systems of a particular society or culture in a given historical period".

1.13 The CAM community has been struggling for fifteen years to come up with a single definition of CAM agreed by all, but with no success. Therefore, when setting up this Inquiry we decided not to begin with a precise definition of CAM. Instead we began with a list of therapies which we thought were commonly considered to fall within the field of CAM and issued this list with our Call for Evidence (see Box 1). Additional disciplines have subsequently been added in the light of evidence received (identified by an asterisk in Box 1). In making the list of therapies we have provisionally grouped the ones we regard principally as complementary separately from the ones we regard principally as alternative. While no firm distinction is possible, we regard the complementary disciplines as those which usually, if not invariably, complement conventional medical treatment, while the alternative disciplines are those which purport to offer diagnostic and therapeutic alternatives to conventional medicine.

NCCAM DEFINITION OF CAM (FROM ITS WEB SITE)

Complementary and alternative healthcare and medical practices (CAM) are those healthcare and medical practices that are not currently an integral part of conventional medicine1. The list of practices that are considered CAM changes continually as CAM practices and therapies that are proven safe and effective become accepted as "mainstream" healthcare practices. Today, CAM practices may be grouped within five major domains2: (1) alternative medical systems, (2) mind-body interventions, (3) biologically-based treatments, (4) manipulative and body-based methods, and (5) energy therapies. The individual systems and treatments comprising these categories are too numerous to list in this document.Thus, only limited examples are provided within each.

I. ALTERNATIVE MEDICAL SYSTEMS

Alternative medical systems involve complete systems of theory and practice that have evolved independent of and often prior to the conventional biomedical approach. Many are traditional systems of medicine that are practiced by individual cultures throughout the world, including a number of venerable Asian approaches.

Traditional oriental medicine emphasizes the proper balance or disturbances of qi (pronounced chi), or vital energy, in health and disease, respectively. Traditional oriental medicine consists of a group of techniques and methods, including acupuncture, herbal medicine, oriental massage, and qi gong (a form of energy therapy described more fully below). Acupuncture involves stimulating specific
anatomic points in the body for therapeutic purposes, usually by puncturing the skin with a needle.

Ayurveda is India's traditional system of medicine. Ayurvedic medicine (meaning "science of life") is a comprehensive system of medicine that places equal emphasis on body, mind, and spirit, and strives to restore the innate harmony of the individual. Some of the primary Ayurvedic treatments include diet, exercise, meditation, herbs, massage, exposure to sunlight, and controlled breathing.

Other traditional medical systems have been developed by Native American, Aboriginal, African, Middle-Eastern, Tibetan, Central and South American cultures.

Homeopathy and naturopathy are also examples of complete alternative medical systems. Homeopathy is an unconventional Western system that is based on the principle that "like cures like," i.e., that the same substance that in large doses produces the symptoms of an illness, in very minute doses cures it. Homeopathic physicians believe that the more dilute the remedy, the greater its potency. Therefore, homeopaths use small doses of specially prepared plant extracts and minerals to stimulate the body's defense mechanisms and healing processes in order to treat illness.

Naturopathy views disease as a manifestation of alterations in the processes by which the body naturally heals itself and emphasizes health restoration rather than disease treatment. Naturopathic physicians employ an array of healing practices, including diet and clinical nutrition; homeopathy; acupuncture; herbal medicine; hydrotherapy (the use of water in a range of temperatures and methods of applications); spinal and soft-tissue manipulation; physical therapies involving electric currents, ultrasound, and light therapy; therapeutic counseling; and pharmacology.

II. MIND-BODY INTERVENTIONS

Mind-body interventions employ a variety of techniques designed to facilitate the mind's capacity to affect bodily function and symptoms. Only a subset of mind-body interventions are considered CAM. Many that have a well-documented theoretical basis, for example, patient education and cognitive-behavioral approaches are now considered "mainstream." On the other hand, meditation, certain uses of hypnosis, dance, music, and art therapy, and prayer and mental healing are categorized as complementary and alternative.

III. BIOLOGICAL-BASED THERAPIES

This category of CAM includes natural and biologically-based practices, interventions, and products, many of which overlap with conventional medicine's use of dietary supplements. Included are herbal, special dietary, orthomolecular, and individual biological therapies.

Herbal therapies employ individual or mixtures of herbs for therapeutic value. An herb is a plant or plant part that produces and contains chemical substances that act upon the body. Special diet therapies, such as those proposed by Drs. Atkins, Ornish, Pritikin, and Weil, are believed to prevent and or control illness as well as promote health. Orthomolecular therapies aim to treat disease with varying concentrations of chemicals, such as, magnesium, melatonin, and mega-doses of vitamins. Biological therapies include, for example, the use of laetrile and shark cartilage to treat cancer and bee pollen to treat autoimmune and inflammatory diseases.

IV. MANIPULATIVE AND BODY-BASED METHODS

This category includes methods that are based on manipulation and/or movement of the body. For example, chiropractors focus on the relationship between structure (primarily the spine) and function, and how that relationship affects the preservation and restoration of health, using manipulative therapy as an integral treatment tool. Some osteopaths, who place particular emphasis on the musculoskelatal system, believing that all of the body's systems work together and that disturbances in one system may have an impact upon function elsewhere in the body, practice osteopathic manipulation. Massage therapists manipulate the soft tissues of the body to normalize those tissues.

V. ENERGY THERAPIES

Energy therapies focus either on energy fields originating within the body (biofields) or those from other sources (electromagnetic fields).

Biofield therapies are intended to affect the energy fields, whose existence is not yet experimentally proven, that surround and penetrate the human body. Some forms of energy therapy manipulate biofields by applying pressure and/or manipulating the body by placing the hands in, or through, these fields. Examples include Qi gong, Reiki and Therapeutic Touch. Qi gong is a component of traditional oriental medicine that combines movement, meditation, and regulation of breathing to enhance the flow of vital energy (qi) in the body, to improve blood circulation, and to enhance immune function. Reiki, the Japanese word representing Universal Life Energy, is based on the belief that by channeling spiritual energy through the practitioner the spirit is healed, and it in turn heals the physical body. Therapeutic Touch is derived from the ancient technique of "laying-on of hands" and is based on the premise that it is the healing force of the therapist that affects the patient's recovery and that healing is promoted when the body's energies are in balance. By passing their hands over the patient, these healers identify energy imbalances.

Bioelectromagnetic-based therapies involve the unconventional use of electromagnetic fields, such as pulsed fields, magnetic fields, or alternating current or direct current fields, to, for example, treat asthma or cancer, or manage pain and migraine headaches.

1 The term conventional medicine refers to medicine as practiced by holders of M.D. (medical doctor) or D.O. (doctor of osteopathy) degrees, some of whom may also practice complementary and alternative medicine. Other terms for conventional medicine are allopathy, Western, regular, and mainstream medicine, and biomedicine.

2 These are the categories within which NCCAM has chosen to group the numerous CAM practices; others employ different, broad groupings.

What Is Complementary and Alternative Medicine?

Complementary and alternative medicine (CAM) covers a broad range of healing philosophies, approaches, and therapies. Generally , it is defined as those treatments and healthcare practices not taught widely in medical schools, not generally used in hospitals, and not usually reimbursed by medical insurance companies.

Many therapies are termed "holistic," which generally means that the healthcare practitioner considers the whole person, including physical, mental, emotional, and spiritual aspects. Many therapies are also known as "preventive," which means that the practitioner educates and treats the person to prevent health problems from arising, rather than treating symptoms after problems have occurred.

People use these treatments and therapies in a variety of ways. Therapies are used alone (often referred to as alternative), in combination with other alternative therapies, or in addition to conventional therapies (sometimes referred to as complementary).

Some approaches are consistent with physiological principles of Western medicine, while others constitute healing systems with a different origin. While some therapies are far outside the realm of accepted Western medical theory and practice, others are becoming established in mainstream medicine.

Ten Guiding Principles Endorsed by the Commission (Edited by Jim Swyers)

The Commission recognizes that its recommendations must be grounded in sound scientific and ethical principles and has, therefore, adopted 10 principles to both guide the process for making recommendations and the recommendations themselves. These 10 Guiding Principles, include:

1) A commitment to promoting the use of science and the appropriate scientific methods to identify and enhance the development and delivery of safe and effective CAM services and products.

2) A commitment to thoughtfully examine the current evidence base for CAM practices, and to make this evidence base widely and easily available as well as to enhance it by advocating for high-quality research.

3) An acknowledgment that good healthcare emphasizes the promotion of health in addition to the treatment of disease. There is overwhelming scientific evidence that it is significantly more humane and cost-effective to prevent illness and disease compared to treating people after they get sick.

4) A recognition that quality healthcare includes attention to all aspects of life -- mental, emotional, societal and spiritual--in addition to one's physical condition.

5) A recognition that "self-care" practices and approaches, CAM and conventional, are a significant part of quality healthcare and that self-care education needs to be integral part of the curricula of health professionals as well as of that of the public at all ages.

6) A recognition that all people have the right to choose freely among practitioners who are both responsive to their needs and concerns and accountable for their actions.

7) A recognition that the body has a remarkable capacity for healing, which can be enhanced by addressing the underlying causes of illness and suffering.

8) An acknowledgement that each person has unique needs that must be attended to in every therapeutic setting and encounter

9) An understanding that potential benefits of CAM for the public can best be maximized through promoting collaborations between conventional and CAM healthcare professionals and researchers and by encouraging the integrated delivery of CAM along with conventional medicine, where appropriate.

10) A commitment to including the views of consumers of CAM practices and products in our decision-making process.

Agenda for August 16th Conference call on Definition and Guiding Principles

1. Objectives for the conference call and beyond

   -Discuss what we want to accomplish in 90-minute conference call.

   -Discuss what needs to be done before October meeting.

2. Quick review and discussion of background materials for CAM definition

   -Key issues from lunch meeting document (pages 1-4)
   -Evolution of definitions (pages 5-9).
   -Review of OAM definition (pages 10-11).
   -Review of Wayne Jonas definition (page 12)
   -Review of House of Lords definition (pages 13-15)
   -Review of NCCAM definition (pages 16-19)
   -Discussion of other materials included in the packet.

3. Guiding Principles Discussion

   Discuss proposal to give Guiding Principles their own prominent section in the report
   Discuss language of guiding principles (page 20)
   Discuss next steps in development of Guiding Principles section.

4. Additional comments and discussion.

ORIGINAL PAPER

DEFINING AND DESCRIBING COMPLEMENTARY AND ALTERNATIVE MEDICINE

Panel on Definition and Description, CAM Research Methodology Conference, April 1995

The panel met at the Methodology Conference in Bethesda, Md, in April 1995. Panel members were Chair, Bonnie B O'Connor, PhD, Department of Community and Preventive Medicine, MCP-Hahnemann School of Medicine, Philadelphia, Pa; Carlo Calabrese, ND, Director of Research, Bastyr University, Seattle, Wash; Etzel Cardeña, PhD, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Md; David Eisenberg, MD, Director, Center for Alternative Medicine Research, Beth Israel Hospital, Boston, Mass; Judith Fincher, PhD, Chrysalis Energy Works, Sterling, Va; David J Hufford, PhD, Director, Doctors Kienle Center for Humanistic Medicine, Department of Humanities, Milton S Hershey Medical Center, Hershey, Pa; Wayne B Jonas, MD (ex officio), Director, Office of Alternative Medicine, National Institutes of Health, Bethesda, Md; Ted Kaptchuk, OMD, Associate Director, Center for Alternative Medicine Research, Beth Israel Hospital, Boston, Mass; Steven C Martin, MD, Department of Epidemiology and Social Medicine, Albert Einstein College of Medicine, Bronx, NY; Anne W Scott, PhD, Country Director, Pact Indonesia, Jakarta, Indonesia; and Xiaorui Zhang, MD, Director, Traditional Medicine Programme, World Health Organization, Geneva, Switzerland.

The definition of complementary and alternative medicine has been much debated in recent years as this type of therapy has increasingly become a focus of public and academic attention. Individual authors typically stipulate a definition for purposes of their particular articles, and definitions have varied with the perspectives and affiliations of authors. The panel on definition and description of the 1995 Office of Alternative Medicine CAM Research Methodology Conference proposed a definition of the field *of complementary and alternative medicine for use by the Office of Alternative Medicine in delineating its research jurisdiction. In addition, the panel suggested a set of descriptive parameters for qualitative research on complementary and alternative medicine and a minimum descriptive standard for both qualitative and quantitative research in the field. The results of the panel's deliberations and the justifications for their outcomes are discussed here. (Alternative Therapies in Health and Medicine. 1997;3(2):49-57)*

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In April 1995, the Office of Alternative Medicine (OAM) of the National Institutes of Health held a conference on research methodology to evaluate research needs in the large, diverse, and dynamic field of complementary and alternative medicine (CAM). Several working groups were empaneled by the OAM to produce consensus statements on a variety of topics essential to CAM research. The panel on definition and description accepted a dual charge: to establish a definition of the field of CAM for purposes of identification and research; and to identify factors critical to thorough and unbiased description of CAM systems and practices that would be applicable to both quantitative and qualitative research.

FOUNDATIONAL CONSIDERATIONS

Language, Values, and Politics

Many constituencies participate in the discourse on CAM, and each has viewpoints and interests to advance, often for disparate—and sometimes mutually exclusive—ends. Debate can be confusing, even contentious. One contributing cause to this state of affairs, even among those desiring to pursue common goals, is that the parties to the discussion may not be "speaking the same language" or sharing the same meanings for terms they use in common (including, of course, the central terms *complementary, alternative;* and *medicine*):

> When we come to say "we just don't speak the same language" we mean ... that we have different immediate values or different kinds of valuation, or that we are aware, often intangibly, of different formations and distributions of energy and interest. In such a case, each group is speaking its native language, but its uses are significantly different, ... especially when strong feelings or important ideas are in question.[1]

Arriving at a consensual language is crucial to productive research and scholarship in the much-contested area of CAM studies, which most certainly involves strong feelings and important ideas, as well as profound issues of legitimacy and authority.[3-5]

Defining and Describing

Definition and *description* both require careful choice of terminology and assessment of encoded values. They are closely

related but distinct undertakings. A definition is "a statement expressing the essential nature of something."[4] To *define* is to "set forth the meaning of; to determine or identify the essential qualities or meaning of; to fix or mark the limits of; to characterize [or] distinguish [something]."[4] A description, on the other hand, is "discourse intended to give a mental image of something experienced." Descriptive statements are those "referring to, constituting, or grounded in matters of observation and experience."[4]

A definition may be stipulated, that is "*assigned* a specific meaning for consistency and clarity of communication [italics added]"[7] in a specific context or for specific purposes. A definition, by its nature and purpose, must apply fully to all members of the class to which it refers. In order to achieve accurate representation of the contours of the phenomenon being defined, it is essential to stipulate a definition that delineates a field neither too broadly nor too narrowly, to achieve accurate representation of the phenomena being defined.[8]

Descriptions, conversely, cannot be stipulative. Accurate and reliable description can be made only on the basis of discovery, observation, or experience. (This requirement would not, of course, apply to those descriptions expressly identified as theoretical, such as some descriptions in particle physics or astronomy.) Descriptive efforts across a class of phenomena yield a repertoire of features, all aspects of which need not—indeed, cannot—apply to every individual member of the class. Table 1 summarizes these distinctions.

In both definitional and descriptive efforts, clarity and care are essential, for "[h]ow the definition or [description] is articulated will influence the choice of data for study,"[8] including which features are made prominent and which invisible, which dominant and which subordinate. It is challenging to forge appropriate language for definition and description in a field as contested, politically charged, and value-laden as CAM, because these very linguistic acts "presuppose a particular point of view, and often carry moral tone,"[5] and may suggest by their selection of words whether the subject is to be regarded favorably or unfavorably.

The language of definition and description must, for professional purposes, be nonevaluative, avoiding implications of favorability. Explicitly or implicitly evaluative linguistic choices have both obvious and subtle effects on distribution of research interest and funding, conduct and contours of research studies, legislation and regulatory activity, patterns of practice and usage, policy decisions, and other sequelae of practical consequence.

TABLE 1: Definition vs description

Definition	Description
• A statement expressing the essential nature of something	• Discourse intended to give a mental image of something experienced
• May be stipulated, or assigned meaning	• Must derive from observation or experience
• When applied to a class of phenomena, must apply fully to all members of the class	• When applied to a class of phenomena, may yield an aggregate set of features, all of which need not apply to each particular member of the class

Screens for Bias

In keeping with the foregoing considerations, the panel on definition and description adopted a set of "screens" for bias in the language chosen to articulate a definition of CAM and to indicate important descriptive features of the whole or any of its subsets. These screens reflect a set of values and goals considered essential by the panelists. The screens applied required that the panel's statements do the following:

- Conform with the distinction between definitive and descriptive features
- Be nonethnocentric and neutral with respect to gender, class, education, race, ethnicity, religion, and other such personal or group identity features
- Be cross-culturally and internationally applicable
- Be nonpreferential with respect to the concerns or status of specific systems or disciplines
- Have construct validity, testable by application to actual instances
- Accommodate the dynamism of the phenomena to which they refer
- Accommodate CAM systems' and participants' self-definition and self-description
- Be nonevaluative

GENERAL DEFINITION OF CAM

The panel defined *CAM* as follows:

> Complementary and alternative medicine (CAM) is a broad domain of healing resources that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health system of a particular society or culture in a given historical period. CAM includes all such practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being. Boundaries within CAM and between the CAM domain and the domain of the dominant system are not always sharp or fixed.

It must be noted that identifying a health system as "politically dominant" does not imply that it achieved its position of dominance through political means. It is rather to recognize the social fact that the dominant system has a reputation for efficacy and broad cultural authority as well as dominant (or perhaps even exclusive) access to legislative and social institutional supports such as medical practice laws, legally recognized accreditation and rights of self-regulation, third-party payment,

privileged access to public research monies and to prestigious publication venues, high status, and so forth.

In the United States in the 20th century, the dominant healthcare system is, for want of a better term, biomedicine. CAM in the United States therefore is that broad domain of all healthcare resources to which people have recourse other than those intrinsic to biomedicine and the specific theoretical and practice models of biomedicine. If in another society an indigenous ethnomedical system is the dominant system, then all healing resources other than those intrinsic to that dominant system constitute that society's CAM domain (even if one of those resources is biomedicine). If a society should have dual or multiple systems of equal dominance and influence, then these would share the dominant-systems domain, and all other healing resources would constitute that society's CAM domain.

The vast range of CAM resources in the United States comprises a spectrum of delivery modes ranging from primarily self-care (for example, dietary practices, folk remedies, personal prayer) to primarily practitioner-based care (for example, chiropractic, acupuncture, naturopathy). CAM includes systems, modalities, and specific practices widely known and used across populations (religious and spiritual healing, herbalism, lay midwifery, prevention and treatment for effects of "the evil eye") as well as those more closely, or even exclusively, associated with a specific population or identity group (*curanderismo*, Neuro-Linguistic Programming [NLP], Alcoholics Anonymous, Navajo sings). Many examples could be cited in several categories. For example, dietary practices can be practitioner-prescribed and supervised, aspects of religious or philosophical allegiance, or personally created and pursued. Homeopathic care may be sought from a homeopath, undertaken privately as a form of self-care, or both, just as one may visit the family medical doctor and self-diagnose and self-medicate with conventional over-the-counter products.

In addition, there are practices which could well be included within the framework of biomedicine, but whose justifying theories or specific modes of use place them within the CAM domain. For example, although use of vitamin and mineral supplementation falls within the biomedical model, use of these substances in megadoses, or for purposes not endorsed or accepted within biomedicine, would be classified in the United States as CAM. Similarly, widespread use of prescription drugs for self-identified, off-label uses, or in forms obtained from veterinary supply sources (as is common among AIDS treatment activists[5]), would qualify as CAM practices.

RESPONSE TO COMMON CONCERNS AND OBJECTIONS

Attendees at the OAM conference were invited to submit recommendations and concerns for incorporation into the panel's deliberations. On the final conference day, panelists publicly presented their findings and accepted questions and comments from the floor. In these two interactions, a number of concerns and objections were raised. We briefly respond here to the most widely shared of these issues, many of which are closely interrelated.

Problematic Aspects of the Component Terms in CAM

The changing usages of the words *alternative* and *complementary* in the past several years reflect an evolving public and professional consciousness and discourse.[4] In the United States, both terms have been used in contrast to conventional biomedicine, to refer to additional healthcare resources that Americans commonly use.

The word *alternative* has most recently been taken by many to suggest substitution, an either-or relationship, implying modalities used *instead of* conventional medicine. This presumption does not, however, reflect the most typical actual patterns of use.[4,5,9-12] In response, the word *complementary* entered the lexicon with its suggestion of modalities used *together with*, or *to complement the offerings of*, conventional medicine.

Both terms are subject to diverse valuation, depending upon one's political and epistemological stances. Some proponents find the terms accurate and largely value-neutral. Some adopt the terms as badges of honor, proud to have the terms represent values, concerns, and practices they feel are essential to health and healing but missing in biomedicine. Still others find the terms offensive for implying a centrality or special propriety of biomedicine and bridle at being classified as "other" when they feel parity (or even priority) would be more appropriate or more accurate.

The same problem of multiple meanings and diverse values is associated with the term *medicine*. Strict constructionists, including many nurses and physicians, argue that the word *medicine* properly refers only to biomedicine and its physician practitioners. Physicians may object to extending a term that they see as the name of their discipline to cover other healing systems. Nurses may object to what they think is the narrowness of the term and the invisibility it produces for members of their profession and others who engage in healing activities that have a theoretical and philosophical basis broader than and different from the biomedical model.

Still others use *medicine* as a broad term covering everything that people do to preserve, promote, and restore health and to prevent and treat illness (with *health* and *illness* again variously defined). Panelists implicitly accepted the broad, as opposed to the disciplinary, usage of the component term *medicine*. The panel declined to define the component terms separately, largely because the problem of sorting out the multiple meanings and valuations of the terms is essentially intractable. Panelists considered that time could much more productively be spent crafting a working definition for the OAM to use to identify and demarcate the *field* in which its interests and research jurisdiction lie.

Aggregation in the Term CAM

As noted, panelists accepted the combined term *complementary and alternative medicine* as assigned by the OAM and chose to define CAM as a significant domain of health-related activity, rather than wrestle with separate definitions for *alternative* and *complementary*. This decision was derived from recognition that the individual designations *alternative* and

complementary (given their meanings as discussed earlier) cannot accurately be applied to any particular system, modality, practice, or theory with constancy, because the terms depend for meaning in any specific instance on the relationship in which they stand to use of conventional therapeutic means. For example, herbs may in one instance be used instead of biomedical care but in another used together with biomedicine; whether herbalism is then to be called alternative or complementary becomes circumstantial.

The definition as formulated has the advantage of constancy with reference to the CAM domain, irrespective of specific instances of substitutive, sequential, or simultaneous use of conventional resources. In addition, it has constancy over time, even if the particular content of the domain should shift; for example, if particular modalities or practices were to become components of the dominant system or be incorporated into its theoretical models. Should such incorporation and theoretical modeling occur, it is quite possible that there would be theory and practice in both dominant and CAM domains as long as the modality was active in both. For example, acupuncture has begun to be incorporated into the biomedical domain in the United States, where its action is explained in terms of one or more neurochemical and neurophysiological theories consonant with other aspects of the biomedical model. Should acupuncture practiced and explained in this way become thoroughly incorporated into biomedicine, its practice in accordance with traditional Chinese diagnostic techniques, meridian theory, and vitalistic explanatory models would remain a part of CAM.

Negative Definition

In response to concerns about negative definitions (eg, the common formulation in the United States that CAM includes everything that is not conventional biomedicine), the panel began with positive wording: "CAM is a broad domain of healing resources...." The definition recognizes two domains of healthcare activity, which we believe accurately reflects social fact. We identified these domains as *dominant system* and *CAM* and further defined CAM as encompassing "all [healing resources] other than those intrinsic to [contrast set]." This definition of CAM neither privileges nor subordinates either domain and avoids negative wording. Furthermore, in this formulation, identification and definition of either domain are equally amenable to illumination by contrast with the other, and a parallel definition of dominant domain could readily be made. (For example, consider two domains of related activity called "Red" and "Blue" [to escape for a moment the cultural and emotional freight that might be associated with use of other terms]. We can with equal accuracy and facility say that all *x* other than those intrinsic to the category Red are members of Blue, or that all *x* other than those intrinsic to the category Blue are members of Red.)

Relational Definition

A related concern has been that of defining CAM by reference to the dominant system, as opposed to formulating a stand-alone definition that outlines the particular qualities of CAM. There are several problems inherent in formulating a stand-alone definition, of which at least two are critical. First, the CAM domain is enormously diverse, as well as dynamic and changing. Following the requirement that definitive criteria must apply fully to all members of the set being defined, the panel could not identify specific qualities that would define CAM, apply equally to all its subsets, and hold over time. Second, the terms *alternative* and *complementary* imply a second referent: a phenomenon is not alternative or complementary in itself but is alternative or complementary to something else.

Medicocentrism

The definition does not mention biomedicine or take biomedicine as a standard against which other healthcare activity and belief are to be measured. In addition, it explicitly identifies a range of delivery modes and actions in an effort both to clarify the possibilities within CAM and to address the common medicocentric assumption that healthcare activities follow a practitioner-patient model.

Status Concerns

The definition does not identify any particular healing system as the system that is or ought to be dominant (on the sociopolitical "inside") or any particular systems as ones that are or ought to be "outside" the dominant domain. It does, however, recognize and take account of the existence of multiple healing systems with various degrees of dominance and influence in the United States and other societies. This social phenomenon highlights some of the political dimensions of the organization of healthcare resources that are true whether we prefer them to be or not and irrespective of the specific terms we assign to them. The panel concluded that the terms *dominant* and *CAM* are nonevaluative and properly identify two broad domains of healthcare theory and practice that are recognized even by those who may decry the relative status of these domains.

Desirability of Moving Toward a Single Definition of "a Medicine" vs Types of Medicine

The panel's definition reflects existing social and political organization and interaction of healthcare resources; it is not a prescriptive pronouncement. In addition, it intentionally helps make salient the facts of healthcare pluralism and the great diversity of theory and practice that human beings bring to bear on matters of health and illness and care.

Boundary Between Medicine or Therapeutic Practice and Lifestyle

The definition addresses the issue of the boundary between medicine or therapeutic practice and lifestyle with respect to CAM by specifying that the domain includes all actions and choices "self-defined by their users as preventing or treating illness or promoting health and well-being." It follows from this formulation that the distinction between healthcare practices

and non–health-related lifestyle choices is not a constant, but rather a situation-specific determination that necessarily involves the intentions of the person taking the action.

Classification of Subsets of CAM

Gaining Acceptance in the Dominant System

The classification of subsets of CAM that are gaining acceptance in the dominant system is addressed by the constancy of the domain definition, as noted in the section on aggregation in the term *CAM*.

Absence of Specific Adjectives Strongly Associated With CAM

The absence of specific adjectives strongly associated with CAM is closely related to the issue of relational definition discussed previously. Most often suggested as belonging in a definition of CAM were the terms *holistic, spiritual,* and *mind/body*. Although these terms do accurately describe features of many CAM systems, modalities, and practices, they do not apply to every member of the class. The panel considered the properly identified scope of the CAM domain as encompassing not only entire healing systems but also particular modalities and individual practices. In many instances, accurate applicability of any of the suggested adjectives is again situation specific.

For example, the philosophical and theoretical basis of traditional Chinese medicine (as a system) asserts the fundamental oneness of body-mind-spirit and addresses therapeutic interventions holistically. Yet, a person may take a specific Chinese herb or multiple-herb preparation to treat a symptom he or she regards as only physical (eg, menstrual cramps) or only mental (eg, anxiety or depression) or may seek acupuncture to treat a physical condition only (eg, repetitive motion injury). Because the suggested terms do not apply to all identifiable members of the class CAM, the panel considered the terms descriptive but not definitive.

DESCRIBING CAM

Some Caveats

It is essential that scholars and researchers base descriptions of components and subsets of CAM on observation and inquiry and avoid introducing interpretations (eg, as to what something "really" is or means or what is "really" happening) into descriptive material. (Here, the use of the term *systems* should also be taken to refer to subsets of systems, such as particular modalities, practices, theories, or beliefs. We use the single term to avoid the cumbersome repetition of the list systems, modalities, practices, and so forth.) Appropriate descriptions of CAM systems must be able to yield categories and representations that members of the system would themselves recognize as accurate and be able to verify. *Interpretations* are suitable research hypotheses or theoretical aspects of analysis and should be clearly identified as such and separated from descriptive elements in research proposals and reports.

For example, to say that current homeopathic theory suggests that homeopathic remedies produce their effects through some not-yet-understood energetic or bioelectromagnetic mechanism of action would be both an accurate description of some aspects of the system's theoretical framework and a description that many homeopaths would probably accept. To suggest that these medicines produce their effects through a placebo response would be to interject outside theory into the description. Similarly, to say a person who finds prayer efficacious in promoting healing believes that divine or otherworldly beings are coming to his or her aid in response to the prayers would be both accurate and acceptable to those to whom the description is intended to apply. To say that prayer for healing accomplishes its ends through psychological means or via a mind-body interconnection would again be to interject outside theory into the description.

It is not necessary to agree with a system's assumptions or to support or advance its claims in order to produce a description that is accurate and thorough and with which members and proponents would concur—as least as far as the description goes.[10] It is necessary to screen carefully for explicit or implicit introduction of outside assumptions and evaluative language into descriptions, just as it is to screen for bias in definitions.

PARAMETERS FOR DESCRIPTION OF CAM SYSTEMS

In qualitative CAM research, it is desirable to obtain the most thorough, detailed, and accurate description of a system, modality, or practice that can be achieved. Such descriptions may as productively be made of a person's individual system of health beliefs and practices and the influences and experiences from which the system is derived (eg, Ms B's interpretations and combinations of Ayurveda, naturopathic therapies, and nutritional supplements) as of a particular "ideal" system (eg, classical Ayurveda, rootwork) described in terms of the system's aggregate theories and related practices.

The list of parameters (Table 2) established by the panel for obtaining thorough descriptions of CAM systems is intended to be applied at the system level, although selected aspects can also be applied to subsets such as specific modalities or individual practices. The list builds on a set of questions originally formulated by Hufford,[13] "Basic Questions About Health Systems," and on a subsequent adaptation by O'Connor.[5] These parameters are equally applicable to a dominant healing system, providing that the final category, comparison and interaction with dominant system, is reversed to read comparison and interaction with CAM system(s). The parameters are illustrated in the following sections, with accompanying questions and examples.

Lexicon

What are specialized terms in the system? Examples include *potenization, succussion,* or *miasms* in homeopathy; *innate intelligence* or *subluxations* in chiropractic; and *brauche* in Pennsylvania German powwowing.

How are common health and illness terms distinctively defined by the system? Examples are *asma* or *fatiga,* and terms such as

TABLE 2: **Parameters for description systems of complementary and alternative medicine**

1. **Lexicon**
   a. Distinctive terms and neologisms
   b. Distinctive meanings for common terms
2. **Taxonomy**
   a. nosology
      i) classes of disease or illness
      ii) specific diseases or illnesses
   b. causal factors
      i) immediate
      ii) underlying
      iii) ultimate
3. **Epistemology**
   a. origins and history
   b. canonical body of knowledge
   c. knowledge-testing mechanisms
   d. adaptation and change mechanisms
   e. accommodation to new input
   f. connections to broader philosophy or worldview
4. **Theories (links to taxonomy and epistemology)**
   a. anatomy, physiology, spiritual function and interactions
   b. etiologies
   c. interpretation of signs and symptoms
   d. preventive and therapeutic effects, mechanisms
5. **Goals for Interventions**
6. **Outcome Measures**
7. **Social Organization**
   a. constituents
   b. referral system
   c. roles and personnel
   d. selection methods
   e. training and education modes
   f. legitimation and oversight structures
   g. treatment sites
   h. compensation mechanisms
   i. relation to or interaction with other systems of complementary and alternative medicine
8. **Specific activities and materia medica**
   a. preventive/health maintenance
   b. therapeutic
   c. other categories (eg, postmortem ministrations)
9. **Responsibilities**
   a. patient
   b. family members
   c. community members
   d. practitioner
   e. others
10. **Scope**
11. **Analysis of benefit and barriers (insider, or emic, considerations)**
12. **Accommodation and views of suffering and death**
13. **Comparison and interaction with dominant system**

"anemia" used as euphemisms for feared or stigmatized diseases such as tuberculosis or cancer or "headache" used as a euphemism for conditions causing embarrassment, such as menstruation. Does "healed" mean physically well, or does it have other meanings? Does "healthy" mean entirely symptom-free, disease-free by other measures, or optimally functioning within certain limitations?

What terms are used to identify roles and people within the system? Examples are *patient, client, asustado, doctor, healer, surgeon, star-gazer, shaman, wise woman, diagnostician, midwife, counselor.*

Taxonomy

What classes of health and illness or disease does the system recognize and address? Examples include physical, emotional, mental, and spiritual illnesses; folk illness categories such as *susto*, high blood, or livergrown; asymptomatic disease or prodromal sequences; and diseases of imbalance, disharmony, energy blockage, and impurity.

What causes for illness does the system recognize? Examples include energy blockages, deficits, or excesses; spinal subluxations; exposure to cold or to harsh weather; improper nutrition; exposure to microbes or other physical agents; constitutional predisposition; environmental influences; "nerves"; fright; emotional or mental distress; malign human agency such as hexes or the evil eye; and supernatural influences.

How important is it to identify and address ultimate, as opposed to proximate, causes of illness? For example, germs may be the proximate cause of a disease, but other causes (eg, neglect of religious duty, exposure to cold drafts, having been hexed or cursed) are implied in the fact that a particular person is susceptible at a particular time while others who may have been exposed are spared.

Epistemology

Is there a canonical body of knowledge? For example, are parts of the knowledge base invariant, especially revered, or required? How is this knowledge codified and transmitted? Are verbatim transmission and acquisition important?

How do the origins and social history of the system relate to its current theories and practices? Examples include continued allegiance to original theoretical principles, revised understanding of original theories, preservation or rejection of earlier modes of practice, and addition of new modalities.

What are the internal disputes and variabilities of the system? Examples include straight vs "mixing" or eclectic chiropractors and Japanese, Korean, and five-element approaches vs modern Chinese acupuncture.

How does the system respond to novel input? For example, does it assimilate new or external practices or observations into existing theories? Does it reject input if the input is not consonant with existing theories? Is novel input subject to formal testing and evaluation? Does the system accommodate existing views to changed understanding based on incorporation of new information or practices?

Theories (Links to Taxonomy and Epistemology)

What are important human systems, their mechanisms of

action, and their interconnections understood to be? Examples include anatomical, spiritual, emotional, spiritual, and mental systems; the belief that organ systems are linked functionally along meridians through which *qi* flows, affecting physical, mental, and spiritual aspects of well-being; and the belief that states of mind can affect or even produce physical states of illness or healing.

How are symptoms interpreted within the system, generally and specifically? Examples of general interpretation include dangerous, and to be eliminated; expressions of the body's needs, and therefore not to be interfered with unless absolutely necessary; and indicators of specific energy blockage. Examples of specific interpretation are rashes as infections or impurities "coming out"; fevers as signs of excessive "heat" in the body or as mechanisms promoting "sweating out" of toxins or impurities in the blood; musculoskeletal pain as an indication of "cold" lodged in the body; and respiratory or other symptoms as particularly dangerous.

What is the relationship of preventive and therapeutic actions to illnesses and the prevention or melioration of illnesses? For example, spinal manipulation corrects subluxations to improve the flow of vital energy; homeopathic remedies stimulate the body's healing energy; or prescription of herbs according to the doctrine of signatures, rather than because the herbs produce a specific action such as carminative, diaphoretic, or purgative.

What is the role of patients' beliefs or expectations or practitioners' intent? For example, the patient must believe in the system or its ultimate source of healing power in order for the system to work, the practitioner must have conscious intent to help or heal in order for the system to work, the mood or intent of the practitioner affects outcome, and therapeutic interventions are expected to work irrespective of the patient's belief or expectation.

Goals for Interventions

What are the primary goals of the system? Examples include prevention of disease, pain control, enhancement of wellness, treatment of chronic disease, spiritual growth, spiritual salvation, preservation of internal and/or external balance or harmony, avoidance of synthetic substances, and minimal intervention.

Outcome Measures

What constitutes a successful intervention? Examples are remission of symptoms, restoration of faith, expiation of sin, removal of hex or curse, restoration of balance or harmony, revitalization of weak or suppressed vital energy, and healing vs curing.

How are successful or failed interventions evaluated? Examples include instrumentation or laboratory results, practitioner evaluation and clinical judgment, intuition or special forms of knowledge, patient self-observation and self-report.

How are the successes and failures of treatments and practitioners explained? Examples are mobilization of the body's own healing capacity, superior healing capacity of natural vs synthetic medicaments, divine providence, shared blame for failure because of the patient's error or inability to follow recommended therapies, insufficient faith on the part of the patient, variability in knowledge and skill among practitioners, and inevitability of a certain percentage of failures in any system.

Social Organization

What are the prevalence and distribution of this system? For example, what is the demographic profile of its proponents, patients, practitioners; the extent of its use across the country; and specific locales in which it is most prevalent?

Who uses the system or to whom is it primarily accessible? Examples include members of a particular ethnic group, persons with specific diseases or dysfunctions, members of specific religious denominations, and members of specific interest or identity groups.

What is the system's referral network? Examples are family members, community members, physicians, practitioners from other nonconventional systems, testimony of the healed, print media, and health food stores.

Are there specialist practitioners? If so, how are they selected and trained? Examples include birth order (eg, seventh son), divine calling, family tradition, appointment by a religious or secular authority, formal schooling, apprenticeship, use of standardized printed text materials, and oral tradition.

What kinds of specialists are there? Examples include lay midwives, bonesetters, massagers, injectionists, diviners or diagnosticians (as distinct from curers), bloodstoppers, herbalists, priests, mediums, and applied kinesiologists.

What are the usual therapeutic practice sites? Examples are practitioner's home or office, consecrated location or place of worship, patient's home, impermanent sweat lodge, and hospital.

What are the system's internal and external legitimation and oversight structures? Examples include legitimation by supernatural selection or sign, by success in practice, or by formal acquisition of specific credentials; internal certification requirements and standards; informal community oversight by cumulative observation of outcomes; governmental regulatory requirements; and self-regulation.

What therapeutic measures are undertaken at home or elsewhere, on one's own or with the aid of family members? Examples are preparation of herbal teas or special diets, avoidance of specific foods or other substances, massages, vitamin or mineral supplementation, and prayer.

How are practitioners compensated? Examples include set or sliding-scale fees, third-party payors, barter of goods or services, free-will donations or offerings, and compensation permitted only indirectly.

How does the system interact with other CAM systems? For example, does it require avoidance of other systems as a measure of faith or sincerity or as a prerequisite to proper healing? Does it freely refer to other systems for specific therapeutic purposes? Does it decry other systems as self-serving or fraudulent?

Specific Activities and Materia Medica

What do practitioners do? Examples include diagnosis, recommendations or prescriptions, massages, spinal manipulation,

needling, verbal therapies, ritual cleansing, injection, guided imagery, soul restoration, and induction of altered states of consciousness in self or patient.

What is the specific materia medica? Examples are herbs, medicaments derived from animal or mineral sources, homeopathic remedies, pharmaceuticals, sacramental objects, pollen, sacrificial animals, colored sands, and objects for transference.

What are the classes and purposes of interventions? Examples include therapeutic and restorative actions; preventive and health maintenance actions; prenatal or postmortem spiritual preparation of family members, baby, or deceased; protection of survivors from spiritual attachment or molestation by deceased family members; and grief counseling.

Responsibilities

What are the responsibilities of practitioners? Examples are provide information, teach self-care techniques, give specific treatments, evaluate progress, help patient cope with illness, formulate diagnosis, and assist patient in practical implementation of the therapeutic plan.

What are the responsibilities of patients or clients? Examples include follow suggested treatment regimens, make lifestyle changes, keep records of own self-care activities and observed responses, show sufficient faith, avoid sin, and think positively. Are patients or clients held responsible or accountable for their own illness or health?

What are the responsibilities of family or community members? Examples include encourage patient to be active or inactive, accompany patient at all times, prepare and serve food, monitor activities of practitioners, protect patient from frightening information, and assist patient in practical implementation of therapeutic programs.

Are there consensual ethical norms? Examples include requirements for practitioner beneficence, recognition of patients' autonomy or expectations of patients' submission, and requirements for telling the truth or for protecting patients from harsh truths.

Scope

How extensive, varied, or specialized are the system's applications? Examples include infants and children, general healing, primarily women, the elderly, veterinary, certain conditions only (eg, burns, warts, bleeding, bonesetting, pregnancy and childbirth), spiritual illness only, and physical illness only.

Analysis of Benefits and Barriers

What are the risks and costs of the system from the insider's perspective? Examples include travel to distant treatment sites, expensive foods or medicaments, potential toxic effects and side effects, and willingness of third-party payors to cover expenses.

Accommodation and Views of Suffering and Death

How does the system view suffering and death? Examples include the beliefs that suffering is always bad and may indicate that the sufferer is not in a state of grace, that coping with suffering can be spiritually or morally uplifting, that suffering can be "offered up" for specific religious intentions to the benefit of self and others, that death is only a stage in a spiritual continuum, and that persons die when it is their time or when it is God's will.

Comparison and Interaction with Dominant System

What does this system provide for healing and for coping with illness that the dominant system does not provide? Examples (in reference to the United States) include a holistic approach, natural therapeutics, spiritual guidance, methods for dealing with supernatural causes and afflictions, and extensive personal contact with a healer.

How does this system view interaction with the dominant system? For example, it considers the dominant system dangerous or a system of last resort, considers that the dominant system addresses certain issues well but sees itself as addressing other issues best, or considers itself willing and able to interact with the dominant system.

MINIMUM DESCRIPTIVE STANDARD FOR CAM RESEARCH DESIGN AND REPORTING

The panel suggested that a minimum descriptive standard be adopted for both qualitative and quantitative research in CAM, to facilitate the establishment of comparability and interpretive reliability across studies. Panelists recommended that the following information be described in some detail in all CAM research:

- Name and summary of theoretical framework of system, modality, practice
- Definitions of system-specific terms or meanings of terms
- Therapeutics used in the study and their relationship to the larger system(s) from which they are derived
- Subjects selected and their comparability to the typical constituency or patient group of this system
- Specific training and background of all diagnosticians and providers of therapeutics participating in the study
- Outcomes considered successful outcomes, how and by whom defined, and how measured
- Specific training and background of all investigators conducting the study

Quantitative CAM research should include these descriptive elements in addition to the customary research-reporting requirements of describing methodological details, subject population, recruitment procedures, handling of dropouts and subjects lost to follow-up, replicability, generalizability, statistical vs clinical significance, and so forth."

CONCLUSION

CAM is large, diverse, and dynamic. It comprises an enormous range of theory and practice, all of which undergo continual modification and reinterpretation. The panel on definition and description focused its attention on producing a definition of the field of CAM and descriptive parameters with the broadest

and most consistent applicability to the wide variability that characterizes the field. A stringent effort was made throughout the panel's deliberations to exclude bias and partisanship from its statements and recommendations.

The efforts of this panel will not be final, nor should one want them to be. The job of definition is seldom complete for long. Changing usages and understandings inevitably change meaning and definition, and competing interpretations will always enter into the ferment of any intellectually challenging activity. The job of description never ends. Because this job is in the hands of countless researchers, it is hoped that the proposed definition and set of parameters may be useful as guidelines to help produce some consistency and comparability across studies in CAM.

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