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Themes of Holism, Empowerment, Access, and Legitimacy Define Complementary, Alternative, and Integrative Medicine in Relation to Conventional Biomedicine

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ABSTRACT

Complementary and alternative medicine (CAM) has been defined largely in relation to conventional biomedicine. CAM therapies that are used instead of conventional medicine are termed "alternative." CAM therapies used alongside conventional medicine are said to be "complementary." "Integrative medicine" results from the thoughtful incorporation of concepts, values, and practices from alternative, complementary, and conventional medicines. The evolving process of integration between CAM and conventional medicine evokes new conceptual frameworks, as well as new terminology. Interview-based qualitative research at the University of Wisconsin-Madison seeks to probe and develop this theoretical structure. Interviews with users and practitioners of CAM therapies have revealed four primary themes: holism, empowerment, access, and legitimacy (HEAL). These themes characterize CAM and contrast it with conventional medicine. CAM is said to be more holistic and empowering yet less legitimate than conventional medicine. CAM is more intuitive; conventional is more deductive. While CAM is perhaps more psychologically accessible to many patients in that it better reflects commonly held values, it is often less financially and institutionally accessible, at least for those with conventional health insurance and limited income. Substantive barriers—including economic, organizational and scientific differences, as well as an apparent widespread lack of understanding—continue to thwart attempts at integration. More and better evidence is needed if CAM therapies are to be accepted by mainstream medicine. State-of-the-art research methods developed by conventional science will be needed to test CAM therapies. Conventional medicine, however, has much to learn from CAM. By incorporating a more holistic, empowering and accessible therapeutic approach, conventional medicine could build on its present legitimacy, and thereby enhance its power to "HEAL."

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INTRODUCTION

The terms "complementary," "alternative," and "integrative" medicine refer to an extraordinarily diverse set of therapeutic modalities, most of which have little in common other than the fact that they differ from conventional Western biomedicine (Kaptchuk and Eisenberg, 2001a, 2001b). If used along with conventional medicine, a therapy is said to be "complementary." If used instead of conventional treatment, it is termed "alternative." When therapeutic methods are deliberately combined in a systematic and thoughtful manner aimed at getting to the root of the problem, then "integrative medicine" is said to occur (Rakel, 2003). Although many of these therapeutic methods have evolved over centuries (e.g., chiropractic [Kaptchuk and Eisenberg, 1998), homeopathy [Barnes, 1998a], naturopathy [Baer, 1992]), and others over millennia (Ayurvedic [Leslie, 1976], herbal medicine [Goldman 2001], and Traditional Chinese Medicine [Unschuld 1985]), widespread use within contemporary industrialized society has only recently been recognized. Survey-based articles published in the *New England Journal of Medicine* in 1993 (Eisenberg et al., 1993) and the *Journal of the American Medical Association* in 1998 (Eisenberg et al., 1998) brought attention to the increasing prevalence of complementary and alternative medicine (CAM). The first of these reports defined unconventional medicine as "medical interventions not taught widely at U.S. medical schools," and estimated that 34% of Americans used a CAM therapy in 1991, at a cost of $13.7 billion (Eisenberg et al., 1993). The second estimated prevalence-of-use as 42% in 1997, with a total cost of $27.0 billion (Eisenberg et al., 1998). Perhaps most alarming to conventional physicians, the total number of visits to CAM healers was said to be 425 million in 1991 and 629 million in 1997. This compared to less than 390 million visits to conventional primary care physicians during the same years. A MEDLINE® search performed on March 14, 2003 yielded 7644 total hits for the terms "alternative medicine" (1640), "alternative therapies" (1270), "complementary therapies" (6885) (MeSH term), "complementary medicine" (665), and "integrative medicine" (75) from years 1966 to the present. Yearly MEDLINE® citations increased steadily from 156 in 1990 to 906 in 1999. While these numbers indicate a substantial body of work, this is still a tiny fraction of the hundreds of thousands of health-related publications cited in MEDLINE and elsewhere.

While definitions and statistics are important, it is the potential ability to benefit human health that places CAM high on the agenda for discussion and research. If complementary, alternative, and integrative healing methods can truly enhance human healing (Reilly, 2001), then they should be incorporated and utilized. At the very least, a social movement of such magnitude needs to be understood and investigated using appropriate methodologies. Healing systems are highly complex systems composed of diverse phenomena. Such complex human endeavors cannot be understood through conventional quantitative methods, because these are based on the isolation and testing of limited sets of hypotheses. Therefore, we have embarked on a series of qualitative and integrative studies. Two projects have so far been completed (Table 1). The first of these was based on 20 interviews with CAM practitioners and 17 with CAM users randomly selected through telephone listings (Barrett et al., 2000). The second was based on 32 interviews with CAM practitioners (Barrett et al., 2003). Both were conducted using in-depth, in-person interviews using both closed and open-ended questions. Interviews were taped and transcribed, then reviewed individually and discussed in group sessions by a multidisciplinary team. Conceptual frameworks from anthropology, family medicine and nursing were used. We have also incorporated a wide reading of the relevant literature, with more than 1000 CAM-related articles and books reviewed by team members.

TWO QUALITATIVE STUDIES

Biomedicine and CAM have long enjoyed professional and lay perceptions of mutual misunderstanding and general incompatibility. However, these perceptions are clearly changing. There is now a cohort of physicians ob-

TABLE 1. SUMMARY OF TWO INTERVIEW-BASED QUALITATIVE STUDIES

	First study (Barrett, 2000)	*Second study (Barrett, 2003)*
Research questions	What is CAM? What CAM therapies do you use/practice? Why? How are goals accomplished? How are CAM and conventional similar or different?	How are CAM and conventional similar or different? Can they be reconciled/integrated? What are barriers? How can they be overcome?
Participants	a. 20 CAM practitioners b. 17 users/clients of CAM	32 CAM practitioners
Selection method	a. Key informant sampling b. Random from telephone listings	Key informant sampling to represent wide array of CAM
Data acquisition	In person interviews. Semistructured instrument with open-ended questions	
Data analysis	Multidisciplinary review of taped-and-transcribed interviews	
CAM fields represented	acupuncture, acupressure, aromatherapy, astrology, Chinese medicine, chiropractic, colonics, cranial sacral therapy, energy healing, flower remedies, herbal medicine, homeopathy, imaging, massage, medical intuition, midwifery, mind–body therapy, naturopathy, neuromuscular therapy, phytotherapy, reflexology, reiki, rolfing, shamanism, *shiatsu, tai chi,* touch therapy, Trager, yoga	

CAM, complementary and alternative medicine.

taining training in complementary modalities. Hospitals, insurers, and groups of health care providers are now explicitly acknowledging and in some cases incorporating CAM practitioners and therapies. These trends suggest a rapproachment between previously competing or mutually exclusive entities, perhaps resulting from a combination of consumer interest and evidence-of-effectiveness (Ernst et al., 2001; Linde et al., 2001). Indeed, the questions of rapproachment and perception-of-difference are at the heart of our interview-based studies: how do CAM users and practitioners perceive the territory between CAM and conventional? What do they think about the possibilities of integration?

In the spring of 1999 we began a qualitative study to investigate the knowledge, attitudes, and practices of clients and providers of complementary and alternative therapies (Barrett et al., 2000). This first study was designed to be exploratory and descriptive, aiming for an in-depth understanding of knowledge, beliefs, and behaviors of practitioners and users of CAM. We chose multidisciplinary review of transcribed in-person interviews as our primary methodology. Aiming for both breadth and depth, we combined key informant and random sampling methods to identify and recruit alternative therapy providers and clients. First, we compiled a list of alternative providers using published listings, the telephone directory, business cards at health stores, and "the grapevine." Once we felt confident that our list was sufficiently comprehensive (approximately 150 individuals), we used random selection within modality to balance the methodological requirements of generalizability and wide coverage of CAM provider categories. All 20 CAM practitioners randomly selected from our list agreed to an interview. All interviews were conducted using a semistructured interview guide, and all were taped and transcribed. Random selection recruitment utilized Madison, WI, telephone listings to recruit competent adults who had used both alternative and conventional medicine within the last year. Of 237 telephone numbers, 25 responders fit inclusion criteria, 19 agreed to an interview, and 17 were interviewed. Interviews took place in respondents' homes or offices, or in public places such as restaurants or libraries. Interviewers used a semistructured interview guide aimed at probing health beliefs and behaviors. We were particularly interested in how CAM clients and providers think about complementary, alternative, and conventional services, how health care choices are made, and how various aspects of CAM and conventional medicine are valued. Transcripts of the taped interviews were reviewed individually and then discussed in meetings by members of the study team.

A number of themes emerged repeatedly in the 37 interviews. The alternative nature of CAM was reinforced by frequent reference to issues contrasting CAM and conventional

health care (Table 2). Both clients and providers noted differences of style, cost, training, and institutional structure, and of philosophy, orientation, and worldview. Over many months of interviews and discussion, we worked to organize the qualitative data into thematic categories. Eventually, four themes became prominent—holism, empowerment, access, and legitimization. Almost all of several hundred items raised in the interviews fit comfortably within at least one of these four major themes. By coincidence, the words naming these four themes began with letters that providing an acronym for our conceptual framework—HEAL (Table 3). To be clear, we discovered that the first letters of the four themes spelled the word "heal" after the items were organized into themes, and after the themes were named.

This first set of interviews was designed to be exploratory and descriptive. When we asked our respondents about why they used CAM therapies, they provided us with many important insights, which appeared to us to be both coherent and consistent. Complementary and alternative therapies, they told us, were more "holistic," in that they provided a more well-rounded approach to health. The social, psychologic, and spiritual aspects of their health were attended to, as well as their physical bodies. The treatments were individualized, giving recipients the feeling of personal attention. They were empowered in the health care decision process—were put the driver's seat—in contrast to conventional medicine, where they often felt disempowered, "a cog on the machine." When asked why she chose CAM, one client said, "I have to be part of the process in order for it to work." Another, referring to conventional medicine, said, "I think the doctors' way of being is phasing out because people are getting more responsible for their health care." The paternalistic attitudes of some physicians were described by one patient as "You broke it so let's fix you." Another said, "And every time I bring it up they blow it off. So I didn't get very far when I voiced my concerns." Our respondents provided many comments regarding the fragmented, impersonal nature of conventional medicine. They also noted its strengths, using terms such as "credibility," "legitimacy," "scientifically proven," "efficient," "regulated," "licensed," "based on research," and "evidence-based."

In general, our 17 client-respondents acknowledged that many CAM therapies were not scientifically tested, and hence perhaps not legitimate means to better health. One said,

Table 2. Attributes That Separate CAM and Conventional Medicine

Conventional medicine		*CAM*
More reductionistic		More holistic
More controlling		More empowering
More deductive		More inductive
More generalizable		More individualistic
More scientific		More intuitive
Less time with patient		More time with client
	Barriers to Integration	
Arrogance		Lack of communication
Belief of ineffectiveness of CAM		Lack of evidence of effectiveness
Competition		Lack of legal recognition
Costs and cost effectiveness		Lack of training
Distrust		Philosophical differences
Fear of liability		Political pressures
Ignorance		Prejudice
Momentum (habits and tradition)		Profit motive
Lack of availability		Territorialism

An article with this table has been accepted for publication in *Annals of Family Medicine* and is still in press. Printed with permission.

CAM, complementary and alternative medicine.

TABLE 3. THE HEAL THEMATIC FRAMEWORK

Holism (H)	*Empowerment (E)*	*Access (A)*	*Legitimacy (L)*
Acceptance	Active, not passive	Attitudes	Acceptability
Community	Client, not patient	Availability	Advertising
Continuity	Education	Awareness	Certification
Empathy	Facilitating change	Barriers	Credentials
Energetics	Healing, not treating	Communication	Credibility
Feedback	Listening	Constraints	Efficacy
Healing, not repair	Making decisions	Costs vs. benefits	Evidence
Health maintenance	Nourishing	Cultural practices	Formal systems
Integration	Personal treatment	Determinants	The "grapevine"
Knowing your body	Providing tools	Economic barriers	Informal networks
Listening to one's self	Readiness for change	Insurance	Institutionalization
Mind–body unity	Renewing health	Jargon	Licensing
Open-mindedness	Responsibility	Language barriers	Organizations
Practice style	Understanding	Logistic barriers	Regulation
Prevention	Self-direction	Payment	Research
Psychologic	Strengthening	Purchasing	Respect
Spirituality	Thrive, not survive	Profits	Scientific proof
Unbroken	Transcendence	Referrals	Tradition
Uniqueness	Willingness to change	Reimbursement	

An earlier version of this framework was published and is reprinted with permission from Barrett B, Marchand L, Scheder J, Appelbaum D, Chapman M, Jacobs C, Westergaard R, St. Clair N. Bridging the gap between conventional and alternative medicine. J Fam Pract 2000; 49:234–239, published by Dowden Health Media.

"They [alternative therapists] are not under any regulated umbrella and I think there are a lot of exaggerated claims about what they can do for you." Opinions varied, however. One participant said, "It [CAM] is just as sound as conventional medicine. It's just that there haven't been enough studies yet." Regarding accessibility, there were several interesting comments. For those with insurance, conventional care is cheaper. When asked why she used conventional medicine first, one respondent said, "I thought I would exhaust the route of things that are free." Another, noting the relatively high out-of-pocket costs of alternative therapies, said, "So basically out of sheer monetary restraints I'll go back to the physician." Several people noted that, while the current health care system is easily available to many, it is financially inaccessible to those without adequate health insurance. The current convention of attaching most health care coverage to employment was criticized as unfair. A clear call for universal health care coverage was made.

Regarding the controversial question as to whether negative experiences with conventional medicine lead toward CAM use, our respondents did not speak with a single voice. While some gave explicit accounts of negative experiences with allopathic medicine, others seemed entirely satisfied with the conventional health care system. Most tried conventional therapies prior to CAM for a given ailment, but the pattern was mixed. Some dropped the conventional when it failed to bring complete satisfaction. Others continued to use conventional medicine, but layered on CAM therapies, mixing and matching health care modalities to suit individual needs. Most seemed to be searching for an integrated solution to their health problems. Almost invariably, CAM clients expressed the desire for a holistic, individualized, and empowering approach, and were willing to combine different treatments in their desire to combat their illnesses, or to achieve better health.

The 20 CAM practitioners, for the most part, echoed the statements and interpretations of CAM clients. They felt that their therapies were, in general, more holistic, individualized, and empowering than conventional modalities. They differed somewhat, both among themselves and with clients, as to the legitimacy and science behind their work. Some agreed that conventional medicine is "more scientifically proven." Others felt that their work was evi-

dence-based, such as the practitioner who said that, "What I teach [and practice] is research-based and backed up by studies." CAM was often contrasted to conventional as more "gentle," "soft," or "safe." The "power" of conventional medicine was acknowledged, but was judged to be "dangerous" or "overkill." One practitioner said that the use of conventional medicine for minor health problems was "like using a boulder to kill an ant." In attempting to differentiate CAM from conventional medicine, one practitioner said, "I think conventional medicine tries to fix a problem . . . rather than get to the heart of the issue." Another put it this way, "Chinese medicine has a top speed of 30 miles per hour and if your disease is going 45–50, you need to go to an allopathic because they can go 120."

A second round of interviews was conducted with 32 CAM practitioners in the years 2000 and 2001 (Barrett et al., 2003). These "key informant" respondents were selected (randomly within category) from a list of 250 Madison-area CAM practitioners, called on the phone, and invited for interview. Again, we first reviewed interview transcripts individually, then discussed them in multidisciplinary group meetings. Here we were looking for descriptive overviews of practices, for thoughtful comments about the relations between CAM and conventional, and for perceived barriers to integration. In general, these interviews confirmed and expanded the theoretical framework suggested by the interviews described above. Holism, empowerment, access, and legitimacy again arose as major themes. CAM was compared and contrasted to conventional medicine in much the same way as in the first set of interviews, with CAM described as more intuitive, holistic and empowering, and conventional as more legitimate and evidence-based. The barriers identified appeared to be both structural (political, economic and legal) and cultural (beliefs, attitudes, and communication styles).

These 32 CAM practitioners displayed a fascinating ambivalence toward conventional medicine. On the one hand, the strengths of biomedicine, including its scientific base and its effectiveness in dealing with emergent or surgical problems, were clearly articulated. On the other hand, conventional medicine's exorbitant costs, high rates of adverse effects, and limitations in dealing with chronic disease were portrayed emphatically. However, it was not these strengths or limitations that were stressed when we asked about barriers to integration. Instead, conceptual, philosophical, and attitudinal issues were invoked. Conventional medicine was said to harbor a great deal of prejudice and arrogance, along with a general ignorance of CAM's theoretical or practical nature. While most CAM practitioners interviewed respected biomedicine and favored some form of integration, they also expressed some distrust and skepticism. Clearly, a great deal of work—primarily in communication—will be needed, if practitioners of CAM and conventional medicine are to facilitate the emergence of a truly integrated healing system.

INSIGHTS FROM THE LITERATURE

Our results are consistent with the data and interpretations of CAM provided by Ernst and colleagues (Ernst et al., 1995), Eisenberg and colleagues (Eisenberg et al., 1998), Jonas (Jonas, 1998), and others (Baugniel et al., 2000; Dickinson, 1996; Furnham, 1996; Kelner and Wellman, 1997; Mansell et al., 2000; Millar, 1997; Sutherland and Verhoef, 1993; Vincent and Furnham, 1996). Following Astin (1998) and Ray (1996, Ray and Anderson, 2000), our research supports the notion that the rapid rise in CAM follows an important shift in societal values. Our respondents consistently expressed belief-centered, value-laden, and sociocultural reasons for their use of CAM therapies. Specific therapeutic methods were linked with specific theoretical frameworks, often with mechanistic explanatory schemata. In this sense, the overall structure of fact- and-theory-based healing methods seem to be similar to the underpinnings of modern medical science. However, the terminology used appears closer to that of vernacular speech, and more generally understandable than the sometimes obscuring lexicon of scientific biomedicine. In this sense, meanings (Moerman, 2002; Moerman and Jonas, 2002) evoked by CAM may have more healing power than those evoked by biomed-

ical explanatory schemata. At the same time, it appears that CAM-related health; beliefs and values are increasingly permeating contemporary social structure (Astin, 1998; Ray, 1996; Ray and Anderson, 2000).

Health-related behaviors are influenced by health beliefs, social structures, and access to care, as well as by symptoms (Kleinman, 1978a; Lee, 1996; Maiman and Becker, 1974; Mansell et al., 2000; McKeown 1979; Miller, 1988). People seek health care—conventional and alternative—for a variety of reasons, including perceived health need, health care accessibility, and perceived ability of care to improve health status (Albrecht and Higgins, 1979; Himmelstein et al., 2001; Kleinman, 1980). As Campbell and Roland (1996) have put it, "The decision to consult . . . is based on a complex mix of social and psychological factors." St. Claire et al. (1996) have ascribed differing health choices to "differences in meanings of health." Millstein and Irwin (1987) have asked whether these differences in meanings are "different constructs or variations on a theme." A survey of 16,689 patients in 46 clinics in 5 states reported: (1) high values ascribed to psychologic and social health as well as to physical health and (2) tremendous variation in patient preferences for health and longevity tradeoffs (Sherbourne et al., 1999). These findings support the general acceptance of a holistic definition of health consistent with that put forth by the World Health Organization and UNICEF in 1978: "Health is a state of complete physical, mental and social well-being." This definition is not easily reconciled with the general disease-treating framework of conventional medicine.

The Behavioral Model, originally developed by Andersen (1968), postulates that health care behavior arises from predisposing characteristics (health beliefs and social structure) interacting with health need to influence choices and utilization of enabling resources ("access") (Aday and Andersen 1974; Andersen, 1968; Starfield, 2000). Other explanatory schemata, such as Rosenstock's Health Belief Model (Rosenstock, 1974a, 1974b) or Leventhal's Self-Regulation Model (Leventhal et al., 1983) similarly postulate a multifactorial interface between health-related belief and behavior. Andersen's Behavioral Model was applied to the CAM health care setting by Kelner and Wellman (1997), who conducted 300 in-depth interviews with patients attending family physicians, chiropractors, acupuncturists/Chinese medicine, naturopaths, and *Reiki* practitioners (60 in each group). Noting their respondents' preference for holistic care, these authors concluded that "the choice of type of practitioner(s) is multidimensional and cannot solely be explained either by disenchantment with medicine or by an 'alternative ideology'" (Ray and Anderson, 2000). They also noted that "this study confirms that an alternative ideology does influence some individuals to consult unconventional practitioners." Regarding empowerment, the authors stated that "Individuals in this study who have chosen to try alternative treatments have essentially taken their health and well-being into their own hands" (Kelner and Wellman, 1997).

Meeker (2000) claims that, "The popularity of CAM is widespread and reflects mainstream values. The scope and nature of these values, however, is not known in detail." In a 1998 *Journal of the American Medical Association* article based on the results of a national survey, Astin (1998) reported the following as predictive of CAM use: (1) a holistic orientation towards health (odds ratio [OR] = 1.4), (2) having had a "transformational experience" that changed the person's worldview (OR = 1.8), and (3) classification into a social group (i.e. "cultural creatives") associated with environmentalism, feminism, spirituality and personal growth psychology (OR = 2.0). This last finding was based on the work of Ray and Anderson (2000), social researchers who have reported the emergence of a new values-defined social group, termed "the cultural creatives." They have argued that a set of empirically verified linked values have demonstrated the emergence and rapid growth of this social group. According to this view, the cultural creatives—as many as 50 million individuals in the United States are disproportionately influencing society-wide practices. Astin found that Ray's cultural creatives category is among the most significant predictors of CAM use. The basic argument is that the values of this segment of society have sufficiently permeated the social matrix to significantly influence health care choices throughout

the United States. In other words, according to Ray and Astin, the dramatic increase in CAM prevalence is at least partially due to this "emergence of transformational values in America" (Ray, 1996). Kaptchuk and Eisenberg (1998b) present a similar view when stating that, "the attraction of alternative medicine is related to the power of its underlying shared beliefs and cultural assumptions."

A substantial body of evidence supports the notion that societal values are linked to the evolution of the conventional health care system (Chen et al., 1994; Kleinman, 1978b; Kuhn, 1962; McKeown, 1979; Starr, 1982; Weiss 1995). Rationalism, modernism, and the widespread belief in the scientific method have influenced the development of health care as we know it today. The scientific method (i.e., hypothesis testing using experimental methodology) has been accompanied by many technical achievements in medicine. However, it has also been accompanied by an overreliance on pharmacologic and surgical intervention, and by a lack of attention to human values and patient experience. The idea of health as a holistic, multidimensional spectrum of psychologic, social, and physical wellness has been contrasted with a reductionistic health paradigm equating health with the absence of measurable disease (Baer, 1987; Charlton, 1993; Simons, 1993). Modern medicine has also been criticized as overly authoritarian and as out of touch with patients' values (Freidson, 1970; Illich, 1976; Lindenbaum and Lock, 1993; Wolinsky and Brune, 1994).

The incorporation of a more holistic, patient-centered and empowering healing philosophy has been proposed as a natural step in the growth of medicine (Baer, 1992; Illich, 1995; Miller, 1988; Pelletier, 1979). Holism and empowerment are consistent with the gradual adoption of the biopsychosocial model first proposed by Engel (1977; see also Sadler and Hulgus, 1990; Smith and Kleinman, 1983.) An increasing body of literature points to the desire of patients to be in control of their health care (Bennett, 1999; Doescher et al., 2000; Goldberg, 2000; Mansell et al., 2000). Within conventional health care, family medicine has perhaps most embraced a philosophy consistent with the values of holism, humanism and empowerment found within CAM (Baarts et al., 2000; Berman et al., 1998; Frey, 1999; Gordon, 1996; Kuzel, 1986; Stange et al., 2001). We would argue that the beliefs and values associated with Engel's psychosocial model and Ray's cultural creatives may indeed be the driving force behind CAM's recent rise to prominence. Our findings that holism, empowerment, accessibility and legitimacy are core CAM values reinforces these earlier findings, and may help to explain the rapid rise of complementary, alternative, and integrative medicine.

Clearly, there is a great deal of interest in and some initial experience with the integration of CAM and conventional medicine. How swiftly, to what extent, and in what forms integration will proceed is difficult to forecast (Barnes, 1998b; Brekke, 1998; Coates and Jobst, 1998; Dixon-Warren, 1998; Dubey, 1997; Ernst, 1997; Gaudet, 1998; LaValley and Verhoef, 1995; Meeker, 2000; Meines, 1998; Pelletier et al., 1999; Rees and Weil, 2001; Schroeder, 1999; Shang, 2001; Zhang, 2000). Presumably, the rate and degree of integration will vary by location, as social forces contend with opportunities and constraints provided by local and regional values and institutions, and by political and economic forces. Preexisting health care structures will probably be the foundation from which new systems will arise. As it evolves, the degree of health care system heterogeneity will probably increase. However, prevalence of CAM use could stabilize, or even decline, after economic downturn, or as a result of actions by major political or economic interests. National health care system reform (Institute of Medicine, 2001; Starfield, 2000) perhaps based on the premise of universal coverage (Carrasquillo et al., 1999; Davis et al., 2000; Donelan et al., 1996; Himmelstein and Woolhandler, 1989), could significantly influence the course of events. It is also likely that the attitudes and values of the individuals occupying key decision-making positions in health care and in government will influence the rate and direction of change. As with all changes in medical practice, scientific evidence of efficacy will be weighed against economic and political exigencies as individual therapies are adopted or rejected, and as styles of practice evolve under the influence of vari-

ous individual, social, and market forces. Perhaps the principles of holism, empowerment, accessibility, and legitimacy will combine with scientific evidence to help guide the next "social transformation of American medicine" (Starr, 1982). In our opinion, such an evolution of attitudes, values, and evidence-based practices is needed if we are to create a health care system that can HEAL illness, as well as treat disease.

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