

An Exploratory Study that Analyzes the Viability of Hatha-Yoga as Preventive Health Care in the Managed Care Environment

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Abstract

Context: Although Hatha-Yoga has been scientifically proven to promote health and prevent disease, it is neither recognized nor valued by many managed care stakeholders.

Objective: This exploratory study was undertaken to answer the research question: What patterns emerge to explain why Hatha-Yoga is not valued by many managed care stakeholders, and what approaches could be taken to increase Yoga's perceived value?

Design: In search of obstacles to Yoga's acceptance, an extensive literature review was conducted and a set of interview questions was developed and then posed to stakeholders of managed care. The data from the literature and interview responses were analyzed and collated. Although this qualitative research touches on many types of complementary and alternative medicine, it highlights Hatha-Yoga and its reimburse-ability in a managed care environment.

Setting: United States.

Participants: Thirty-two representatives were nonrandomly selected from various stakeholder groups in nine different states.

Results: Fifty-one reasons, attributable to all categories of stakeholders, surfaced to explain why Hatha-Yoga is not readily valued by many health care stakeholders. This study identifies numerous approaches that could be taken to increase appreciation and application of Yoga's proven health benefits.

Conclusion: To improve the acceptability and reimburse-ability of Hatha-Yoga, the following must happen:

Yoga professionals resolve issues surrounding certification and licensing; physicians recognize Yoga's proven benefits and place more emphasis on prevention; controlled randomized trials and measurable outcomes are instituted; medical schools provide education about Yoga; and insurance companies and health maintenance organizations include coverage for the use of Yoga.

Key Words

Hatha-Yoga: "... is a branch of Yoga that includes postures (*âsanas*), breath control (*prânâyâma*), relaxation, meditation, and other practices designed to improve or restore a practitioner's health and fitness, but also traditionally to lead to inner peace and freedom."¹

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."²

Prevention: "... is a proactive process which empowers individuals and systems to meet the challenges of life events and transitions by creating and reinforcing condi-

tions that promote healthy behaviors and lifestyles.”³

Managed Care: “. . . can be defined as an organized system of care that seeks to influence the selection and utilization of health services (including preventive care) of an enrolled population and ensures that care is provided in a high-quality, cost-effective manner.”⁴ (Researcher’s note: during the study, the term “managed care” was used, but in fact, for every respondent a stake in “health care” was the most common denominator).

Introduction

Complementary and alternative medicine (CAM) covers a minimum of 43 therapies,⁵ including acupuncture, Ayurvedic medicine, guided visual imaging, herbal therapy, homeopathy, hypnosis, nutrition/vitamin supplements, osteopathic manipulation, prayer, Qi Gong, reflexology, spiritual healing, Tai Chi, Yoga, and meditation. The latter two sometimes fall under the main heading of mind/body techniques, relaxation techniques, or stress management.

A survey of 2,055 households in 1997 determined that 42% or 83 million Americans spend upwards of \$34 billion for CAM therapies.⁶ Who uses CAM? According to two studies,^{7,8} CAM users are typically young adult to middle-aged women, who in comparison to nonusers live in rural areas (perhaps because complementary “treatments are well embedded in traditions of rural medicine”),⁹ are more highly educated, are from a higher socioeconomic status, are more likely to consume alcohol at a risk level, and are more apt to value complementary medicine. Nonetheless, the establishment of the King

County Natural Health Clinic in Seattle, Washington, which puts alternative treatments within reach of the poor, suggests that many less educated and less affluent people

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would avail themselves of these options if given the opportunity.¹⁰

In 1992, the United States Congress established the Office of Alternative Medicine (subsequently renamed the National Center for Complementary and Alternative Medicine or NCCAM) at the National Institutes of Health (NIH) to study nontraditional treatment. As early as 1997, ten new NCCAM centers across the country had been established.¹¹ Due to heightened global interest, the World Health Organization (WHO) designated NIH as a Traditional Medicine Collaborating Center with its first responsibility to “promote research in complementary and alternative medicine.”¹²

Around the globe, physicians too have become increasingly interested in complementary and alternative modalities. In September 1996, the American Medical Association’s Council on Scientific Affairs met to consider the growing interest in unconventional therapies. From medical journals originating in Europe, New Zealand, and Israel, a meta-analysis concluded that physicians, particularly younger ones, consider complementary medicine to

be moderately effective.¹³

Interest in and acceptance of alternative medicine has been studied in England, New Zealand, Sweden, the Netherlands, and Germany—“[t]he interest in complementary medicine among German general practitioners has increased remarkably in the last years,” perhaps because 68% of the patients interviewed for the study wished to be treated more often by alternative methods.¹⁴ Verhoef and Sutherland¹⁵ present a study of the prevalence in Canada, while in Australia a survey on the use of alternative medicines and practitioners is the largest in the world literature.¹⁶ This latter study revealed that “[a]mong the 3004 respondents, the overall use of at least one ‘non-physician’ prescribed alternative medicine was 48.5%,” producing an annual expenditure for alternative medicine and practition-

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ers of \$AU1,000 million,¹⁷ corroborating that the use of alternative treatments is a major industry.

A national survey conducted in the United States revealed that 83% of primary care physicians would encourage their patients to practice relaxation techniques if the patients expressed an interest in this therapy.¹⁸ Similarly, 51% would endorse meditation and 42% would sanction Yoga. Regarding the latter

therapy, 44% remained neutral and only 14% said they would discourage their patients in this pursuit.¹⁹ In a study to determine referral patterns, it was found that “[p]rimary care physicians are more likely than other medical specialists to be knowledgeable about, personally subscribe to, and refer patients for, alternative therapies.”²⁰

To stay abreast of this growing interest in CAM, one-half of the medical schools in the United Kingdom are providing or planning some form of introduction to complementary medicine²¹ and over thirty medical schools across the United States are now offering courses in alternative medicine.^{22,23}

Managed care and insurance companies have responded to the expanding market in complementary and alternative medicine. According to a survey of 156 HMOs in 13 states that examined the likelihood of offering coverage for alternative medicine, 58% intended to add such therapies to their plan while 38% believed CAM coverage would increase their enrollment.²⁴ Seventy percent of the HMOs said their enrollees have requested CAM coverage.²⁵ An incentive for insurance

Seventy percent of the HMOs said their enrollees have requested CAM coverage.

companies is the expectation of reduced costs for drug use and office visits.²⁶

With so much response to alternative medicine, what then are the barriers to the acceptance of Hatha-Yoga in the United States? Many managed care stakeholders *still* do

not know what Hatha-Yoga is nor do they value it as a reimbursable preventive health care modality. This study reveals the obstacles and opportunities surrounding this issue.

The word *yoga* means “union” and the practice of it unites the mind, body, and spirit. Although the aim of Yoga is union with God,²⁷ practitioners do not subscribe to any particular religious thought. It is a common misconception that Yoga is rooted in Hinduism, but in fact, as Alice Christensen clarifies,

“If anything, Hinduism has incorporated Yoga into its religious thought, rather than the other way around. There are no beliefs or creeds that are prescribed by Yoga or followed by every Yoga practitioner, and so Yoga cannot be attached to any particular religion . . . Yoga encourages a scientific approach of observation and experimentation.”²⁸

Yoga’s extensive system integrates four different paths: active, philosophical, devotional, and scientific.²⁹ Specific to the latter category, this study highlights *Hatha-Yoga*, the 1,000-year-old science of stretching, breathing, and relaxing.³⁰ The stretching postures, or *āsanas*, which “purify, strengthen and calm the body”³¹ can be further subdivided into *physical and therapeutic*—because by toning and stimulating the endocrine and nervous systems, the Yoga student becomes limber and free from disease, or *meditative*—because the perfect alignment that is achieved by the practitioner creates a serene breath and calm mind.³²⁻³⁴

A central component of Yoga is *prāṇāyāma*, a variety of specific breathing techniques practiced to

deliberately change one’s state of mind, reduce mental disturbance, and minimize the impurities in

Many managed care stakeholders *still* do not know what Hatha-Yoga is . . .

one’s system, thus helping one become clearer, with enhanced understanding.³⁵ The combination of yogic breathing and a Yoga posture can induce a meditative state.

“Meditation is so thoroughly effective in reducing stress and tension that, in 1984, the National Institutes of Health recommended meditation over prescription drugs as the first treatment for mild hypertension. Meditation has also been shown to have a positive effect on immune functions and strengthens the body’s defenses against infectious disease.”³⁶

“Investigations into the effects of yoga practices have been made in fields as diverse yet interrelated as medicine, education, health and fitness, counseling, behavioral therapy, humanistic therapy, physiology, and psychoanalysis.”³⁷ Yoga has been found to help in the treatment and/or prevention of anxiety disorders,³⁸⁻⁴² asthma,⁴³⁻⁴⁸ low back pain,^{49,50} blindness,⁵¹ carpal tunnel syndrome,⁵² diabetes,⁵³⁻⁵⁵ headaches—migraine and tension,⁵⁶ heart disease,^{57,58} hypertension,⁵⁹⁻⁶¹ mental retardation,^{62,63} os-

teoarthritis of the hands,⁶⁴ chronic pain,⁶⁵ pain management,⁶⁶ rheumatoid arthritis,⁶⁷ stress,⁶⁸ and substance abuse.⁶⁹

In the field of psychiatry, Karel Nespor, M.D., Ph.D., has found beneficial application of Yoga for patients with psychosomatic disorders, neuroses and personality disorders, schizophrenia, depression, sexology, geriatric psychiatry, child mental health problems (specifically for children with attention deficit hyperactivity disorder), alcohol and drug abuse, professional stress, and burnout.⁷⁰

Hatha-Yoga is gaining recognition in the medical field due in part to the following work:

- Dr. Dean Ornish's Heart Disease Reversal Program is "based on the practice of yoga as a complete discipline"⁷¹ and is administered in eight hospitals around the country;⁷²
- Jon Kabat-Zinn's research on mindfulness combines Yoga and meditation in his standard eight-week program in the Stress Reduction Clinic at the University of Massachusetts Medical Center in Worcester;⁷³
- Dr. Herbert Benson, of the Mind-Body Institute at Harvard University, coined the phrase "relaxation response," which is taught there in conjunction with Yoga;⁷⁴
- Dr. Mehmet C. Oz, executive director, and Jerry Whitworth, R.N., C.C.P., director of the Columbia-Presbyterian Complementary Care Center in New York City, serve heart-surgery, orthopedic, oncology, and neurology patients while exploring the effectiveness of Yoga.^{75,76}

INTERVIEW QUESTIONS

1. What is your name, title, and job description?
2. a. Please describe what you know about yoga in general, and hatha yoga in particular.
 - b. How do you feel about it?
 - c. What credentials, in addition to doing yoga and teaching it on a regular basis, do you think should or will be necessary for one to provide reimbursable yoga?
 - d. Is a yoga instructor a teacher (i.e., an academic person) or a healer (i.e., a therapist)?
 - e. Do you associate any risks with yoga?
3. a. Describe what you know about managed care.
 - b. How do you feel about it?
 - c. What would you like to see happen with managed care?
4. a. Do you think yoga has a viable, meaningful place in the managed care environment?
 - b. Do you think physicians view preventive health care as an effective health care strategy in the managed care environment?
 - c. Do you think physicians will support yoga as an effective preventive health care strategy?
 - d. Beyond preventive use, in what specific instances, and under which conditions, should yoga be applied?
 - e. Should yoga be a long-term intervention for a specific medical condition or short-term like physical therapy?
 - f. In an ideal situation, how would you like to see health care handled specific to yoga; i.e., what would you like to see happen with it?
 - h. Do you have any experience with CAM networks?
 - i. Do you think CAM networks have a place in the managed care environment?
 - j. What would be the advantages of such a system? The disadvantages?
5. Are you aware of any studies that are pertinent to what we've been discussing?
6. May I quote you? (Interviewee has signed waiver.)
7. What do you think about my list of questions?
8. Why do you think hatha yoga is not valued among some managed care stakeholders, and what approaches do you think need to be taken to increase this perceived value?

Table 1

Despite such scientific and therapeutic interest, *many* people are still unaware of Hatha-Yoga's efficacy. This study was undertaken to explore the discrepancy between proven effectiveness and relatively low medical usage.

Method

A comprehensive literature review employed books, journals, clinical studies, legal cases, magazines, newspapers, and presentations to obtain information pertinent to Hatha-Yoga, other forms of CAM, and managed care. A set of twenty-five interview questions (Table 1) was specifically created for this

study and then posed to thirty-two managed care stakeholders (Tables 2 and 2A). Results of the qualitative interviews were compared with patterns revealed by the extensive literature review. The combined results (Table 3) show the similarities between worldwide research and national stakeholder opinions. Table 4 illuminates seventeen more obstacles to Yoga not found in the literature, yet also culled from the interview reports.

Instrument Design

The twenty-five in-depth, detailed interview questions were posed to medical school faculty,

ROLES OF 32 INTERVIEWEES	
Number	Role*
9	M.D.
2	D.O.
2	D.C.
1	Naturopath
1	Homeopath
5	Acupuncturist
2	Ph.D.
4	R.N.
1	Massage Therapist
5	Yoga Teacher
1	Polarity Practitioner
6	Medical School Faculty Member
5	Insurance/Managed Care Representative
1	Strictly Consumer
3	Hospital Board Member

* Please note several of the interviewees fulfill more than one role. For example, one subject satisfies 5.

Table 2

physicians, alternative health care providers, insurance company/HMO representatives, and consumers (numbering thirty-two interviewees in all). The interviewer was aware of the importance of remaining neutral and nonjudgmental in response to the interviewees' answers. The methodical nature of the process reduced interviewer judgment.²²⁵ Each interview lasted approximately forty minutes, during which time the interviewer ensured that all questions were posed and answered, permitting the respondent to set the pace. All of the interviews were tape-recorded, with prior written permission by interviewees (on informed consent forms approved by the researcher's Institutional Review Board), and then transcribed to guarantee accuracy in analysis (voice

NAME, TITLE, AND JOB DESCRIPTION OF INTERVIEWEES*

1. Kevin Ergil, M.A., M.S., L.Ac. (Calif., N.Y.), Dpl. Ac. (NCCA) is Dean and Director, Pacific Institute of Oriental Medicine, N.Y.C.
2. James Dillard, M.D., D.C., Medical Director for the Alternative Medicine Department at Oxford Health Plans, N.Y.C., is a physician, acupuncturist, chiropractor, faculty member at Columbia Medical School, and department director at St. Joseph's Hospital Catholic Medical Center in Queens.
3. Trish Muehsam, M.D., Course Director of the Alternative and Complementary Medicine Curriculum at Mt. Sinai School of Medicine, N.Y.C., does research on Qi Gong and other healing modalities in their bio-electric lab and has a private practice in acupuncture.
4. Mary Frances Hatfield, R.N., P.H.N., Albany, N.Y., is a public health nurse by training and worked (until her recent retirement) as a Risk Management Consultant (in preventive practice) with the Healthcare Underwriters Mutual Insurance Co. (HUM). Hatfield was recently appointed to the New York State Board of Acupuncture.
5. Michael Delarm serves as Principal for Burdett Management Systems (an affiliate of the Eddy, a member of Northeast Health) in Troy, N.Y.
6. Clifford Wagner, D.C., maintains a practice in Saranac Lake, N.Y.
7. Ellen Maroun is Director of Strategic Planning at St. Joseph's Rehabilitation Center, and a Board Member, Adirondack Medical Center, both of which are in Saranac Lake, N.Y. Original involvement in health care was as Founder of Fr. Co. A.R.C. She has served as President of State Board of Visitors of N.Y. State (Psychiatric and Developmental Centers), served on State Task Force to redesign mental hygiene system (which was the largest single service system in the world), served on Health Systems Agency of N.Y., served on Health Care Trustees of N.Y. State (an arm of Hospital Association of N.Y. State), and was Family Service Coordinator in northern N.Y. for Head Injury Association.
8. Nora Camens, a Licensed (N.Y., N. M.) Massage Therapist in North Bangor, N.Y., is also a Registered Polarity Practitioner and studies Advanced Cranial Sacral work.
9. Thomas Burgoon, M.D., is with Cooper Family Medicine (The Cooper Health Systems), Cherry Hill, N.J. He is an acupuncturist and has a faculty appointment at New Jersey School of Medicine.
10. Marie White is a consumer who occasionally practices yoga in upstate New York.
11. Amy Kohanski has an associate's degree in Culinary Arts and a bachelor's degree in Food and Nutrition and has been an owner of a health food store for many years in Saranac Lake, N.Y.
12. Craig Fawcett is Director of Marketing for Partners Health Plans (a statewide HMO, a subsidiary of Healthcare Underwriters Mutual-HUM, a medical malpractice company out of Latham, N.Y.).
13. Anita Moore, R.N., is a Credentialed Alcoholism Counselor, a Nationally Certified Addictions Counselor, and Nursing Supervisor for St. Joseph's Rehabilitation Center, Saranac Lake, N.Y.
14. Joann Reed is an Executive Officer of the Board of Trustees and Chairperson of the Managed Care Committee for Adirondack Medical Center, Saranac Lake, N.Y. Reed was former Director of Communications for the Hospital Association of N.Y.S., and currently owns a business as a Communications Consultant.
15. Erma Durant is a consumer in Lake Placid, N.Y.
16. Valerie Long is a Doctor of Naturopathic Medicine, Licensed Midwife, and Wellness Doctor with the Wellness Health Plan of American Western Life in San Mateo, Calif.
17. A Ph.D., R.N., chief of a community health program, professor, and anthropologist in the Great Lakes area who requested anonymity.
18. Joseph DiGiovanna, Ph.D., is a yoga student of 30 years and yoga teacher for 25, certified from New England Institute for Integrative Acupressure, and is a Full Professor at State University of New York, Potsdam, N.Y.

Table 2A

inflection proved helpful for analyzing content). Although not as succinct nor as easily aggregated as quantitative data, direct quotations provided depth, detail, consideration for the respondent's role, experience and "stake" in the outcomes, and a "forum for elaborations, explanations, meanings and new ideas."²²⁶

Participant Selection

The objective in the selection of interviewees was to obtain representation of: physicians, medical school

The objective in the selection of interviewees was to obtain representation of: physicians, medical school faculty, alternative health care providers, consumers, and HMO/insurance company representatives.

faculty, alternative health care providers, consumers, and HMO/insurance company representatives. Unlike the power of random sampling, purposeful sampling yielded high-quality descriptions and heterogeneous patterns (which were shared across cases).²²⁷

On four occasions, interviewees referred the researcher to other potential interviewees because of said subjects' knowledge and ability to articulate useful insights. Although this snowball sampling locates information-rich, key informants, it poses a threat to the study's validity due to the possibility of obtaining distorted perspectives from "a friend of a friend."

NAME, TITLE, AND JOB DESCRIPTION OF INTERVIEWEES *continued*

19. Jnani Chapman, R.N., former Executive Director, International Association of Yoga Therapists (IAYT) in California. Chapman has been a yoga teacher since 1975 (certified in Integral Yoga). Chapman is the massage coordinator and a fill-in yoga teacher for the Commonwealth Cancer Help Program (a week-long residential retreat for people with cancer, which was the focus of an hour segment called "Wounded Healers" on the PBS special, Bill Moyers' *Healing and the Mind*). Chapman is also a nurse case manager and a stress management specialist at the University of California San Francisco and California Pacific Medical Center for two programs in their Program in Integrative Medicine: the Heart Disease Reversal Program and the Personal Support and Lifestyle Integration Program—a research program for women with breast cancer.
 20. David Johnson, M.D., is an internist in Saranac Lake, N.Y., "trained in scientific, allopathic, Western medicine for a long, long time. I'm here for a perspective."
 21. Linda Gajevski is the Media Relations Manager for American Yoga Association, "the first non-profit, non-religious school of yoga in the United States, founded 28 years ago by Alice Christensen who has written several books, including *Easy Does it Yoga*." Gajevski lives in Cleveland Heights, Ohio, and practices yoga.
 22. Sandra McLanahan, M.D., designed and works with Dr. Dean Ornish's Heart Disease Reversal Program and is Executive Medical Director of Integral Health Center in Buckingham, Va. (located at Yogaville). "I have a family practice where I use an integrated approach to medicine, which means it's integrative medicine using Western and Eastern approaches, including diet, exercise, vitamins, herbs, homeopathy, flower and gem essences, stress management, yoga, group support, emotional factors, and spiritual connections."
 23. Marcy Robinson is Conference Producer, Cambridge Health Resources, Newton, Mass., and has practiced yoga from time to time.
 24. Jackie Wilson, M.D., is board certified in Family Practice and Homeotherapeutics. "I know how to use over 1,000 homeopathic medicines." As President of World Health Solutions, Inc., Escondido, Calif., Wilson consults in complementary and alternative medicine through the health care industry.
 25. Christine Wade, Research Manager, National Institutes of Health Grant, Center for Complementary/Alternative Medicine Research in Women's Health, Columbia University College of Physicians and Surgeons, N.Y.C., is an Integral Yoga Instructor, yoga student, and self-taught as an herbalist.
 26. Victor Opinheimer, Cambridge, Mass., has been teaching Iyengar Yoga and practicing with B. K. S. Iyengar every other year for twenty years in India. He runs a small computer company.
 27. A northern New York surgeon who prefers to be unnamed.
 28. Jay Federman, M.D., is a Family Practitioner and also Medical Director of the Physician Hospital Organization in Saranac Lake, N.Y.
 29. Dorothy Federman, M.D., is a Family Practitioner in Saranac Lake, N.Y.
 30. Merrily Manthey in Kent, Wash., is the initiator of the King County Natural Medicine Clinic Project. Manthey currently sits on that Advisory Board, on the Board at Bastyr University, and also on the board at the Harborview Medical Center in Seattle, which is county owned, serves four states, and is managed by the University School of Medicine.
 31. Thomas A. Quinn, D.O., is Regional Medical Director of Humana Health Care Plans, Sarasota, Fla., and is developing an alternative health care rider.
 32. Josh Schwartzberg does manipulations as a D.O., is a Family Practice Physician, a N.Y. state certified Acupuncturist, a faculty member at three medical schools, and a board member and three-year president of a 350-doctor organization in upstate New York.
- *A founder/director of a large yoga center in the Washington, D.C., area was also interviewed, but there was a tape-recording failure that precluded collecting the data.

Table 2A, continued

Validity

Threats to the validity of this study follow:

- the non-random selection and size of the sample population;
- the fact that the researcher, who is a 20-year veteran of Yoga, was the sole interviewer.

Conversely,

- if the subjects *had* been randomly chosen, their responses may have been less informed;
- the validity of the literature review is strengthened by the number of references (more than 140 separate sources) that are cited in the study.

Reliability

The reliability of the template drawn from the literature review is dependent upon the objectivity of the researcher's selection and interpretation of the literature. Table 3 is strengthened by its tangibility or "concreteness of materials,"²²⁸ that is, others can review the literature to confirm findings. It is likely that another researcher replicating this study would choose many similar sources from which to garner information.

Data Analysis

It was necessary to read through the interviews several times to identify coherent and important examples, themes, and patterns,²²⁹ while organizing the data into topics and files. Rather than determine patterns before collection and analysis, the researcher strove to let the patterns emerge.

RESULTS	
Thirty-four obstacles to the acceptance of yoga and CAM as derived from the literature review and referenced by interviewees during their interview	% of respondents referencing each as an obstacle
1. Lack of clarity regarding role of yoga instructor as "teacher" or "therapist" ^{77,78}	97%*
2. Lack of emphasis on disease prevention by the medical establishment ⁷⁹⁻⁸⁴	66%
3. Insufficient insurance reimbursement for CAM modalities ⁸⁵⁻⁹⁵	63%†
4. Insufficient licensing and/or certification requirements for CAM practitioners ⁹⁶⁻¹⁰²	59%
5. An expectation of measurable outcomes ¹⁰³⁻¹⁰⁵	41%
6. Physical risks‡ concerning the practice of yoga ¹⁰⁶⁻¹⁰⁸	40%
7. Lack of emphasis on disease prevention by the population in general ¹⁰⁹	38%
8. The disinclination of medical schools to change curriculum ¹¹⁰⁻¹¹⁴	34%
9. Physicians' lack of receptivity to CAM ¹¹⁴⁻¹¹⁸	31%
10. People's (notably physicians') ¹¹⁹⁻¹²² lack of experience and/or familiarity with yoga	31%
11. General disregard for the effect of spirituality on healing ¹²³⁻¹²⁹	31%
12. Physicians' resistance to CAM ¹³⁰⁻¹³²	28%
13. Cultural conflicts ¹³³⁻¹⁴²	28%
14. Patients' reluctance to discuss their interests§ in CAM with their physicians ^{146,147}	28%
15. Advisability for participants in yoga to have a medical assessment/diagnosis before embarking on a practice¶ ^{148,149}	28%
16. Physicians' preference for a biomedical approach ¹⁵⁰ rather than a psychosocial approach	25%¶
17. Insistence on double-blind studies, controlled trials ¹⁵¹⁻¹⁵⁵	25%
18. Medical monopoly ¹⁵⁶⁻¹⁷⁰	22%
19. CAM's intangibility (often, the effects cannot be weighed nor measured) ¹⁷¹⁻¹⁷⁴	22%
20. People's dependency on others to "make" and "keep" them well ^{175,176}	19%
21. Trepidation about assimilation or dilution of the modality in use ¹⁷⁷⁻¹⁸⁰	19%
22. Dispute over the placebo's place in establishing efficacy ¹⁸¹⁻¹⁸³	16%
23. Insufficient funding for the provision of CAM modalities ¹⁸⁴	16%
24. Concerns about quackery ^{185,186}	13%
25. Physicians' concern about malpractice suits ¹⁸⁷⁻¹⁸⁹	9%
26. Reluctance of some physicians to admit their "closeted" endorsements of CAM modalities ^{190,191}	9%
27. General disregard for the effect of emotions on healing ¹⁹²⁻¹⁹⁸	9%

Table 3

Results

Fifty-one reasons surfaced to explain why Hatha-Yoga is not readily valued by many health care stakeholders. Table 3 enumerates thirty-four of the impediments to the acceptance of Yoga and CAM as derived from the literature and corroborated in the interviews. Table 4 illuminates seventeen more obstacles to Yoga not found in the literature, but also culled from the results of this study's thirty-two interviews. Table 5 lists, according to over 59% of the interviewees, benefits attributable to Yoga.

Conclusions

In answer to the first part of the research question: "What patterns emerge to explain why Hatha-Yoga is not valued by many managed care stakeholders . . .?" this exploratory research revealed several obstacles attributable to *all* key stakeholders and applicable to many CAM modalities. For the second part of the question: ". . . what approaches could be taken to increase Yoga's perceived value?" this study points to several opportunities (prioritized according to interviewee response), which we, as stakeholders in health care, may choose to follow:

- Standardize certification requirements to create synergy between different schools of Yoga, diminish differences, settle the "teacher" or "therapist" question, and simultaneously lend careful consideration to licensing issues.
- Encourage physicians to explore the benefits of Hatha-Yoga and raise their level of acceptance of it (and other CAM modalities).
- Increase CAM education, specifically "Yoga," in medical school, outside of medical school, as

RESULTS, *continued*

28. General disregard for the effect of a connection to consciousness on healing ¹⁹⁹⁻²⁰²	9%
29. Lack of political activism or vigilance by the consumer ^{203,204}	9%
30. Insufficient funding for CAM research ²⁰⁵⁻²⁰⁸	9%
31. Lack of the necessary motivation to commit to a CAM modality ²⁰⁹⁻²¹¹	9%
32. Policies related to healthcare ²¹²⁻²²⁰	9%
33. The judgment that "yoga is too soft" ^{221,222}	6%
34. The power of the pharmaceutical companies ^{223,224}	3%

* 19% favored "teacher," 25% "therapist," 47% "both," 6% "neither."

† In addition, 13% were concerned about problems arising for insurance companies due to possible "over-usage" and 16% were opposed to factoring managed care companies whatsoever into the equation of the delivery of CAM.

‡ These are specific cases but virtually all yoga books advise readers of inherent risks if techniques are practiced improperly.

§ This is similar to: physicians' unwillingness to listen to their patients' interest in and/or use of CAM modalities^{143,144} and physicians' unwillingness to recognize the patients' involvement in their own care.¹⁴⁵

√ This expectation may be problematic if interested participants do not follow through or if they do but their physician is unfamiliar with and hence unsupportive of CAM.

¶ 3% held that some patients prefer the strictly biomedical approach.

Table 3, *continued*

- "continued education" credit, and to the general public.*
- Encourage all parties, particularly the medical establishment, to emphasize disease prevention.
- Conduct randomized, controlled trials (preferably double-blind) and produce measurable outcomes.
- Recommend that insurance companies recognize the preventive and therapeutic value of the practice of Yoga and include coverage for its use (which would help to abate the obstacle of some people's inability to pay).
- Raise the level of experience and hence understanding and knowledge of Yoga for physicians and the population as a whole, which will help to dispel cultural conflicts and check assimilation.†
- Encourage Yoga professionals to recognize that Yoga is not the only solution to achieving and maintaining optimum health, to be open toward and educated about the advantages and benefits of different modalities, including biomedical treatments.
- Encourage all parties to investigate how emotions, spirituality, and consciousness, although difficult to measure, can affect the body's ability to heal.
- Encourage Yoga instructors to design programs suitable for each participant's ability and advise each participant to respect his/her limitations.
- Encourage physicians to construct protective arrangements with CAM practitioners to safeguard themselves from the fear of malpractice suits.
- Encourage prospective Yoga participants to discuss their interests in Yoga with their physician, to secure a thorough screening/ diagnosis, and to communicate such to their Yoga instructor whose credentials they have verified.

- Encourage prospective Yoga participants to accept personal responsibility for maintaining their own health and to recognize that a commitment to Yoga requires motivation, discipline, and time.
- Increase the availability and convenience of, along with access to, the experience of Yoga.
- Improve funding, marketing, and public relations efforts regarding Yoga.‡
- Encourage physicians to discuss more openly amongst themselves (and with their patients) their interests in Yoga.
- Activate political and grassroots movements to persuade policymakers to support Yoga's cause, to dissuade pharmaceutical companies from wielding their opposition, and to increase the level of societal resources invested, specifically by policymakers and members of the health care industry.

* With this widespread education, lessen the likelihood for misconstruction of information and counteract the judgments that "Yoga is too soft" or "too hard."

† . . . and simultaneously authenticate Yoga's efficacy and integrity.

‡ . . . which may concurrently persuade more males to explore the practice of Yoga.

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Endnotes

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RESULTS

Seventeen more obstacles to yoga culled from the results of the study's thirty-two interviews

% of respondents referencing each as an obstacle

1. Education for physicians*	53%†
2. Recognition that "Yoga is not the only game in town"	50%‡
3. The "Bad Apple" concern, whereby one incompetent CAM provider can taint a modality's reputation	31%
4. Yoga needs marketing and public relations efforts	22%
5. Education for the population, in general	19%
6. Time is needed to be educated about and to practice yoga (or another modality)	19%
7. As yoga (or another CAM modality) gains popularity, misconstruction of information can increase§	19%
8. Divisiveness within a school of yoga can erupt	16%
9. Accessibility of classes	19%
10. Availability of classes	16%
11. The integrity of yoga (and other modalities) must be able to withstand scrutiny as CAM education becomes more prevalent	16%
12. Yoga is not "high tech" enough to suit some physicians	6%
13. "Yoga is too hard"√	6%
14. Patient's inability to pay	6%
15. Ease or convenience in attending a yoga class	3%
16. Gender issue¶	3%
17. "Turf battles" between different schools of yoga or among different camps of CAM can occur	3%

* Education is needed not just within the walls of medical school but also as continuing education.

† Three-fifths of whom are themselves physicians.

‡ 50% of those interviewed cited a total of fifteen other CAM modalities that are beneficial to health. One interviewee, a physician, cautioned against using any therapy as a sole management tool, particularly if the therapy is being used for a condition "that should be managed some other way."

§ For example, if insurance companies create alternative riders without counsel from yoga (or other CAM) experts, misinformation or improper techniques could be shared.

√ One managed care representative, who is very familiar with yoga, said that persons with arthritis or who are older can hurt themselves with inappropriate forms of yoga and added, "Hatha-Yoga is probably the safest form." [Editor's note: Actually, almost every style of Yoga that is practiced in the United States today is a form of Hatha-Yoga, ranging from Gentle Yoga to the more athleticized forms such as Power Yoga and Hot Yoga. The interviewee has a different concept of what Hatha-Yoga includes, his impression being that a Gentle Yoga class, which he refers to as "Hatha-Yoga," is less intense and therefore safer for older people or for anyone with limitations.] "I think there are a lot of risks if you do it by yourself with a video," voiced an interviewee who is a massage therapist. Yet another interviewee praised the value of a video's instruction.

¶ It is known that more females than males participate in yoga and that more females than males are certified as yoga teachers. Aside from these imbalances, yet due to those facts, there could arise in the field of yoga the potential predicament of yoga professionals needing to relate to and gain acceptance from members of the medical profession in which there is a preponderance of males. The current imbalance in "gender" participation might also deter more males from investigating yoga benefits.

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BENEFITS OF YOGA

According to *verbatim* reports from 59% (or 19) of the 32 people interviewed

Yoga is beneficial for:

- prevention
- maintaining general health and well-being
- physical conditioning
- flexibility
- mobility (simply moving ones body through space)
- boosting the immune system (specifically counteracting viral infections, including HIV)
- chronic disorders
- sleeplessness
- coronary artery disease
- pulmonary conditions
- cancer (improving quality of life)
- allergies
- headaches
- strains

Yoga is useful for reducing:

- blood pressure
- lower back pain/any back problems
- amounts of medications (example: asthma)
- admissions for emergency conditions
- employee absenteeism

Yoga is:

- an excellent modality for a number of people who might be somewhat physically limited*
- an adjunct in sports medicine rehabilitation
- physical therapy for somebody who has undergone some kind of physical trauma where they need to stretch and relax their muscles, to regain mobility, or to increase flexibility
- a form of meditative exercise and a perspective on living that helps individuals become centered and better able to determine their life paths
- a quest for self knowledge

Yoga is a way:

- to transcend ordinary consciousness (for spiritual growth)
- to squeeze toxins out through the lymphatic system, aiding cellular renewal
- to tap the energy sources and release negative energies . . . especially beneficial for people who want to control everything
- to be happy with what happens, that's the spirit of yoga, you're always at home

* For example, for someone who is overweight with shortness of breath, yoga can be a source of empowerment. The sense of well-being from yoga can encourage other forms of exercise that are also very important.

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