Report of the Presidential Commission on the Space Shuttle Challenger Accident

(In compliance with Executive Order 12546 of February 3, 1986)

Table of Contents

Volume I

Volume II

Volume III

Volume IV

Hearings of the Presidential Commission on the Space Shuttle Challenger Accident: February 6, 1986 to February 25, 1986

Volume V

Hearings of the Presidential Commission on the Space Shuttle Challenger Accident: February 26, 1986 to May 2, 1986.

Note: Currently only parts of each section are online

COMMISSION ACTIVITIES
An Overview

President Reagan, seeking to ensure a thorough and unbiased investigation of the Challenger accident, announced the formation of the Commission on February 3, 1986. The mandate given by the President, contained in Executive Order 12546, required Commission members to:

(1) Review the circumstances surrounding the accident to establish the probable cause or causes of the accident; and,

(2) Develop recommendations for corrective or other action based upon the Commission's findings and determinations.

The Commission itself divided into four investigative panels:

1. Development and Production, responsible for investigating the acquisition and test and evaluation processes for the Space Shuttle elements;

2. Pre-Launch Activities, responsible for assessing the Shuttle system processing, launch readiness process and pre-launch security;

3. Mission Planning and Operations, responsible for investigating mission planning and operations, schedule pressures and crew safety areas; and

4. Accident Analysis, charged with analyzing the accident data and developing both an anomaly tree and accident scenarios.

More than 160 individuals were interviewed and more than 35 formal panel investigative sessions were held generating almost 12,000 pages of transcript. Almost 6,300 documents, totaling more than 122,000 pages, and hundreds of photographs were examined and made a part of the Commission's permanent data base and archives. These sessions and all the data gathered added to the 2,800 pages of hearing transcript generated by the Commission in both closed and open sessions.

In addition to the work of the Commission and the Commission staff, NASA personnel expended a vast effort in the investigation. More than 1,300 employees from all NASA facilities were involved and were supported by more than 1,600 people from other government agencies and over 3,100 from NASA's contractor organizations. Particularly significant were the activities of the military, the Coast Guard and the NTSB in the salvage and analysis of the Shuttle wreckage.

RECOMMENDATIONS OF THE PRESIDENTIAL COMMISSION

The Commission has conducted an extensive investigation of the Challenger accident to determine the probable cause and necessary corrective actions. Based on the findings and determinations of its investigation, the Commission has unanimously adopted recommendations to help assure the return to safe flight.

The Commission urges that the Administrator of NASA submit, one year from now, a report to the President on the progress that NASA has made in effecting the Commission's recommendations set forth below:

I
DESIGN
The faulty Solid Rocket Motor joint and seal must be changed. This could be a new design eliminating the joint or a redesign of the current joint and seal. No design options should be prematurely precluded because of schedule, cost or reliance on existing hardware. All Solid Rocket Motor joints should satisfy the following requirements:

The joints should be fully understood, tested and verified.

The integrity of the structure and of the seals of all joints should be not less than that of the case walls throughout the design envelope.

The integrity of the joints should be insensitive to:
--Dimensional tolerances.
--Transportation and handling.
--Assembly procedures.
--Inspection and test procedures.
--Environmental effects.
--Internal case operating pressure.
--Recovery and reuse effects.
--Flight and water impact loads.

The certification of the new design should include:
--Tests which duplicate the actual launch configuration as closely as possible.
--Tests over the full range of operating conditions, including temperature.

Full consideration should be given to conducting static firings of the exact flight configuration in a vertical attitude.

INDEPENDENT OVERSIGHT
The Administrator of NASA should request the National Research Council to form an independent Solid Rocket Motor design oversight committee to implement the Commission's design recommendations and oversee the design effort. This committee should:

Review and evaluate certification requirements.
Provide technical oversight of the design, test program and certification.
Report to the Administrator of NASA on the adequacy of the design and make appropriate recommendations.

II
SHUTTLE MANAGEMENT STRUCTURE
The Shuttle Program Structure should be reviewed. The project managers for the various elements of the Shuttle program felt more accountable to their center management than to the Shuttle program organization. Shuttle element funding, work package definition, and

vital program information frequently bypass the National STS (Shuttle) Program Manager.

A redefinition of the Program Manager's responsibility is essential. This redefinition should give the Program Manager the requisite authority for all ongoing STS operations. Program funding and all Shuttle Program work at the centers should be placed clearly under the Program Manager's authority.

ASTRONAUTS IN MANAGEMENT
The Commission observes that there appears to be a departure from the philosophy of the 1960s and 1970s relating to the use of astronauts in management positions. These individuals brought to their positions flight experience and a keen appreciation of operations and flight safety.

NASA should encourage the transition of qualified astronauts into agency management positions.

The function of the Flight Crew Operations director should be elevated in the NASA organization structure.

SHUTTLE SAFETY PANEL
NASA should establish an STS Safety Advisory Panel reporting to the STS Program Manager. The Charter of this panel should include Shuttle operational issues, launch commit criteria, flight rules, flight readiness and risk management. The panel should include representation from the safety organization, mission operations, and the astronaut office.

III
CRITICALITY REVIEW AND HAZARD ANALYSIS
NASA and the primary Shuttle contractors should review all Criticality 1, 1R, 2, and 2R items and hazard analyses. This review should identify those items that must be improved prior to flight to ensure mission safety. An Audit Panel, appointed by the National Research Council, should verify the adequacy of the effort and report directly to the Administrator of NASA.

IV
SAFETY ORGANIZATION
NASA should establish an Office of Safety, Reliability and Quality Assurance to be headed by an Associate administrator, reporting directly to the NASA Administrator. It would have direct authority for safety, reliability, and quality assurance throughout the agency. The office should be assigned the work force to ensure adequate oversight of its functions and should be independent of other NASA functional and program responsibilities.

The responsibilities of this office should include:

The safety, reliability and quality assurance functions as they relate to all NASA activities and programs.

Direction of reporting and documentation of problems, problem resolution and trends associated with flight safety.

V
IMPROVED COMMUNICATIONS
The Commission found that Marshall Space Flight Center project managers, because of a tendency at Marshall to management isolation, failed to provide full and timely information bearing on the safety of

flight 51-L to other vital elements of Shuttle program management.

NASA should take energetic steps to eliminate this tendency at Marshall Space Flight Center, whether by changes of personnel, organization, indoctrination or all three.

A policy should be developed which governs the imposition and removal of Shuttle launch constraints.

Flight Readiness Reviews and Mission Management Team meetings should be recorded.

The flight crew commander, or a designated representative, should attend the Flight Readiness Review, participate in acceptance of the vehicle for flight, and certify that the crew is properly prepared for flight.

VI
LANDING SAFETY
NASA must take actions to improve landing safety.

The tire, brake and nosewheel steering systems must be improved. These systems do not have sufficient safety margin, particularly at abort landing sites.

The specific conditions under which planned landings at Kennedy would be acceptable should be determined. Criteria must be established for tires, brakes and nosewheel steering. Until the systems meet those criteria in high fidelity testing that is verified at Edwards, landing at Kennedy should not be planned.

Committing to a specific landing site requires that landing area weather be forecast more than an hour in advance. During unpredictable weather periods at Kennedy, program officials should plan on Edwards landings. Increased landings at Edwards may necessitate a dual ferry capability.

VII
LAUNCH ABORT AND CREW ESCAPE
The Shuttle program management considered first-stage abort options and crew escape options several times during the history of the program, but because of limited utility, technical infeasibility, or program cost and schedule, no systems were implemented. The Commission recommends that NASA:

Make all efforts to provide a crew escape system for use during controlled gliding flight.

Make every effort to increase the range of flight conditions under which an emergency runway landing can be successfully conducted in the event that two or three main engines fail early in ascent.

VIII
FLIGHT RATE
The nation's reliance on the Shuttle as its principal space launch capability created a relentless pressure on NASA to increase the flight rate. Such reliance on a single launch capability should be avoided in the future.

NASA must establish a flight rate that is consistent with its resources. A firm payload assignment policy should be established. The policy should include rigorous controls on cargo manifest changes

to limit the pressures such changes exert on schedules and crew training.

IX
MAINTENANCE SAFEGUARDS

Installation, test, and maintenance procedures must be especially rigorous for Space Shuttle items designated Criticality 1. NASA should establish a system of analyzing and reporting performance trends of such items.

Maintenance procedures for such items should be specified in the Critical Items List, especially for those such as the liquid-fueled main engines, which require unstinting maintenance and overhaul.

With regard to the Orbiters, NASA should:

Develop and execute a comprehensive maintenance inspection plan.

Perform periodic structural inspections when scheduled and not permit them to be waived.

Restore and support the maintenance and spare parts programs, and stop the practice of removing parts from one Orbiter to supply another.

CONCLUDING THOUGHT

The Commission urges that NASA continue to receive the support of the Administration and the nation. The agency constitutes a national resource that plays a critical role in space exploration and development. It also provides a symbol of national pride and technological leadership.

The Commission applauds NASA's spectacular achievements of the past and anticipates impressive achievements to come. The findings and recommendations presented in this report are intended to contribute to the future NASA successes that the nation both expects and requires as the 21st century approaches.

PRESIDENTIAL COMMISSION ON THE SPACE SHUTTLE CHALLENGER ACCIDENT
(Source: The Presidential Commission on the Space Shuttle Challenger Accident Report, June 6, 1986)

William P. Rogers, Chairman
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Neil A. Armstrong, Vice Chairman
Former astronaut, currently Chairman of the Board of Computing Technologies for Aviation, Inc. Born in Wapakoneta, Ohio, Mr. Armstrong was spacecraft commander for Apollo 11, July 16-24, 1969, the first manned lunar landing mission. He was Professor of Aeronautical Engineering at the University of Cincinnati from 1971 to 1980 and was appointed to the National Commission on Space in 1985.

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Former Senior Vice President and General Counsel, Communications Satellite Corporation (1967-1974), currently a partner in the law firm of Drinker Biddle & Reath. Born in Washington, DC, he previously served as an attorney with the U.S. Atomic Energy Commission (1948-1950) and was U.S. Attorney for the District of Columbia (1961-1965). He holds an LL.B. from Harvard University (1948) and served as LT, U.S. Navy (1942-1946).

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Educator and engineer. Born in Rapid City, South Dakota, he is currently Professor and Head, Department of Aeronautics and Astronautics, at Massachusetts Institute of Technology. Member of the National Academy of Engineering, he was a recipient of the Exceptional Civilian Service Award, USAF, in 1973 and the NASA Public Service Award in 1980. He holds a Doctorate in Science from Massachusetts Institute of Technology.

Dr. Richard P. Feynman
Physicist. Born in New York City, he is Professor of Theoretical Physics at California Institute of Technology. Nobel Prize winner in Physics, 1965, he also received the Einstein Award in 1954, the Oersted Medal in 1972 and the Niels Bohr International Gold Medal in 1973. He holds a Doctorate in Physics from Princeton (1942).

Robert B. Hotz
Editor, publisher. Born in Milwaukee, Wisconsin. He is a graduate of Northwestern University. He was the editor-in-chief of Aviation Week & Space Technology magazine (1953-1980). He served in the Air Force in World War II and was awarded the Air Medal with Oak Leaf Cluster. Since 1982, he has been a member of the General Advisory Committee to the Arms Control and Disarmament Agency.

Major General Donald J. Kutyna, USAF
Director of Space Systems and Command, Control, Communications. Born in Chicago, Illinois, and graduate of the U.S. Military Academy, he holds a Master of Science degree from Massachusetts Institute of Technology (1965). A command pilot with over 4,000 flight hours, he is a recipient of the Distinguished Service Medal, Distinguished Flying Cross, Legion of Merit and nine air medals.

Dr. Sally K. Ride
Astronaut. Born in Los Angeles, California, she was a mission specialist on STS-7, launched on June 18, 1983, becoming the first American woman in space. She also flew on mission 41-G launched

October 5, 1984. She holds a Doctorate in Physics from Stanford University (1978) and is still an active astronaut.

Robert W. Rummel
Space expert and aerospace engineer. Born in Dakota, Illinois, and former Vice President of Trans World Airlines, he is currently President of Robert W. Rummel Associates, Inc., of Mesa, Arizona. He is a member of the National Academy of Engineering and is holder of the NASA Distinguished Public Service Medal.

Joseph F. Sutter
Aeronautical engineer. Currently Executive Vice President of the Boeing Commercial Airplane Company. Born in Seattle, he has been with Boeing since 1945 and was a principal figure in the development of three generations of jet aircraft. In 1984, he was elected to the National Academy of Engineering. In 1985, President Reagan conferred on him the U.S. National Medal of Technology.

Dr. Arthur B. C. Walker, Jr.
Astronomer. Born in Cleveland, Ohio, he is currently Professor of Applied Physics and was formerly Associate Dean of the Graduate Division at Stanford University. Consultant to Aerospace Corporation, Rand Corporation and the National Science Foundation, he is a member of the American Physical Society, American Geophysical Union, and the American Astronomy Society. He holds a Doctorate in Physics from the University of Illinois (1962).

Dr. Albert D. Wheelon
Physicist. Born in Moline, Illinois, he is currently Executive Vice President, Hughes Aircraft Company. Also a member of the President's Foreign Intelligence Advisory Board, he served as a consultant to the President's Science Advisory Council from 1961 to 1974. He holds a Doctorate in Physics from Massachusetts Institute of Technology (1952).

Brigadier General Charles Yeager, USAF (Retired)
Former experimental test pilot. Born in Myra, West Virginia, he was appointed in 1985 as a member of the National Commission on Space. He was the first person to penetrate the sound barrier and the first to fly at a speed of more than 1,600 miles an hour.

Dr. Alton G. Keel, Jr., Executive Director
Detailed to the Commission from his position in the Executive Office of the President, Office of Management and Budget, as Associate Director for National Security and International Affairs; formerly Assistant Secretary of the Air Force for Research, Development and Logistics; and Senate Staff. Born in Newport News, Virginia, he holds a Doctorate in Engineering Physics from the University of Virginia (1970).

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PREFACE

The accident of Space Shuttle Challenger, mission 51-L, interrupting for a time one of the most productive engineering, scientific and exploratory programs in history, evoked a wide range of deeply felt public responses. There was grief and sadness for the loss of seven brave members of the crew; firm national resolve that those men and women be forever enshrined in the annals of American heroes, and a determination, based on that resolve and in their memory to strengthen the Space Shuttle program so that this tragic event will become a milestone on the way to achieving the full potential that space offers to mankind.

The President, who was moved and troubled by this accident in a very personal way, appointed an independent Commission made up of persons not connected with the mission to investigate it. The mandate of the Commission was to:

1. Review the circumstances surrounding the accident to establish the probable cause or causes of the accident; and

2. Develop recommendations for corrective or other action based upon the Commission's findings and determinations.

Immediately after being appointed, the Commission moved forward with its investigation and, with the full support of the White House, held public hearings dealing with the facts leading up to the accident. In a closed society other options are available; in an open society -- unless classified matters are involved -- other options are not, either as matter of law or as a practical matter.

In this case a vigorous investigation and full disclosure of the facts were necessary. The way to deal with a failure of this magnitude is to disclose all the facts fully and openly; to take immediate steps to correct mistakes that led to the failure; and to continue the program with renewed confidence and determination.

The Commission construed its mandate somewhat broadly to include recommendations on safety matters not necessarily involved in this accident but which require attention to make future flights safer. Careful attention was given to concerns expressed by astronauts because the Space Shuttle program will only succeed if the highly qualified men and women who fly the Shuttle have confidence in the system.

However, the Commission did not construe its mandate to require a detailed investigation of all aspects of the Space Shuttle program; to review budgetary matters; or to interfere with or supersede Congress in any way in the performance of its duties. Rather, the Commission focused its attention on the safety aspects of future flights based on the lessons learned from the investigation with the objective being to return to safe flight.

Congress recognized the desirability, in the first instance, of having a single investigation of this national tragedy. It very responsibly agreed to await the Commission's findings before deciding what further action might be necessary to carry out its responsibilities.

For the first several days after the accident -- possibly because of the trauma resulting from the accident -- NASA appeared to be withholding information about the accident from the public. After the Commission began its work, and at its suggestion, NASA began releasing a great deal of information that helped to reassure the public that all aspects of the accident were being investigated and that the full

story was being told in an orderly and thorough manner.

Following the suggestion of the Commission, NASA established several teams of persons not involved in the mission 51-L launch process to support the Commission and its panels. These NASA teams have cooperated with the Commission in every aspect of its work. The result has been a comprehensive and complete investigation.

The Commission believes that its investigation and report have been responsive to the request of the President and hopes that they will serve the best interests of the nation in restoring the United States space program to its preeminent position in the world.

Chapter I - Introduction

The Space Shuttle concept had its genesis in the 1960s, when the Apollo lunar landing spacecraft was in full development but had not yet flown. From the earliest days of the space program, it seemed logical that the goal of frequent, economical access to space might best be served by a resuable launch system. In February, 1967, the President's Science Advisory Committee lent weight to the idea of a reusable spacecraft by recommending that studies be made "of more economical ferrying systems, presumably involving partial or total recovery and use."

In September, 1969, two months after the initial lunar landing, a Space Task Group chaired by the Vice President offered a choice of three long-range plans:

> A $8-$10 billion per year program involving a manned Mars expedition, a space station in lunar orbit and a 50-person Earth-orbiting station serviced by a reusable ferry, or Space Shuttle.
>
> An intermediate program, costing less than $8 billion annually, that would include the Mars mission.
>
> A relatively modest $4-$5.7 billion a year program that would embrace an Earth-orbiting space station and the Space Shuttle as its link to Earth.

In March, 1970, President Nixon made it clear that, while he favored a continuing active space program, funding on the order of Apollo was not in the cards. He opted for the shuttle-tended space base as a long-range goal but deferred going ahead with the space station pending development of the shuttle vehicle. Thus the reusable Space Shuttle, earlier considered only the transport element of a broad, multi-objective space plan, became the focus of NASA's near-term future.

Groft, Steve (NCCAM)

From: Greene, Anita (NCCAM)
Sent: Tuesday, July 18, 2000 11:18 AM
To: Groft, Steve (NCCAM)
Subject: FW: AP clip: President announces CAM

FYI...
Subject: AP clip: President announces CAM

White House announces commission on alternative medicine

WASHINGTON (AP) President Clinton appointed a Harvard educated psychiatrist Thursday as chair of a new commission charged with recommending federal guidelines for the use of alternative medical therapies.

Clinton created the White House Commission on Alternative Medicine by executive order earlier this year. The commission is supposed to recommend legislation or administration action to help people make the most of alternative medicine while avoiding potential risks from unproven therapies.

``Each year, tens of millions of Americans receive alternative therapies. The great potential and possible perils associated with the use of complementary and alternative medicine have been well documented," Clinton said in a statement issued at the White House. ``There is no doubt that these therapies should be held to the same standard of scientific rigor as more traditional health care interventions."

Clinton appointed Dr. James S. Gordon, of Washington, to chair the group. He also appointed nine other members, with others planned later.

3. Should a federally-sponsored entity be established to coordinate CAM-related activities and discussions among federal agencies?

Public Information:

1. How can useful, reliable and updated information about CAM products and practices be made more accessible to the public and to health professionals?

COMMISSION MEMBERSHIP

The White House will identify and appoint 10-12 knowledgeable and prominent representatives with expertise in health care practice and/or CAM from the public and private sectors in the following measure:

2-3 CAM practitioners
2-3 conventional medical practitioners
2-3 researchers of CAM or conventional sciences
2 health policy analysts
2-3 consumers/patient representatives

The Chair should be a respected health care professional with broad-based health care and public policy experience, who reflects an openness to innovative alternative practice and an ability to balance a wide diversity of views.

Additionally, a number of ex officio representatives will be identified from federal agencies to provide technical assistance and expertise.

An executive staff will be established to organize and support the Commission, and will include detailees from federal agencies.

TIME LINE and FUNDING

The Commission would be named and begin its work by April 15, 1999. It would conclude its work and provide its recommendations to the President and Congress by May 1, 2000. It would be funded by the $1,000,000 provided through the National Center for Complementary and Alternative Medicine in the Fiscal Year 1999 Labor, HHS Appropriations Act.

$25.00

DESI

Drug Efficacy Study Implementation

CAMESI

SECAMSI

ESCAMSI

Broken out by Intervention

- Effective
- Probably
- Possibly
- Ineffective
- No Ranking - Cannot be Evaluated
  Individualized treatment
  not Evaluatable?

BMJ 2000;321:683-686 (16 September)

Clinical review

Recent advances

Complementary medicine

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Given that many complementary medicine techniques are defined in terms of a static historical tradition, discussing recent advances in complementary medicine is almost a contradiction in terms. None the less, few acquainted with complementary medicine would deny that substantive shifts in its scientific base and organisational structure have occurred recently. These shifts might indicate that complementary medicine is becoming more integrated. Integration, as used here, means that similar clinical, scientific, and regulatory standards are being applied across all forms of health care. If a list was written of what patients care about (for example, the clinical relationship), what researchers feel is important (for example, control of bias), what clinicians hold critical (for example, clinical competence), or what matters to purchasers (for example, cost effectiveness) there would probably be no reference to the historically and politically contingent concepts of "conventional" and "complementary" medicine. Integration has obvious implications for the access to and availability of care. It also implies that clinicians agree on their respective roles so that patients feel that they are receiving care as part of a coordinated service. In this article I review a number of signs that complementary medicine is becoming increasingly integrated.

Recent advances

The quantity of applied research in complementary medicine is growing rapidly and the quality is improving

There is good evidence supporting the use of some complementary medicine treatments

Guidelines and consensus statements issued by conventional medical organisations have recommended some complementary medicine treatments

Complementary medicine is increasingly practised in conventional medical settings, particularly acupuncture for pain, and massage, music therapy, and relaxation techniques for mild anxiety and depression

Osteopaths and chiropractors recently became the first complementary medicine practitioners in the United Kingdom to be regulated

There is a more open attitude to complementary medicine among conventional health professionals; this is partly explained by the rise of evidence based medicine

Methods

Top
Methods
Applied research
Clinical practice
Training, education, and...
Attitudes
Conclusion
References

This review is largely a personal reflection on recent changes in complementary medicine. Research has been supplemented by email discussions with colleagues based in the United Kingdom. The major source of original research material was the *Cochrane Library*, an electronic database of randomised trials and systematic reviews.

Applied research

Top
Methods
Applied research
Clinical practice
Training, education, and...
Attitudes
Conclusion
References

The quantity of applied health research on complementary medicine is growing rapidly, and the quality is improving. The number of randomised trials of complementary treatments has approximately doubled every five years,[1] and the *Cochrane Library* now includes nearly 50 systematic reviews of complementary medicine interventions.

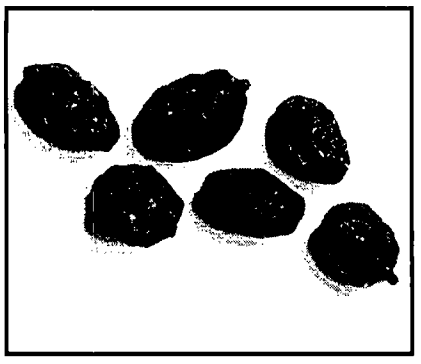
Much of this evidence involves small numbers of patients and is of poor methodological quality; however, high quality systematic reviews of complementary medicine have been published recently which provide a reliable basis for making healthcare decisions. For example, a Cochrane systematic review of St John's wort (*Hypericum perforatum*) for mild to moderate depression included 27 trials with a total of more than 2000 participants.[2] The review found that St John's wort was superior to placebo and equivalent to tricyclic antidepressants but had fewer adverse effects. Although not all questions have

been answered, particularly those of safety,[3] the review does provide a basis for making treatment decisions. Another Cochrane review of a botanical medicine examined the effects of Saw palmetto (*Serenoa repens)* on benign prostatic hyperplasia. Eighteen studies with a total sample size of nearly 3000 patients were included. Clear benefits were shown for urinary symptoms and peak urine flow.[4] Other recent, high quality systematic reviews have found acupuncture to be effective for pain [5] [6] and nausea[7] but not for helping smokers to quit.[8]

One consequence of the increase in the availability of high quality data is that guidelines and consensus statements published by conventional medical bodies have supported the value of complementary medicine. In the United Kingdom guidelines from the Royal College of General Practitioners recommend physiotherapy, chiropractic treatment, or osteopathy within six weeks of the onset of persistent uncomplicated back pain.[9] The BMA recently published a report supporting the use of acupuncture.[10] In the United States, the National Institutes of Health have issued consensus statements supporting the use of hypnosis for pain related to cancer and the use of acupuncture for pain and nausea. [11] [12] Acupuncture, hypnosis, and relaxation techniques are included in guidelines on the management of pain associated with cancer that have been published by the US National Comprehensive Cancer Network.[13]

(Credit: BRIDGEWATER BOOK CO)

Gingko biloba



(Credit: BRIDGEWATER BOOK CO)

Fruit of Serenoa repens

These shifts highlight an improved awareness among researchers of the importance of complementary medicine and an improved awareness among complementary medicine practitioners of the importance of research. These changes have led to increased funding and the establishment of complementary medicine research units at sites of research excellence. Some of the ongoing research studies are shown in the box. In the United Kingdom, the NHS recently funded two trials of acupuncture for treating chronic pain. In Germany, a centre for research into complementary medicine at the Technische Universitat in Munich has produced a series of important systematic reviews.[2 5 14] And in the United States, a centre for research into complementary medicine at the National Institutes of Health has a $68m (£45m) budget and supports a large number of trials and research centres. The United States also has a large number of units for research into complementary medicine that are based at conventional research institutions such as the University of Maryland, Columbia University in New York, Harvard University in Massachusetts, and Memorial Sloan-Kettering Cancer Center in New York. These institutions provide the sort of intellectual and practical infrastructure essential for high quality research; this support has long been missing in complementary medicine. For example, a phase I trial of a botanical cancer treatment planned at Memorial Sloan-Kettering has been developed by a team that includes experts in complementary medicine research, a statistician who is an expert in developing novel designs for phase I studies, an expert in assessing quality of life, and senior oncologists with extensive experience in clinical research. The researchers have access to a large number of patients who are receiving the highest standard of care. These basic prerequisites for conducting high quality research into complementary medicine would not have been in place several years ago.

Clinical practice

Complementary medicine and conventional medicine have traditionally been provided in entirely separate settings. Recently, however, there has been a greater integration between the two, with both often provided at the same site. Currently about 40% of general practices in the United Kingdom offer access to complementary medicine.[15] Chiropractic and osteopathy are two of the treatments that are most commonly provided, particularly for low back pain.[16] Some practices offer relaxation classes (to improve wellbeing)[17] or

yoga (to produce feelings of vitality).[18] These treatments are generally aimed at patients with mild anxiety or depression or chronic physical complaints for which further treatment options are limited. Massage, which has been shown to reduce scores on scales measuring anxiety[19] and to improve sleep,[20] is offered in most hospices in the United Kingdom. Acupuncture is widely provided in pain and rheumatology clinics, a development spurred by increasing evidence that acupuncture is of benefit for chronic pain. [5] [21] [22] Music therapy is a popular complementary treatment in hospitals in the United States, where randomised trials have supported its use for reducing pain and anxiety in the acute setting. [23] [24]

At the Integrative Medicine Service unit at Memorial Sloan-Kettering, practitioners of massage, music therapy, and acupuncture work on the inpatient wards; patients can be referred by a doctor, nurse, or social worker. These treatments are also offered at an outpatient site along with relaxation, yoga, and t'ai chi classes. It is not unusual to see a patient with severe pain having a foot massage while receiving intravenous methadone or to hear a guitar being played in the room of an anxious and lonely patient.

Although one stimulus for increasing integration has been the increase in research evidence, the factors which affect the use of complementary medicine within conventional settings are complex.[15] Issues such as public pressure, economics, or the attitudes of key personnel often play an important part in determining whether integration occurs.

Training, education, and regulation

Top
Methods
Applied research
Clinical practice
Training, education, and...
Attitudes
Conclusion
References

There have long been inconsistent standards of training and regulation in complementary medicine. Patients visiting practitioners of complementary medicine have had no guarantees of the competence of a practitioner. The first statutory registration of practitioners of complementary medicine is occurring now and therefore represents a welcome step in the regulation of complementary medicine. A General Osteopathic Council and a General Chiropractic Council have been established and have opened statutory registers in the United Kingdom. After a transitional period it will be an offence for anyone in the United Kingdom to claim to be an osteopath or chiropractor unless they are registered.

Training in complementary medicine is increasingly being provided in academic settings. For example, in the United Kingdom the London School of Acupuncture, which used to provide private tuition, has now joined the University of Westminster to offer a BA degree in acupuncture. Similarly, herbal medicine courses are offered at the University of Middlesex, and postgraduate studies in complementary medicine are available at the University of Exeter. Although academic training in complementary medicine is a new discipline and there are some teething problems, the shift to the university setting provides the opportunity for students of complementary medicine to interact with other students in an environment of critical analysis and debate.

Courses on complementary medicine are also being offered to medical students. These tend to be offered as an option on modular courses and generally provide an academic introduction rather than specific clinical skills. The proportion of medical schools in the United Kingdom offering such courses rose from

10% to 40% between 1995 and 1997.[25] A large number of US medical schools have elective classes and seminars on complementary medicine.[26]

Ongoing research studies

Comparative effectiveness of St John's Wort, sertraline, and placebo in depression (Duke University, North Carolina, United States)

Acupuncture versus sham acupuncture versus educational intervention (control) for patients with osteoarthritis of the knee who are on standard drug treatment (University of Maryland, United States)

Effectiveness and cost effectiveness of acupuncture versus no additional treatment for headache (Royal London Homoeopathic Hospital, United Kingdom)

Systematic review of spinal manipulation for back pain (Cochrane Collaboration review)

Ginkgo biloba versus placebo for prevention of dementia in older people (University of Pittsburgh, Pennsylvania, USA)

Sources of additional information

Books

Zollman C, Vickers A. *ABC of complementary medicine*. London: BMJ Publishing, 2000.

Websites

Acupuncture

- British Medical Acupuncture Society at www.medical-acupuncture.co.uk
- British Acupuncture Council at www.acupuncture.org.uk/
- International acupuncture associations at directory.google.com/Top/Health/Alternative/Acupuncture_and_Chinese_Medicine/Professional_

Chiropractic

- UK Chiropractic Website at www.chiropractic.org.uk/
- International chiropractic organisations at directory.google.com/Top/Health/Alternative/Chiropractic/Organizations_and_Associations/

Cochrane resources

- Cochrane Collaboration and the *Cochrane Library* at www.cochrane.org

Herbal medicine

- Phytonet at www.exeter.ac.uk/phytonet/
- American Botanical Council at www.herbalgram.org/

Homoeopathy

- Homeopathic Trust at www.trusthomeopathy.org/
- National Center for Homeopathy in the US at www.homeopathic.org/

Hypnosis

- British Society of Medical and Dental Hypnosis at www.bsmdh.org/
- US Society for Clinical and Experimental Hypnosis at sunsite.utk.edu/ijceh/scehframe.htm

Massage

- American Massage Therapy Association at www.amtamassage.org/

Osteopathy

- Osteopathic Information Service available at www.osteopathy.org.uk/
- US osteopathic medicine at the Student Doctor Network at osteopathic.com/

Universities

- University of Exeter—Centre for Complementary Health Studies at www.ex.ac.uk/chs and Department of Complementary Medicine at www.ex.ac.uk/pgms/comphome.htm
- University of Maryland—Complementary Medicine Program at www.compmed.ummc.umaryland.edu/ and the School of Medicine Cochrane Collaboration field on complementary medicine at www.compmed.ummc.umaryland.edu/compmed/cochrane/cochranefr.htm

US National Institutes of Health

- National Center for Complementary and Alternative Medicine at nccam.nih.gov

Memorial Sloan-Kettering Cancer Center, New York, United States

- Integrative Medicine Service at www.mskcc.org/patients_n_public/patient_care_services/outpatient_services_and_facilities/integ

Information on unusual complementary treatments

- Quackwatch at www.quackwatch.com

Attitudes

Top
Methods
Applied research
Clinical practice
Training, education, and...
Attitudes
Conclusion
References

Complementary medicine and conventional medicine have not always coexisted easily. Each has attacked the other. Practitioners of conventional medicine have used legal sanctions to harass and even jail practitioners of complementary medicine.[27] Recently there has been a change in the attitude of those practising conventional medicine towards complementary medicine. This is perhaps best characterised by two articles on complementary medicine published in the *BMJ* in 1980 and 1999. [28] [29] The first editorial was entitled "The flight from science." It suggested that some aspects of chiropractic "ought to be as extinct as divination of the future by examination of a bird's entrails"; acupuncturists' beliefs were described as irrational.[28] In contrast, the Editor's choice that was published alongside a specially commissioned series of articles on complementary medicine, described "a new dawn" and stated that complementary medicine is not "unproved"; the article continued: "increasing evidence shows the effectiveness of some treatments in some conditions."[29] A key element in this change has been the rise of evidence based medicine, which emphasises empirical data over theory. Accordingly, what matters is whether a treatment does more good than harm and not how it happens to be categorised. [30] [31]

Conclusion

Top
Methods
Applied research
Clinical practice
Training, education, and...
Attitudes
Conclusion
References

Given the increasing amount of data available in some areas of complementary medicine, research is shifting from efficacy trials to more pragmatic studies.[32] Acupuncture is a good example of this changing agenda. In a classic trial performed in the mid-80s, patients with migraines referred to secondary care were randomly allocated to treatment with acupuncture or a sham technique to see whether acupuncture was more effective than placebo in relieving pain.[33] In a trial now in progress patients with chronic headaches seen in primary care are randomly allocated to the usual care offered by a general practitioner or to the general practitioner's care plus acupuncture; this trial was designed to answer the practical question of whether a general practitioner should refer patients with chronic headache to an acupuncturist.[34]

As it becomes accepted that some complementary medicine can work, the question arises "why does it work?" The popularity of complementary medicine, and at least part of its effectiveness, has been ascribed to the therapeutic relationship. Accordingly, there have been calls for research into the clinical effects of "caring, communication . . . patient empowerment [and the] meaning [of illness]."[35] Another area for further basic research is botanical medicines. This area raises important questions about the current emphasis on single compounds in pharmacological treatment. For example, why is St John's wort effective in treating depression? Is its effectiveness due to a single active ingredient, or is there an additive or synergistic interaction between some of its many constituent compounds? Can we design a drug based on St John's wort which works better than the raw botanical?

Discussing St John's wort—recently shown to reduce concentrations of the HIV-1 protease inhibitor indinavir[3]—raises the issue of safety. As more people use complementary medicine and it comes under

increasing scrutiny, safety issues are likely to cause serious concerns because systematic means of gathering, collating, and disseminating reports of adverse effects are not fully developed.

The use of St John's wort illustrates another key question in complementary medicine: how much evidence is enough evidence? And regardless of how much evidence is published, will any complementary medicine become standard, first line treatment? In patients with mild or moderate depression, St John's wort has been shown to be more effective than placebo,[2] to have similar efficacy to and fewer adverse effects than tricyclic antidepressants,[2] and to have possibly greater efficacy and certainly fewer adverse effects than fluoxetine.[3,6] Yet St John's wort is not licensed in the United Kingdom and is not widely prescribed. Is it plausible to think that it ever will be?

Footnotes

Competing interests: No direct competing interests declared.

References

- Top
- Methods
- Applied research
- Clinical practice
- Training, education, and...
- Attitudes
- Conclusion
- References

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Peter Morrell, Hon Research Associate, History of Medicine , *Staffordshire University*
bmj.com, 15 Sep 2000 [Response]

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  Complementary Medicine

Groft, Steve (NCCAM)

From: Lazarus, Linda [Linda.Lazarus@hq.doe.gov]
Sent: Friday, September 01, 2000 7:05 PM
To: 'SG18B@NIH.gov'
Subject: FW: Suggestions to Improve the Medical Research Program at DOE

Hi Steve,

This really needs more work, I based it solely on the emf program....

Take care,

Linda

-----Original Message-----
From: Lazarus, Linda
Sent: Friday, September 01, 2000 6:46 PM
To: Marmolejos, Poli
Cc: Wu, Jeremy; Hanfling, Phyllis; Allard, Edward; HALE, DOUGLAS R; Warnick, Walter
Subject: Suggestions to Improve the Medical Research Program at DOE

Poli,

As you suggested, I wrote a proposal on how to improve the medical research program at DOE. Unfortunately, I can't seem to get the Secretary's e-mail address. Would you mind sending it on for me?

Let me know if you can't send it forward.

Thanks much.

Linda
*******I

Although DOE spends millions of dollars on medical research, the agency does not have a well-coordinated program. Projects are scattered throughout the agency, and there is little or no communication between the different parts of DOE and the labs.

Moreover, the medical projects are often not effectively designed to provide results that will be meaningful to other researchers. The problem appears to result from the fact that different projects (and sometimes the individual experiments within a project) start from different (often unstated) assumptions, involve too many (often unidentified) variables, and analyse data using different models or an overly-simplistic linear model. Finally, despite the fact that DOE is filled with brilliant physicists, the agency still has a mechanistic view of the human body .

I have some suggestions:

1) To the extent possible, centralize all matters relating to medical research. This task would involve identifying all ongoing medical research projects, consolidating similar matters, and eliminating unnecessary duplication.

2) Engage an expert in systems design to improve the flow of information about medical issues. This would encourage the development of a positive feedback loop and prevent the agency from continuing to spend money on experiments that have become moot.

3) Request that the Secretary appoint a special assistant for medical issues and a liaison to the White House Commission on Alternative Medicine.

4)Request that a liaison be appointed to coordinate with other federal agencies on medical issues.

5) Hold a conference with representatives from the agency, the labs and citizen groups to

determine appropriate research methodology. This will enable DOE to identify and assess different methodologies, assumptions and epistemological problems. This will enable DOE to more easily assess the information obtained from the research projects.

6) A medical research coordinating committee should be appointed with authority to recommend agency goals, review medical research procedures (including matters related to human subjects) and ensure that the medical research projects are being coordinated and conducted ethically. The committee members should include representatives from the Secretary's office, the DOE liaison with other federal agencies, the DOE liaison to the White House Commission on Alternative Medicine, a representative of each medical research project, a representative from each Lab, and representatives of citizen groups.

DRAFT 1/7/99

Proposal for a Commission on Integrated Health Care: Developing A National Plan

Background

Wide-spread use: According to the November 1998 issue of the *Journal of the American Medical Association (JAMA)*, 85 million American adults (42% of the population) now use complementary and alternative medical (CAM) products and practices. There are substantially more visits each year to alternative medicine practitioners than to conventional primary care physicians. The public's out-of-pocket expenses for these CAM products and services is equal to that paid out-of-pocket for physician services and is three times that paid out-of-pocket for hospital expenses.

A Women's Health Issue: Increasing numbers of women (48.9% in 1997) are turning to CAM products and practices for a variety of conditions and illnesses, including breast cancer, menstrual problems, endometriosis, nerve-related conditions, and pregnancy and labor management. Over the next 16 years, each year nearly 1 million American women will turn 50. The average age for menopause is 51. Hormone replacement therapies constitute the most prescribed drugs in America today and often are marketed as panaceas for conditions associated with aging such as osteoporosis and heart disease, in addition to the full range of menopausal complaints. Women are seeking natural, less invasive and holistic alternatives to synthetic drugs -- alternatives that may reduce symptoms, improve well-being, and prevent and treat chronic illness. However, there is little or nothing known about the safety and effectiveness of many of these products and practices on pre-and menopausal women.

Similarly, little is known about alternative treatments for endometriosis, even though up to 20% of American women of childbearing age are diagnosed every year with this painful disease. While studies have shown some efficacy with conventional drugs, all of them have side-effects that make them unsuitable for long-term use. Subsequently, women are turning to untested alternative treatments and products to treat this condition.

Women often are the primary caretakers for the health of their entire family, making decisions about diet and illness prevention, such as vitamins and other food supplements, and for treatment of minor aches and pains. And these women increasingly desire to take charge of their own -- and their family's -- health care practices. For example, the vast majority, approximately two-thirds, of homeopathic patients and purchasers of homeopathic products are women.

Integrated Medicine: Over 95% of those who use CAM products and practices do so in conjunction with conventional medicine — not in place of it. Americans are looking for health care services to complement conventional medicine when its side effects, costs, and effectiveness are inadequate or unacceptable. However, only a minority of patients disclose CAM use to their doctor and few doctors ask about CAM use or have the expertise to advise on the benefits and risks of these practices. In late 1997, *JAMA* noted the "increasingly critical" need to determine how to integrate CAM practices into clinical practice to improve patient care.

There is credible research showing the effectiveness of various CAM practices concerning many common conditions such as heart disease, depression, asthma, addictions and pain management. As research on CAM opens up new treatment options, the health care community has attempted to respond to the public's interest in CAM. Nearly 70% of American medical schools now offer CAM electives, and several are already incorporating required lectures and seminars into their core curricula. And managed care organizations and insurance companies are beginning to grapple with how to offer CAM benefits, and hospitals throughout the nation are opening "integrative care centers."

Statement of Need

National health and science policy must catch up with the changing values and needs of the American people. The movement toward integrated medicine promises a more comprehensive, and more responsive health care system. Evidence suggests that this approach may be far more cost-effective as well.

The Federal government needs to develop a national plan to address the integration of complementary and alternative treatments into mainstream health care. To that end, the Congress provided funding for a White House Commission on Integrated Health Care. The Commission is charged with developing a federal strategy for the integration of CAM into our health care system. In particular, the Commission would evaluate current CAM therapies; assess the prospects of a holistic or integrated approach for improving the health of Americans; address issues of regulation and safety; and establish guidelines for the integration of this approach and these therapies into all aspects of health care, including patient care, research, professional training and health education. Under the leadership of the White House, this Commission would seek input from all relevant constituencies, with a special focus on women's health, in the development of this plan.

Goals

The White House Commission's National Plan for Integrated Health Care would address the following:

- Determining priorities for integrated health care in the areas of practice, research and policy. These should include:

  — Surveillance and monitoring of potential adverse effects from CAM use
  — Adequate CAM education and training of health care providers
  — Accountability of emerging CAM products and practices
  — Consumer access to alternative medicine products and practices
  — Priorities for funding research on integrated health care, with a special emphasis on women's health research
  — Criteria for the provision of integrated health care benefits
  — Areas for frontier and anomalous sciences that are of interest to the public, including family wellness and women's health issues

— Use of traditional and indigenous medical practices in conjunction with conventional medicine

- Identifying what information on integrated health care should be collected, summarized and made easily accessible to the public

- Establishing appropriate and adequate research priorities, particularly in the area of women's health

- Developing guidance in making integrated health care services safe and effective, including how to monitor the possible adverse effects of these practices and products, and how to establish standards of training, credentialing, licensing and monitoring of service quality

- Establishing guidance to assure reasonable access and appropriate benefits to integrated health care services

- Reviewing the impact of integrated health care services on special populations, including the disadvantaged, elderly, veterans, children, women and minority populations

Consensus

Under the leadership of the White House, the Commission may seek the input and participation of a number of organizations, including, but not limited to, the following:

Association of American Medical Colleges
Association of Health Insurers of America
American Board of Medical Specialties
Agency of Health Care Policy and Research
Agency of International Development
Bureau of Primary Health Care
Bureau of Health Professionals
Centers for Disease Control and Prevention
Complementary and Alternative Medicine Consortium
Department of Health and Human Services
Office of Women's Health
Department of Defense
Department of Education
Food and Drug Administration
Federation of State Medical Boards
Government Reform and Oversight Committee
Health Care Financing Administration
Health Resources and Services Administration
Institute of Medicine
National Academy of Sciences

National Institutes of Health
National Library of Medicine
Office of Alternative Medicine
Office of Women's Health Research
Professional Health Care Associations
Veterans' Affairs
The World Bank

Membership

Under the leadership of the White House, the Commission would be composed of 10-15 knowledgeable and prominent citizens of the country with knowledge of and expertise in health care practice and policies and be drawn from both the public and private sectors.

The Chair should be a respected member of the health care establishment with experience in all aspects of medicine and health care and with an openness to innovative alternative practices and an ability to balance a wide diversity of views.

Timeline and Resources

The Commission would convene for a 12 to 15-month period. It would be allotted sufficient resources and a coordinating staff to support the Commission, solicit expert advice, collect relevant background information and obtain public input.

TO: DR. JONAS

Table of Contents

INTEGRATING COMPLEMENTARY MEDICINE IN HEALTH SYSTEMS

THE EMERGING FIELD OF INTEGRATIVE MEDICINE

MANAGEMENT FUNCTIONS

ORGANIZATIONAL STRUCTURES

Part VIII. Networks

Part IX. Integrative Medicine Centers

Part X. Hospital-Based Programs

11 Sep 00

Steve,

Dr. Ricki Pollycove gave me ~~this~~ to share with the "Nice."

Joe

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VOL 73 NO 6 June & July 2000

SAN FRANCISCO MEDICINE

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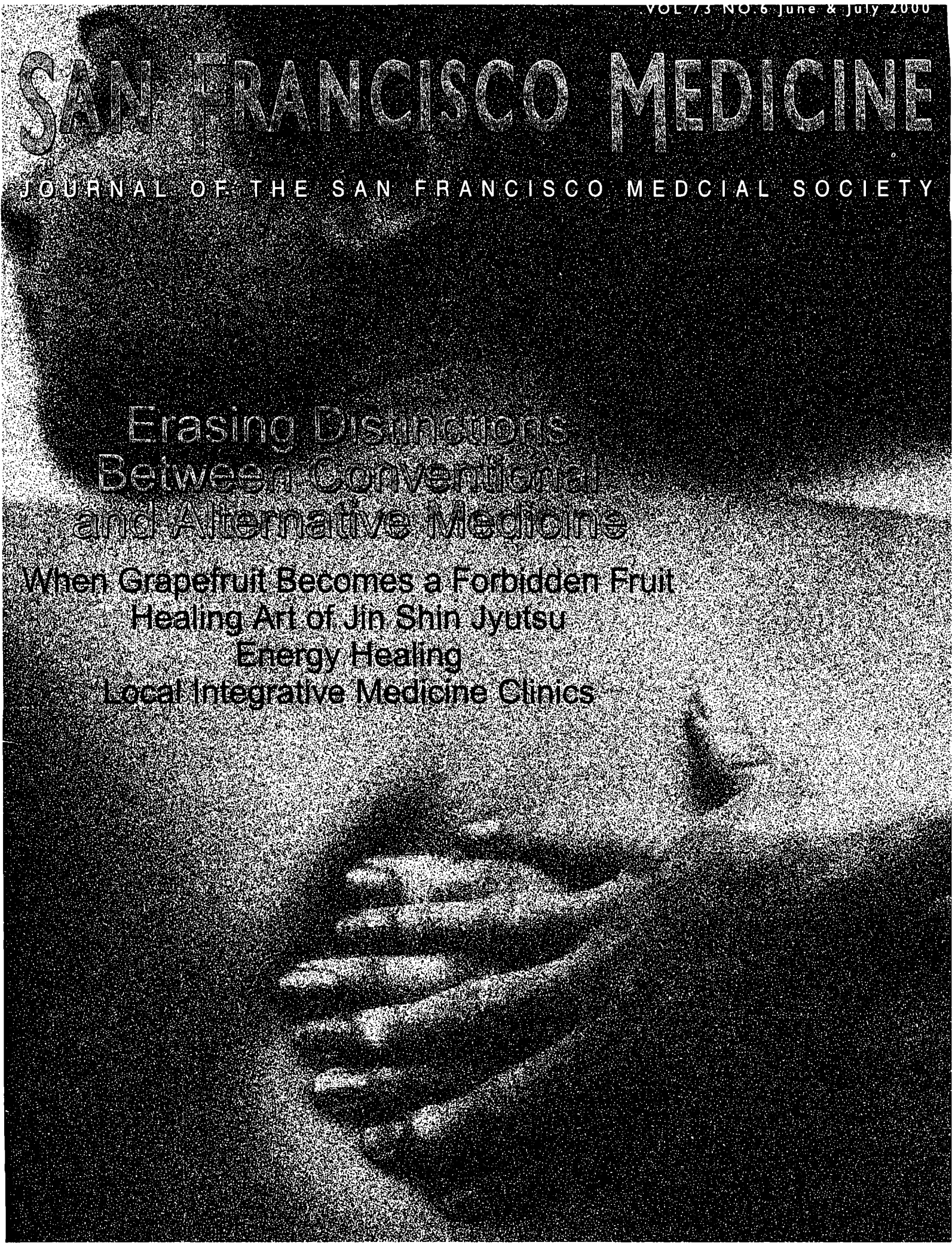
Erasing Distinctions Between Conventional and Alternative Medicine

When Grapefruit Becomes a Forbidden Fruit

Healing Art of Jin Shin Jyutsu

Energy Healing

Local Integrative Medicine Clinics



A FAX FROM

The White House Commission on Complementary and Alternative Medicine Policy

DATE: July 25, 2000

~~TO~~: FROM

George Bernier	Charlotte Kerr/Lisa Calloway
Tom Chappell	Dean Ornish/Marjorie
Effie Chow	Conchita Paz
George Devries	Buford Rolin
Bill Fair	Julia Scott
~~Joe Pizz~~	Tieraona Low Dog
Wayne Jonas	

~~FROM~~: TO **Michele M. Chang, MPH** / Steve Croft
Executive Secretary, WHCCAMP
(tel): 301-435-6232 ; (fax): 301-480-1691

Pages, including this one: 3

Message:

Please indicate (X) all unavailable dates on the attached calendar and return at your earliest convenience.

~~Here's the best I can do for now.~~

Michele & Steve

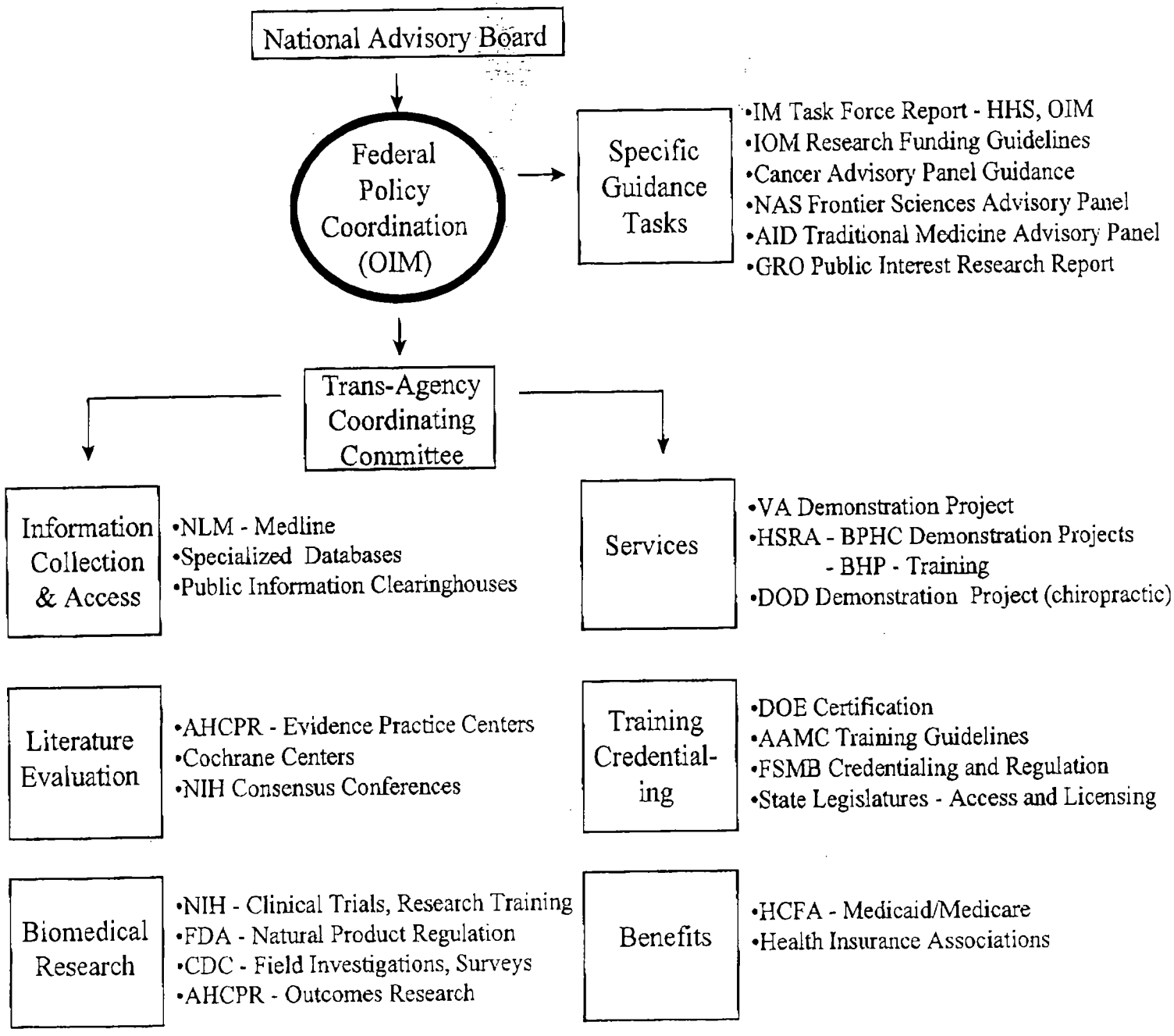
Here is another ~~draft~~ approach possibly for the report. I did a while ago with a more complete list of government agencies and their roles.

THANKS!

Best.

Wayne

Developing a National Plan for Integrated Health Care



Index of Terms

Acronym	*Definition*
AAMC	Association of American Medical Colleges
AHCPR	Agency of Health Care Policy and Research
AID	Agency for International Development
BPHC	Bureau of Primary Health Care
BHP	Bureau of Health Professionals
CDCP	Centers for Disease Control and Prevention
DHHS	Department of Health and Human Services
DOD	Department of Defense
DOE	Department of Education
FDA	Food and Drug Administration
FSMB	Federation of State Medical Boards
GRO	Government Reform and Oversight Committee
HCFA	Health Care Financing Administration
HRSA	Health Resources and Services Administration
IOM	Institute of Medicine
NAS	National Academy of Sciences
NIH	National Institutes of Health
NLM	National Library of Medicine
OIM	Office of Integrated Medicine
VA	Veteran's Affairs

TOWARD A NATIONAL PLAN FOR INTEGRATED MEDICINE

Complementary and alternative medicine: The public's health care reform

Complementary and alternative medical (CAM) products and practices are being extensively and increasingly used by the American people. Eighty-three million American adults (42% of the population) now use CAM on a regular basis. Their are substantially more visits each year to alternative medicine practitioners than to conventional primary care physicians. The public's out-of-pocket expenses for CAM products and services is equal to that paid out-of-pocket for physician services and is three times that paid out-of-pocket for hospital expenses.

CAM use is the public's health care reform. The American people are seeking out health care services to complement conventional medicine when its side effects, costs, and effectiveness are inadequate or unacceptable. Values in health care are changing as the prevalence of chronic disease rises in an aging population. The public increasingly desires to participate in health care practices that use less invasive and more natural means. They are seeking out more holistic approaches to health care - approaches that reduce symptoms, improve well-being, and simultaneously prevent and treat chronic illness. And they are combining them with conventional medicine.

Yet this type of integration is unmonitored, unguided and places the public at risk. Fifteen million Americans each year use herbal or high dose vitamins along with conventional drugs - risking unknown and possibly dangerous interactions. The competence and scope of practice of CAM providers is variable, unevaluated and largely unregulated. Only a minority of patients disclose CAM use to their doctor and few doctors ask about or have the expertise to advise on the potential benefits and risks of these practices. In response to patient demand hospitals and health insurers are increasingly providing CAM benefits with variable and unknown standards.

The science behind CAM remains uncollected and unevaluated. The quantity and quality of evidence for the safety and effectiveness of unconventional practices is unknown. CAM practitioners (and many patients) claim tremendous benefits from CAM. Conventional medicine warns of the risks from unproven therapies and quackery. Current laws provide a disincentive for private research on the preventative and therapeutic benefits of CAM products. Potential profits from testing natural products are meager when compared to drug development of specific chemicals. Pharmaceutical companies seek to discredit claims for natural products if they threaten their market share from already approved drugs or to keep them marketed only as dietary supplements and so without claims. Government efforts to test and regulate CAM products must be designed to complement, not compete, with the private sector.

Integrated Medicine: The wise combination of alternative and conventional medicine

Over 95% of those who use CAM products and practices do so in conjunction with conventional medicine - not in place of it. Integrated medicine (IM) - the wise combination of alternative and conventional medicine - is what the public needs. In England, an plan for addressing the two main vulnerabilities of integrated medicine - research evidence and regulatory oversight - has been outlined. The United States must develop a similar plan for the American public. Such a plan should include, but not be dictated by, a wide range of governmental, scientific, medical, private and public groups. Such a plan must be grounded in the ethical principles of autonomy and beneficence, use science as a guide, and be responsive to the changing values and needs of the American people.

Coordinating a National Plan for Integrated Medicine

A national plan for integrated medicine (NPIM) will require that several issues be addressed in a coordinated fashion: These are outlined in figure 1 and include 8 items.

1. Guidelines and a guidance process are needed to direct the development of integrated medicine (IM) in practice, research and policy. This process must incorporate all relevant constituencies - especially the public.
2. The CAM and IM research and practice literature must be collected, organized and made accessible to the public.
3. CAM and IM research literature must be evaluated to determine the state-of-the-science for making evidence-based decisions about practice, research and policy.
4. Biomedical research support in basic science and clinical trials of CAM and IM is needed.
5. Outcomes research, field investigations and health services research is needed on the public impact, costs, feasibility, and effectiveness of CAM and IM in practice.
6. Evaluation of the relevance of CAM and IM for special populations is needed such as with disadvantaged, elderly, veterans, children, women, and minority populations.
7. Coordination of training, credentialing, licensing and monitoring of service quality is needed.
8. A process for determining appropriate benefits of integrated medicine is needed.

The public is driving the interest in CAM and IM and so government policy and activities in guiding research, practice and benefits must incorporate the public into this process. No single agency can be responsible to carryout development or coordination of all these items. The following federal agencies and other organizations would be involved. Most of these organizations already have initial efforts beginning. Thus, coordination of at this time is optimal.

1. Guidelines and a Guidance Process for Integrated Medicine
- for research, practice and policy

- Institute of Medicine (IOM) Guidelines for Funding Research and Provision of IM
- IOM/NCI Cancer Advisory Panel for CAM Research
- National Science Foundation (NAS) Advisory Board for Frontier Sciences in the Public Interest
- Agency for International Development (AID) Committee on Traditional and Indigenous Medicine
- Assessment of the integration process in light of the:
  - goals of medicine (e.g. Hastings Institute, IOM, AMA, etc.);
  - needs of the public (Government Accounting Office, Milbank Memorial Fund etc.); and the
  - role of science in addressing chronic disease (NAS; AAAS; Cato Institute; Santa Fe Institute, etc.).

2. Obtaining the Research Literature on Complementary and Alternative and Integrated Medicine

- National Library of Medicine (MEDLINE)
- Office of Alternative Medicine (CCI)
- World-wide database of CAM and IM research and practice (IMLINE)

3. Evaluation of Existing CAM Research Literature. The State-of-the-Science

- Agency for Health Care Policy and Research
- The International Cochrane Collaboration for Maintaining Systematic Reviews
- An Integrated Medicine Services Task Force Report
  (Similar to the US Preventive Services Task Force Report for Prevention)

4. Biomedical Research
- NIH Office of Alternative Medicine for supporting "Centers of CAM Research"
- NIH Office of Alternative Medicine for supporting clinical research development
- NIH Office of Alternative Medicine for supporting research training
- NIH Institutes and Centers (ICs) for supporting clinical trials
  (done separately from but coordinated with the OAM)
- National Institutes of General Medical Science (NIGMS) for supporting basic science research (done separately from but coordinated with OAM)

5a. Surveillance Research on Practice Effects and Safety
- Center for Disease Control and Prevention (CDCP) Field Investigation activities
- CDCP survey's of health trends and practices
- CDCP Practice-based Research Networks
- Food and Drug Administration (FDA) Natural Product Regulations
- FDA/CDC monitoring of safety and adverse effects from CAM and IM.

5b. Outcomes and Health Services Research
- Agency for Health Care Policy and Research (AHCPR) program on CAM effectiveness
- AHCPR/IOM Outcomes and Effectiveness Research Technology Assessment Guidelines

6. CAM and IM Services in Special Populations
- Veterans Administration Demonstration Project for veterans
- Health Services and Resources Administration
  Bureau of Primary Health Care Services Demonstration for under-served and minority populations
  Bureau of Health Professions IM Residency Training Programs
- Department of Defense Demonstration and Grant programs
  Chiropractic Demonstration Project
  Breast Cancer CAM Grants
- State and county health department demonstration projects (e.g. King County Clinic)

7. Training, Licensing and Credentialing of CAM and IM Practitioners
- Department of Education guidelines
- State's Medical Licensing Laws coordination
- Professional organization practitioner-review coordination (both CAM and conventional)
- Association of American Medical Colleges medical education guidelines
- Federation of State Medical Boards credentialing guidelines

8. CAM and IM Benefits
- Health Care Financing Administration determined benefits
- Association of Health Plan and Insurance Providers

An Office for Integrated Medicine (OIM) could arrange for the guidance, coordination and support for the above activities. This would need to be at the level of the Secretary of Health and Human Services, the GAO, or other appropriate and authoritative level.

Groft, Steve (NCCAM)

From: Ayurveda Holistic Center [mail@ayurvedahc.com]
Sent: Friday, September 01, 2000 10:35 AM
To: Groft, Steve (NCCAM)
Subject: town hall ideas

Dear Steve,
It was a pleasure speaking with you yesterday. I emailed many people in all camps of Ayurveda. So far, no replies...

Here are some basic ideas I said I'd share with you.

1. Since the committee will not take any new members to represent ayurveda, have a subcommittee of all health modalities not properly represented so far, to report to and act as liason with the committee. This way each member of the subcttee. acts as a news/communication agency link between their field and the pres. cttee. Further, this prevents any divisions of any alt. health field from trying to bias & and control the workings of their field in the US - that is the Pres. cttee. will be the unbiased overseeing ruling org.

2. Lack of proper communication needs to be addressed, we have not heard about the committee selection til late or we would have presented people for consideration. There must be a way to properly notify all alt health fields of Pres. cttee workings. One way is to use the subcttees (see #1).

3. Rather than licensing, have the similar format that MN and NJ are doing, having a general clearing board for all practitioners to register with even if they dont have licences, and any complaint are made to the board and the practitioners then have to answer to this state committee,

4. Beware of isolated active ingredients...they are drugs. Use whole herbs

5. Spirituality must be a part of healing

6. More grants/money to fund alt. med. research & better ways to notify us of the grants availability.

7. Ayurveda offers uniqe personalized approach that has to be considered in total US health care options. It is the oldest and still offers unique missing links not used or known in any other alt health system.
==========
Regarding the issues you sent me here are some ideas as well.
1B) Incentives to stimulate research- have more grant/funds available and actively inform us of these grants. Create communication channels to achieve the latter issue.

Note cost-savings is in the hundreds of billions of dollars by using ayurvedic medicine
Note the safety/no side effects issue of using ayurvedic medicine

2A) We dont even know what they are. There should be a system that allows for reimbusement without insurance companies automatically denying all first applications. This is an unethical way to discourage reimbursement application.
C) Ayurveda should be included in reimbursement

3A) Standardization/Certification/Education: First have a general clearing house where all practitioners register regardless of cert./license, etc. They would all be allowed to practice. If there are any complaints made to clearing house cttee, practitioner must answer to the board. Assume registered practitioners are properly trained until proven otherwise- See MN & NJ states who are taking the lead in this approach

B) Education standardization: get course material from all ayurveda schools and create a standardized final test. Inform all schools of material that needs to be covered so proper & complete teaching is offered. Standardize training & internship hours. This avoids biased teaching methods (ie one school's view vs another school's.)

C) Create a gov't scholarship & loan prgm for school certication students.

4A) Information communication: Have a subcommittee that reports to and from Pres. Cttee of at least 1 person from each holistic field (or one person from each main camp) who is responsible to inform their camp/field and report back to Pres. cttee.

Information should at least be received by email notification. Initial information should be ad on TV, radio, newspaper, magazine, email to let all people know of this initial development/inception.

B & C) Unfortunately TV news shows have some pact with drug companies & AMA and almost always - every few months air highly biased show - highly promo'd showing the 'sham' of holistic & organic. There should be a way to enforce balanced/equal time. & impose fines or law suits on unethical reporting. More interviews, shows and articles on the amazing benefits of holistic therapy results. Still to be fair, penalties should be imposed on herb companies that market 'sex-improving' or 'getting high naturally' type herbs as they do add herbs that force stimulation of adrenals etc.

Hoping this helps. Sorry we cant find anyone to speak in SF. But we will definately be in NYC. Please contact me as soon as the details are ready.

I will send you a copy of my Ayurveda Encyclopedia in the next few days, for your NIH/ Pres. cttee library. I and my director are here to answer and help your cttee in any way we can to speak for ayurveda.

Yours,
Swami Sada Shiba Tirtha, D.Sc.
Founder

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October 19, 2000

James S. Gordon, MD
Chair
White House Commission on Complementary
and Alternative Medicine Policy
6701 Rockledge Drive
Suite 1010, Mailstop 7707
Bethesda, MD 20817

Dear Dr. Gordon:

On behalf of the Institute of Medicine, Board on Health Promotion and Disease Prevention, I am writing to invite you to join us at our upcoming board meeting, on November 3, 2000 in Washington, DC, to discuss the White House Commission on Complementary and Alternative Medicine Policy. Our board is broadly concerned with the increasing role of CAM in the lives of Americans and its impact on health. We would be delighted if your presentation could address the charge of the Commission and strategy for responding to the charge. Of particular interest are the results of recent town hall meetings and other Commission activities. Board members usually enjoy asking questions and having a lively discussion. I am including a list of our board members for your information.

We look forward to seeing you on Friday November 3 at 9:30-10:30 am in Room 130 of the Cecil and Ida Green Building. The Green Building is located at 2001 Wisconsin Ave., NW, Washington, DC. Please call or email Rita (202/334-2383; rgaskins@nas.edu) if you have any questions or have audiovisual requirements for your discussion/presentation.

Thanking you in advance,

Rose Marie Martinez, Sc.D
Director, Board on Health Promotion and Disease Prevention

Cc: Michele Chang
Executive Secretary

INSTITUTE OF MEDICINE
NATIONAL ACADEMY OF SCIENCES
2101 CONSTITUTION AVE. N.W. WASHINGTON, D.C. 20418

Board on Health Promotion
and Disease Prevention
Rose Marie Martinez, Sc.D., *Director*

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BOARD ON HEALTH PROMOTION AND DISEASE PREVENTION

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National Academy of Sciences
National Academy of Engineering
Institute of Medicine
National Research Council

October 19, 2000

Stehpen Groft, Pharm. D
Executive Director
White House Commission on Complementary
and Alternative Medicine Policy
6701 Rockledge Drive
Suite 1010, Mailstop 7707
Bethesda, MD 20817

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BOARD ON HEALTH PROMOTION AND DISEASE PREVENTION

IOM Staff
Rose Marie Martinez, Sc.D.
Director, Board on Health Promotion and Disease Prevention

Rita A. Gaskins
Division Administrative Assistant

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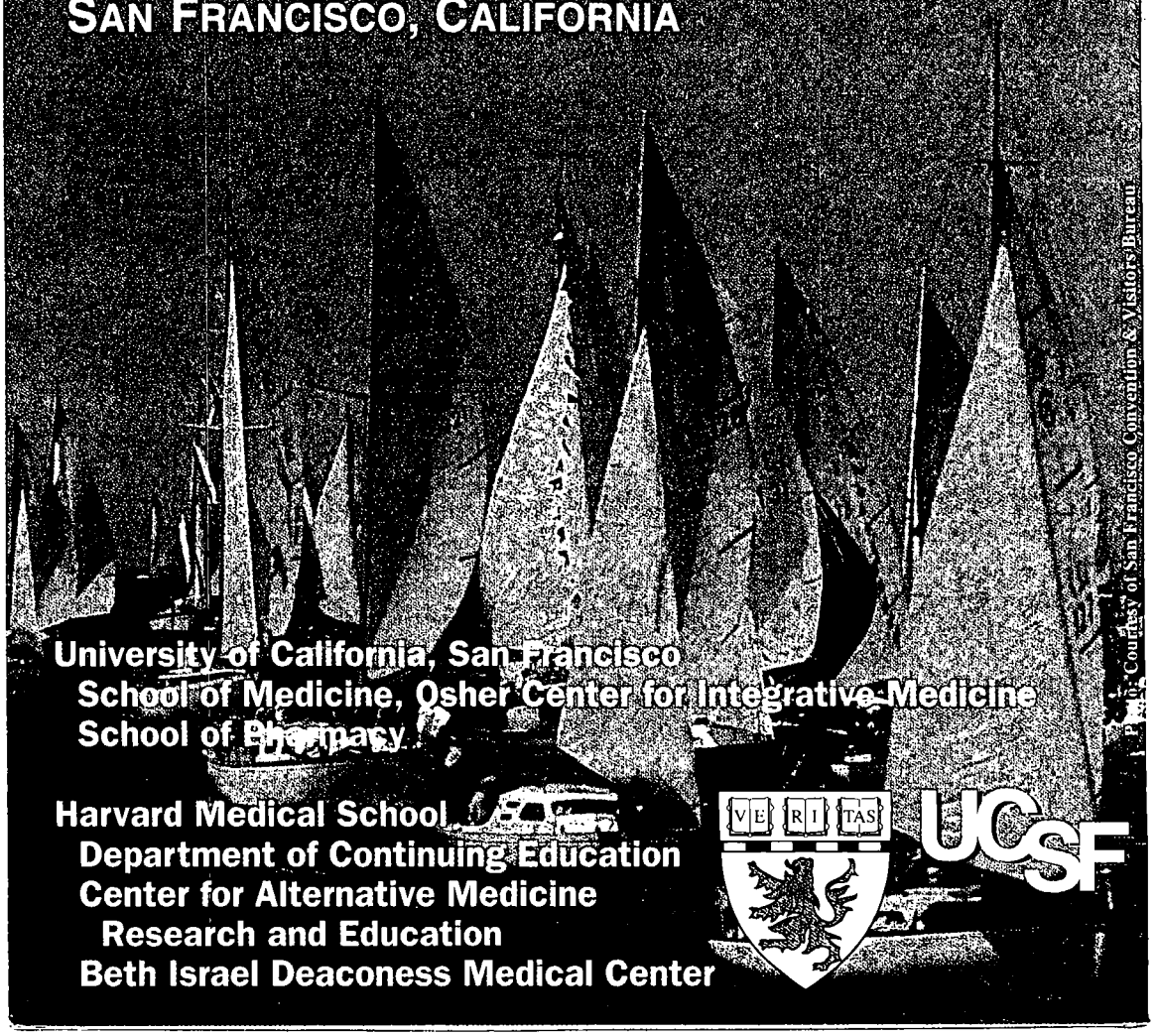

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