

Minority Report
of the
Special Commission on Complementary
and
Alternative Medical Practitioners

A Report to the Legislature
January, 2002

Executive Summary

The Special Commission on Complementary and Alternative Medical Practitioners was established, at the request of naturopaths (practitioners of “natural medicine”), by an outside section of the fiscal 2000 state budget. Although the Commission’s name suggests a more general charge, its work was largely confined to a single task: consideration of state licensing for naturopaths. During the course of a year, naturopaths failed to make a persuasive case for the quality of their educational experience, the efficacy of their treatments, the accuracy of their diagnoses, or the rational basis of their beliefs. Skeptics provided extensive materials, including a Massachusetts based, peer-reviewed study of naturopathic opinions, comprehensive governmental documents on naturopath licensing, and a comprehensive review of naturopathy literature. All of these demonstrate the futility of the case for the licensing of naturopaths.

We, the undersigned, therefore register our opposition to the proposed licensure of naturopaths in the Commonwealth of Massachusetts, and to the establishment of any self-regulating board of “naturopathic medicine.” The Commission heard overwhelming evidence that an endorsement of naturopaths through licensure would pose a clear threat to public health and safety. No scientific evidence was presented supporting naturopathic claims, but ample evidence was presented to show that these claims are implausible and dangerous. No evidence was presented to justify distinguishing the small group of naturopaths represented on the Commission from other, “less educated” naturopaths. Finally, the pro-licensure report fails to consider the Arizona report described below, which illustrates that a self-regulation statute cannot result in meaningful regulation and public protection in a field that is inherently irrational and unethical.

The signatories of this report have compiled this brief to reflect the evidence presented to the Commission and to fulfill the charge that the legislature presented to the Commission. We urge readers of this summary also to review the extensive background materials attached to it. Any objective reviewer will find that the evidence is fair and comprehensive, and leads inexorably to the conclusion that naturopaths are not qualified to be licensed health care providers.

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Summary of Findings in Nine Key Areas

1. Licensing:

Establishment of licensing for naturopaths is not warranted because:

- A. Evidence presented shows that there is no list of proven, safe and effective treatments or methods necessary to define professional naturopathy.
- B. Evidence presented shows that there is no clear, established scope of practice for naturopathy.
- C. Evidence presented shows significant problems in structuring and implementing state regulation of naturopathy in a manner that protects the public.
- D. Evidence presented shows that there is no way to determine who would be a deserving candidate for naturopathic licensure, even if the clinical claims of naturopaths were valid.
- E. Evidence presented shows that there is no basis for distinguishing the validity of the claims of one group of naturopaths from that of others.
- F. Evidence presented raises serious questions about the ability of the small number (approximately 30) of individuals seeking licensure to fund and staff a self-regulating board without serious conflicts of interest.
- G. Evidence presented shows that standard naturopathic practice is substandard medical practice. Thus a self-regulating naturopathic board would legitimize unacceptable practices.
- H. Evidence failed to demonstrate a set of principles or methods that distinguish naturopathic practice from what licensed medical doctors and doctors of osteopathy are already able to do. Therefore, there is no social or professional need that naturopathy supplies.
- I. “Collaborative practice” between naturopaths and medical doctors is untenable because of irreconcilable scientific and ethical differences.

2. Title Protection

The exclusive right to the titles “naturopath,” “naturopathic physician” or any similar title should not be established because:

- A. The Commission heard no evidence supporting the claim that the title “naturopath” should be legally limited.
- B. The Commission heard evidence from another, larger, national organization of naturopaths who are opposed to licensing. They

asserted their own qualifications, which are neither more nor less demonstrably valid than the group represented on the Commission. They oppose the licensure on the grounds that limitation of the term “naturopath” would arbitrarily limit their ability to make a living, and that those naturopaths seeking licensure are not qualified to practice medicine. The evidence does not warrant granting exclusive right to the term “naturopath” to any particular group of naturopaths.

3. Educational and Training Standards

Naturopathy schools should not be recognized as medical schools or as providing adequate health care training because:

- A. The evidence shows that academic and attendance standards in naturopathic schools and national accrediting programs are inconsistent and lack rigor. The mere issuance of an “N.D.” degree cannot guarantee that graduates are qualified or able to advise the public on matters of health.
- B. Evidence shows that the course content of naturopathy schools is filled with unscientific assertions and beliefs that strain credulity.

4. Clinical Experience

Naturopaths should not be recognized as having clinical experience adequate to advise patients on matters of health and disease because:

- A. Evidence was presented showing that both graduates and practicing naturopaths lack experience in recognition of disease and effects of treatment.
- B. No evidence was presented that naturopathy schools provide competent clinical training or any significant experience caring for truly ill patients.

5. Testing Standards

There is no basis for recognizing any meaningful testing system in naturopathy training because:

- A. Uniform testing of naturopaths has been shown to be ineffective in establishing minimum entry standards for licensing of naturopaths.
- B. Meaningful testing is not possible because of the lack of a comprehensive, proven body of knowledge and methods that define naturopathy.
- C. The Arizona report shows that, in spite of strong legislative efforts to mandate testing, such testing is impossible to design

and implement. Indeed, in Arizona all applicants passed the examination regardless of test results.

- D. Naturopaths did not present standards or examples of examinations to the Commission.

6. Independent Board Issues

The Commonwealth should not support the establishment of an independent licensing board because:

- A. Standard naturopathic practice is substandard medical practice. Thus an independent naturopathic board would legitimize unacceptable practices.
- B. The Arizona report shows the problems inherent in allowing naturopaths to establish their own boards. Major problems exist with scope of practice, dispensing of narcotics, conflicts of interest, funding, and public protections. Arizona has a 65-year history of licensing naturopaths, a community of 400 licensees and an established school of naturopathy. Massachusetts could not expect to avoid the problems experienced by Arizona.
- C. There are only 30 naturopaths in Massachusetts and 1500 nationally. Such a small group has little capacity to support an independent board.

7. Disciplinary Actions and Public Protections

The Commonwealth should not recognize a public protection capability in a naturopathy board because:

- A. Standard naturopathic practice is substandard medical practice. Thus the establishment of a self-regulating naturopathic board would, paradoxically, endorse practices that would be grounds for discipline if performed by a medical doctor.
- B. The Arizona report shows the lack of meaningful public protections from naturopathy self-regulation.
- C. No evidence was presented showing that licensed naturopaths in any state have any history of oversight by state licensing agencies.
- D. Existing fraud laws in Massachusetts should be strengthened and the Attorney General's health care division be asked to develop mechanisms to use existing laws to protect the public from misconduct, fraud and abuse by practitioners of all types.

8. The Duty to Refer Sick Patients to Medical Doctors

The evidence demonstrates the inability and unwillingness of naturopaths to make timely referrals to physicians because:

- A. The duty to refer depends upon the ability to recognize the need to refer. Naturopaths' limited training does not equip them to recognize the early signs of serious diseases or to distinguish self-limited diseases from those that require significant intervention.
- B. Naturopathic literature demonstrates a disdain for standard medical practice and an unwarranted faith in naturopathic "healing."
- C. A Massachusetts study indicates that naturopaths do not recognize the duty to refer patients who need urgent or specialized medical care.

9. The Title "Physician"

The Commonwealth should support a ban on use of the term "physician" or "primary care physician" by naturopaths because:

- A. The evidence presented to the Commission supports prohibition of the use of the term "physician" by individuals who are not licensed medical or osteopathic doctors. Indiscriminate use of this term constitutes a health and safety risk for unwary consumers.
- B. Naturopaths have consistently adopted this term in an attempt to legitimize their claims.
- C. No useful similarity exists between naturopaths and physicians regarding training, experience, capabilities or methods.

Discussion of the Process

The Origin and Real Agenda of the Special Commission: to Advance the Licensure of Naturopaths

The Special Commission on Complementary and Alternative Medical Practitioners was established in the summer of 2000. The Massachusetts Society of Naturopathic Physicians had long sought licensing for its constituents, who number about thirty. The Legislature had consistently and overwhelmingly opposed such licensing since 1995. After repeatedly failing to advance its agenda, this small group of naturopaths and its legislative patrons managed to establish the Commission, not through legislation approved by the Health Care Committee but through an undebated, outside section of the 2000 budget.

Opponents of Licensure Presented the only Comprehensive Critiques

Among those opposing licensure are the only members of the Commission who used their professional expertise to evaluate naturopathic claims: Drs. Kimball Atwood and Arnold Relman, representing the Massachusetts Medical Society and the Board of Registration in Medicine, respectively. The two began their Commission work open to the possibility that the public might benefit from some form of regulation of naturopathy, but were persuaded to oppose licensure by the wealth of evidence that was brought to bear, much of which is restated here. These physicians prepared extensive critiques of the field for the benefit of Commission members. These are appended to this report, and provide useful descriptions of the beliefs and claims of “naturopathic medicine” and examples of how rational physicians evaluate such claims.

Those favoring licensure of naturopaths did not show an interest in investigating the validity of naturopathic practices. The naturopaths themselves did not choose to defend questionable and erroneous practices, but rather denied their existence or importance. This denial was in spite of the fact that every questioned practice was gleaned directly from primary naturopathic sources representing the mainstream, including the leadership, of the field. Thus, the pro-licensure report reflects no sense that a state endorsement of such practices might be detrimental to the citizens of Massachusetts. On the contrary, the signatories of the pro-licensure report trust naturopaths themselves to establish a responsible system of self-regulation – a trust that is not feasible under professional and ethical social codes, and not warranted in light of the Arizona report.

This opposition report, by virtue of providing numerous examples of naturopathic practices, stands in contrast to the pro-licensure report, which provides none. We ask the legislature to question why the proponents of naturopathy did not discuss the validity of specific naturopathic practices.

The Commission's Charge

The outside section of the 2000 budget established the following tasks for the Commission:

- An identification of the types of practitioners and therapies available
- An estimate of the use of such therapies
- An evaluation of the necessity for state licensure of naturopaths as a consumer protection measure
- A review of naturopathic education and training standards
- A review of the scope of practice of state licensed naturopaths
- A review of potential standards of conduct for licensees of naturopathy
- A review of third party reimbursement for therapies

The Commission's Actions

The Commission met for nearly a year. During that time, the issue of licensure for naturopaths dominated its activities, in spite of evidence showing that the demand for naturopathic services is miniscule. Pro-licensure naturopathy advocates consistently supported an independent licensing board with the broad authority to define naturopathy, its standards and scope of practice. The representative of acupuncture on the Commission, who is an administrator at a local acupuncture and oriental medicine school, also supported this position with the provision that naturopaths be excluded from the practice of acupuncture.

"Organizing Principles"

The Commission spent several meetings establishing a set of "organizing principles." These were eventually organized into two major categories: "Criteria that Suggest the Need for Government Intervention" and "Criteria that Suggest the Need for Licensure." Most of these criteria reflected the superficial trappings of legitimacy, e.g., the existence of schools, a national society, and an examination; one was concerned with the only relevant initial criterion for a health care profession: validity of claims. This was phrased as follows: "Is there evidence of effective treatment of conditions if treated by well-trained naturopathic medical practitioners?" The answer to this is "no," but those favoring licensure accepted the assertions of naturopaths in spite of substantial evidence presented to the contrary.

The Case for Naturopathic Licensure as Presented to the Commission

A small group of naturopaths, who refer to themselves as "naturopathic physicians" or "naturopathic doctors" ("ND's"), seeks licensure to practice an unusual form of medicine in the Commonwealth of Massachusetts. These individuals are few by any standard, numbering approximately 1500 in the entire U.S. and 30 in Massachusetts (by comparison, in Massachusetts alone there are about 30,000 medical doctors, 4,000 nurse

practitioners, 400 nurse midwives, and 1800 chiropractors). They contrast themselves to other, more numerous naturopaths, by virtue of having attended on-campus schools, which number four in the U.S.¹ These schools grant the “N.D.” degree, but so do several other, “unapproved,” correspondence schools. The N.D. degree is not recognized nationally or in the Commonwealth of Massachusetts. The Commission was presented no specific information detailing the educational and work histories of the 30 or so members of the Massachusetts Society of Naturopathic Physicians.

The naturopaths represented on the Commission make several assertions, all of which are contradicted by the evidence, to justify their quest. These assertions, together with our responses, are as follows:

1. Naturopaths State that they are “Primary Care Physicians.”

These naturopaths claim to be “primary care physicians” and to be adequately trained for this calling. They view their scope of practice as covering every aspect of medical care except trauma and major surgery. This claim is repeated in the literature of every major institution of the field, including the official websites of all four schools in the U.S., the official website of the American Association of Naturopathic Physicians (AANP), and the *Textbook of Natural Medicine* (the only general textbook of the field). The following quotation is from the website of the National College of Naturopathic Medicine in Portland, Oregon, one of the four naturopathy schools recognized by those seeking licensure:

Naturopathic doctors (N.D.s) are primary care physicians, most of whom are in general private practice. They are trained to be the doctor first seen by the patient for general healthcare, for advice on keeping healthy, and for the diagnosis and treatment of acute and chronic conditions.

¹ They are: Bastyr University in Kenmore, Washington; the National College of Naturopathic Medicine in Portland, Oregon; the Southwest College of Naturopathic Medicine in Tempe, Arizona; and the University of Bridgeport College of Naturopathic Medicine in Bridgeport, Connecticut. All four schools have websites.

Response:

Primary Care Physician Claim

In one of the few concessions to the overwhelming evidence against the claims of naturopaths, the pro-licensure report suggests that the title “primary care physician” be denied to them. “Naturopathic physician” would still be available, as would all claims regarding the ability to diagnose and treat disease.

Regardless of what the pro-licensure report may state, the pretension of these naturopaths to be “physicians” is the standard for the field as a whole. It is precisely what Massachusetts consumers will be told if such practitioners become licensed. No crafting of legislative language can change this fact, as evidenced by the attached letter from the State of New Hampshire demanding that the AANP stop proclaiming that New Hampshire licenses naturopathic “physicians.”

Recognition of the status of their graduates as “physicians” is central to the survival and growth of the four naturopathy schools. These schools actively support political action for licensure throughout the country. Prospective and former students demand licensure as a means of returning their considerable financial investments in naturopathy degrees. Thus consumers in Massachusetts and other states must be led to believe that licensed naturopaths are “primary care physicians.” If the Commonwealth licenses naturopaths in any way, the schools, the national organizations and the individual naturopaths will assert that they have been recognized as “physicians” in Massachusetts.

Naturopathic Education Does Not Justify the Title “Physician” or “Doctor”

Simple arithmetic shows that the education of naturopaths and medical doctors cannot be comparable. Evidence-based medical school requires four years, of which at least one is spent in an intensive, hospital setting learning about patients who are seriously ill. To be licensed to practice medicine, a graduate M.D. must complete another year of intensive hospital training (the well-known “internship”). Most primary care physicians in modern times, moreover, have subsequently completed two more years of post-graduate training and passed a certification exam.

Naturopathic schools also advertise a four-year curriculum, but during this time they claim to combine standard medical training with naturopathic training. The latter includes multiple courses in various “alternative” practices, including homeopathy, acupuncture and traditional Chinese medicine, “naturopathic manipulation” (a form of chiropractic), Ayurvedic medicine, cranial osteopathy, herbalism, and more.² Exclusive practitioners of several of these methods, who are not naturopaths, contend that four years is a minimum requirement for training in each. How, then, could naturopaths be adequately trained in all of these and in scientific medicine as well?

² Bastyr University Course Catalog. Available at:
<http://www.bastyr.edu/catalog/courses/default.asp?PID=NM>

Naturopathic Clinical Training is Inadequate

Naturopathic schools, moreover, offer no training in the care of sick, hospitalized, patients, and little or no teaching by expert clinical professors. Naturopathic school faculties overwhelmingly consist of naturopaths, who themselves have had inadequate training. Naturopathic schools have no significant hospital affiliations. The result is to perpetuate a dubious, superficial understanding of health and disease, as will be discussed further below.

Licensure would Create a Double Standard

The central element of medical education in the clinical years is to learn from qualified physicians and be exposed to real diseases, trauma and chronic conditions. Thus, for naturopaths to claim training comparable to that of even minimally qualified M.D.'s who are allowed to practice primary care, two years of intensive hospital training would have to be added to the naturopathic curriculum, the second occurring after graduation. Since this innovation is not part of the proposal for naturopathic licensure, the result would be to construct a two-tiered medical system for the citizens of the Commonwealth.

Naturopathic Credentials are Inconsistent

The evidence, furthermore, shows that many graduates of "approved" naturopathy schools (including the naturopath on the Commission, Barbara Silbert) do not attend the full four years at naturopathic school. Instead they receive up to two years of credit for schooling in other fields, such as chiropractic, whose teaching also deviates from the basic educational and scientific premises of evidence-based medical schools. If the Commission representative, who is president of the Massachusetts Society of Naturopathic Physicians, has such weak credentials, it can reasonably be concluded that the credentials of the average naturopath are at least as questionable.

2. Scientific Training and Educational Quality

Naturopaths seeking licensure claim to have received the same basic science training as medical doctors, and to have passed an examination that is alleged to be equivalent to that required of medical doctors.

Response:

Basic Science Training

If the quantity of naturopathic training is lacking, so is its quality. Naturopathic schools claim to teach the same basic sciences as science-based medical schools, but the evidence presented to the Commission proves otherwise: no scientifically trained physician, for example, could possibly believe that a hydrogen peroxide bath can effectively treat or prevent asthma by "bring[ing] extra oxygen to the entire surface of the skin, thus making the lungs somewhat less oxygen hungry." This claim, which is incompatible with the facts of anatomy and physiology, is

made in a naturopathic treatise written by a leader in the field and printed on the official website of the AANP.³ It is typical of the myriad pseudoscientific claims made by naturopaths, many more of which are discussed in the accompanying *Naturopathy Monograph* prepared by Dr. Atwood, the Massachusetts Medical Society representative to the Commission. We explained this claim and others like it to the Commission shortly after two Boston teenagers died of asthma for lack of prompt, definitive treatment. These teenagers may not have been treated by naturopaths, but their deaths clearly show that the conflict between scientific facts and irrational claims makes a difference in the treatment of real diseases. Acute asthma victims do not have time to be bathed in hydrogen peroxide.

Naturopathic Schools vs. Real Colleges and Universities

Naturopathic schools display the trappings and titles of established universities, but are actually small facilities that were started by a few individuals to promote a dubious health “system” not recognized by society at large. These schools may have a for-profit history and receive funding from health food and “dietary supplements” companies, as is documented on p.21 of the accompanying *Naturopathy Monograph*. They do not offer a variety of undergraduate and graduate degrees.

Health consumers should be wary, in general, of any health-related field whose training programs are unaffiliated with larger, established academic institutions. Lacking such affiliations, the field is insulated from the scrutiny of the larger scientific community and is thus likely to perpetuate dubious, unscientific beliefs and practices. Often such beliefs are the product of the musings of one or a few individuals. Bastyr University's publications show such limited authorship.

Naturopathic Education and the “Moonies”

Of the four on-campus naturopathic schools in the United States, only one, the University of Bridgeport College of Naturopathic Medicine, can boast that it is part of a real university. Yet this is no ordinary university: it is the “flagship” of the World University Federation, a front organization for the Unification Church. Legislators will recall that this is the cult of the Reverend Sun Myung Moon, from whose name its more common designation, the “Moonies,” is derived. Naturopathic schools, unsurprisingly, have not joined the scientific community but have maintained an ideological, cult-like approach to health care.

Accreditation

Naturopathic schools are not accredited in any meaningful way. The Council on Naturopathic Medical Education (CNME) has been the accrediting body in the past, but it does not certify that what naturopathic schools teach is valid. It merely ascertains that certain peripheral factors are in order. These include, according to consumer health activist Stephen Barrett, M.D., “record-keeping, physical assets,

³ Kane E. Asthma. <http://aanp.net/Library/articles.lay/EK.Asthma1.html>. Emily Kane, N.D., the author of this article, is listed as a senior editor of the *Journal of Naturopathic Medicine*, “the official publication of the American Association of Naturopathic Physicians.”

financial status, makeup of the governing body, catalog characteristics, nondiscrimination policy, and self-evaluation system.”⁴ The CNME publishes a handbook explaining its criteria for accreditation, but naturopathic advocates did not provide it to the Commission.

The National Advisory Committee on Institutional Quality and Integrity, for the United States Department of Education, voted in 1999 to deny the CNME recognition as an accrediting agency. This occurred as a result of violations found in relation to the accreditation of the Southwest College of Naturopathic Medicine.⁵ The proponents of naturopathic licensure on the Commission knew this, but did not present it to the other members.

This contrasts with the accrediting body for evidence-based medical schools, the Liaison Committee on Medical Education (LCME). The LCME is concerned with such relevant issues as the content of the coursework, the preparation of newly–admitted students, evaluation of student achievement, and academic counseling. These criteria are available on-line.⁶ The LCME is recognized by the U.S. Department of Education, contrary to what is stated in the pro-licensure report.

Testing

The assertion that naturopathic testing is comparable in any substantial way to testing required of medical doctors remains merely an assertion: no examples of test questions, materials or results were offered to the Commission by licensing advocates. Evidence from the Inspector General of Arizona's report, however, documents that there are serious problems with composition, grading and the quality of the panel that compiles the examinations. Evidence in that report also shows that no one who failed the exam in Arizona was denied a naturopathy license during the period of review. At least one of the Arizona exam writers also helped write the national examination.

3. The “Scientific Evidence” for Naturopathy

Naturopaths assert that there is a wealth of scientific evidence for their practices. The *Textbook of Natural Medicine*, the major textbook of the field, cites “10,000 references” to support its claims.

Response:

The Lack of Scientific Evidence for Naturopathic Practices

There is no scientific basis for the bulk of what makes up naturopathy. By disingenuously claiming credit for some practices that are uncontroversial and well known to all, such as low fat diets, naturopaths can appear to be rational and

⁴ Barrett S. A Close Look at Naturopathy. *Quackwatch*. Available at: <http://www.quackwatch.com/01QuackeryRelatedTopics/Naturopathy/naturopathy.html>

⁵ Ibid.

⁶ <http://www.lcme.org/start.htm>

scientifically grounded. In fact, claims that are truly naturopathic in origin range from pseudoscientific nonsense (see p.12 above) to outright consumer fraud, such as the use of hair analysis to diagnose mineral deficiencies and “toxins.”

The Textbook and Scientific Evidence

The “10,000 references” claimed by the *Textbook of Natural Medicine* are irrelevant to the issues, as is shown in some detail in the accompanying review by Dr. Relman and the Naturopathy Monograph. An example is this: in a chapter on AIDS, colloidal silver is recommended for the treatment of opportunistic bacterial and yeast infections. The authors justify this by citing a study in which colloidal silver is used not as a medicine, but as a *preservative*. In fact, colloidal silver is a well-known, toxic heavy metal, which the FDA has declared unsafe for any medicinal use.

Naturopaths’ Unwillingness to Test Their Own Methods

Naturopaths have had ample opportunity over many decades to test their claims scientifically, but have failed to do so. For example, they claim to effectively treat streptococcal pharyngitis (strep throat) without antibiotics but “with very low incidence of poststreptococcal sequelae” including rheumatic heart disease. They offer no data to support this astonishing claim. Any rational physician evaluating the AANP Position Paper on “strep throat” will quickly realize that if naturopathic treatments were to become common, the incidence of rheumatic fever would rebound to levels not seen since the introduction of penicillin.⁷

Naturopaths don’t test their own methods for the simple reason that they are certain, *a priori*, that they work. This is a hallmark of pseudoscience. When naturopaths claim that there is “scientific evidence” for their methods, it is an attempt to justify preconceived beliefs based only on naïve conjectures.

An Example of Scientific Evidence Offered to the Commission

An example of the scientific evidence offered by the naturopathic representative on the Commission is this: when challenged to provide evidence for the assertion that childhood ear infections are caused by dietary sugar (a common naturopathic error), she produced a bibliography of articles. Perusal of the list revealed that most of the articles had nothing to do with ear infections, but instead pertained to tooth decay. The others were equally irrelevant, and typically came from obscure, non peer-reviewed journals.

⁷ Treatment of Strep pharyngitis. Position Paper of the American Association of Naturopathic Physicians. <http://aanp.net/position.papers/PP.strep.html>

4. Naturopaths and Referrals to Medical Doctors

Naturopaths state that they know when to refer patients to medical doctors.

Response:

A Massachusetts Study and other Evidence Refute Referral Claim

Naturopaths cannot possibly know when to refer patients for competent medical care, both because they have had too little training to detect subtle signs of serious illness, and because they believe that their own ineffective methods can cure real diseases. This is shown abundantly in the *Naturopathy Monograph*, and is most striking in a survey done by a pediatrician from Boston's Children's Hospital in 1999: only 40% of polled Massachusetts naturopaths would refer a two-week old infant with a temperature of 101 degrees (a dire, life-threatening emergency) for definitive medical care.⁸ When we presented this study to the Commission, the representatives of the naturopaths denied that the subjects of the study were among their constituents. This is false: most of the subjects were identified through the AANP or the Massachusetts Society of Naturopathic Physicians. Their denial was characteristic of how naturopathy proponents, during the Commission's work, responded to criticism: real evidence, overwhelming in its refutation of naturopathic claims, was countered with mere assertions and claims of persecution.

5. Naturopaths Claim Unique Knowledge of Medical Secrets

Naturopaths claim that they can enhance the public health by methods that are, apparently, unknown to medical doctors, nurses, nutrition experts, public health experts, and other evidence-based practitioners. Naturopaths claim to know how to "boost the immune system" so as to avoid the need for antibiotics and prevent diseases such as cancer. They claim to "eliminate the underlying cause of a problem, rather than merely mask the symptoms." They claim that most diseases are caused by multiple "toxins" or "food allergies" that naturopaths, but not legitimate toxicologists or allergists, can detect. Among these toxins, according to naturopaths, are antibiotics, heart and blood pressure medicines, and most other life-saving medicines that medical doctors prescribe.

Response:

Naturopathy is a Mixture of Unremarkable Claims and Absurd Theories

The naturopathic claim to enhancing public health is spurious. Some of the dietary and lifestyle changes that naturopaths suggest for patients are mundane and widely known (e.g., lose weight and get more exercise); others have been disproved in real studies (e.g., dietary sugar is alleged to cause hyperactivity in children) or are *prima facie* absurd (e.g., dietary sugar allegedly causes ear infections in otherwise healthy children by providing sugar for bacteria to eat).

⁸ Lee AC, Kemper KJ. Homeopathy and naturopathy: practice characteristics and pediatric care. *Arch Pediatr Adolesc Med.* 2000 Jan;154(1):75-80.

Any specific claims that esoteric naturopathic ministrations can boost the immune system so as to prevent cancer, for example, are implausible and made without evidence, and thus constitute straightforward consumer fraud.

The Myths of “Toxins” and “Food Allergies,” and Associated Diagnostic Quackery

Equally false and alarmist are naturopathic claims regarding toxins and food allergies (e.g., 25% of Americans allegedly suffer from heavy metal poisoning, and food allergies are claimed to be a major cause of problems ranging from learning disorders to kidney diseases). Many of the means by which naturopaths diagnose these toxins and allergies are outright quackery: electrodiagnostic devices (banned by the FDA as worthless), hair analysis, applied kinesiology, iridology, and more. A practitioner who expects to find multiple offending substances may well “uncover” these with some of these methods, while missing the occasional real one. Imagine the pressure on the DPH to do something about these horrible toxins and allergies, once legitimized by the official diagnoses of licensed practitioners. Imagine, for that matter, the effect of this on worker’s compensation, disability insurance, union grievances, and civil court caseloads.

The Assault on Rational Medicine and Public Health Initiatives: Childhood Vaccinations

The systematic denigration of rational medicine and public health, by seeking to dissuade patients from taking medicines and otherwise to undermine the public trust in rational health care, can only cause harm.

Indeed, ample evidence was presented to the Commission showing that naturopathy poses threats to rational public health initiatives, most notably by its opposition to childhood vaccinations. This is extensively documented in the *Naturopathy Monograph*, and also in the study from Children’s Hospital mentioned above, in which only 20% of Massachusetts naturopaths polled said that they would recommend childhood vaccinations to parents. When such evidence was presented to the Commission, the naturopathic representatives flatly denied it. It is disturbing to us that the signatories of the pro-licensure report seem to have minimized such a dangerous misrepresentation. In parts of the country in which anti-vaccination movements have had real influence, the incidence of serious, even deadly, childhood diseases has risen alarmingly (see pp. 40-43 of the accompanying monograph for a discussion of this issue).

Because we called this issue to their attention, naturopathic advocates have included language in the pro-licensure report suggesting a requirement for “mandatory tracking of immunization status” of children under the care of naturopaths. This is well intentioned but naïve. All that would be required to defeat this provision is a tacit agreement between the anti-vaccine practitioner and the apprehensive parents.

Bioterrorism, Homeopathy, and Naturopaths

Here is another example of a public health claim that is both outrageous and relevant to current events. Dana Ullman, a nationally-known proponent of homeopathy, has recently recommended a homeopathic preparation to prevent anthrax.⁹ This recommendation has no basis in research and is refuted by the facts of chemistry and biology, because there is no active ingredient in the preparation.

Mr. Ullman is not a naturopath, but there is ample reason to assume that naturopaths in general would subscribe to this irresponsible notion. Homeopathy is a fundamental part of the naturopathic belief system. It is taught, uncritically, in all four naturopathic schools. Mr. Ullman's website, "Homeopathic Educational Services," is listed as a "recommended website" by the National College of Naturopathic Medicine.¹⁰ Homeopathy is promoted in the *Textbook of Natural Medicine* and recommended in virtually every naturopathic treatise. The 1994 edition of the *Journal of Naturopathic Medicine* (the "official publication of the AANP") recommends homeopathic "nosodes," the same sort of preparation recommended by Mr. Ullman for anthrax, as safer and more effective than real vaccines.¹¹ Many naturopaths consider themselves to "specialize" in homeopathy. Among these is Amy Rothenberg, who made several presentations to the Commission and is editor of the *New England Journal of Homeopathy*.

There is no basis for the claim that homeopathic preparations can prevent or cure any disease.¹² We refer the reader to the accompanying *Naturopathy Monograph*, p.45, for a discussion of how scientifically-naïve practitioners are seduced into believing that homeopathy and many other ineffective treatments "work."

6. "Naturopathy is Safer"

Naturopaths claim to be safer than scientifically trained physicians, because they use "safe, natural remedies." Naturopaths, for example, claim to be able to treat diseases such as coronary artery disease and hypertension (high blood pressure) with natural remedies that have essentially no side effects.

⁹ Garsombke K. Alternative Remedies for Anthrax; Homeopathy provides options. *Utne Reader Online*. Oct. 31, 2001. Available at: <http://www.utne.com/bSociety.tmp!/?command=search&db=dArticle.db&eqheadlinedata=Homeopathic%20Remedies%20for%20Anthrax>

¹⁰ Homeopathy. From the NCNM Page of Recommended Websites. Available at: <http://www.ncnm.edu/internet.htm#homeopathy>

¹¹ Barrett S. A Close Look at Naturopathy. op cit.

¹² Atwood KC. Homeopathy and Critical Thinking. *Scientific Review of Alternative Medicine*. In press.

Response:

The Real Dangers of Naturopathy

There is no evidence that naturopathic practices are safe, except in the deceptive sense that many of them amount to nothing at all. There is ample evidence that misinformation offered by naturopaths is dangerous, as exemplified repeatedly in this report. Two examples of many recommended naturopathic treatments that are unsafe, unnatural, and irrational are chelation therapy for coronary artery disease (see p.12 of the *Naturopathy Monograph*) and colonic enemas for “detoxification.” The safety of many other naturopathic remedies remains a theoretical and anecdotal issue, since no studies have been done, even in states where licensure has existed for decades (one must persist in questioning the integrity of a field that relentlessly sells its methods as safe and effective without ever having subjected them to scientific scrutiny). In fact, in theory, and in anecdotal reports, naturopathy is dangerous. Examples have been cited above, and others abound in the accompanying *Naturopathy Monograph*.

Herbal Sales, Ethics and Exploitation

A particular concern is the unethical peddling of supplements and herbal preparations by naturopaths, who know little of their pharmacology and have a major financial incentive to oversell them. These points are extensively documented in Dr. Atwood’s monograph (pp.13-22 and appendix I). Language in the pro-licensure report intended to respond to this problem (Part IV, 6) is inadequate: “unsubstantiated advertising claims” about products sold by naturopaths are the norm for the field, and “excessive charging” could only be curbed by prohibiting the practice altogether.

7. Competing Factions of Naturopaths

Naturopaths seeking licensure claim that their on-campus training distinguishes them from other, more numerous practitioners who call themselves “naturopaths” or “traditional naturopaths” and whose training is typically obtained through a correspondence course. Those petitioning for licensure assert that the latter group presents a threat to public safety and should therefore be excluded from licensure.

Response:

There is no Demonstrable Difference among Naturopaths

The Commission was shown nothing to support the claim of differing standards of care among naturopaths. All of the implausible, unproven methods that are described in this report and its appendices are advocated by graduates and faculty of “approved” naturopathy schools.

“Traditional naturopaths” also state that their schools are accredited.¹³ The signatories of this report did not closely examine the claims of graduates of naturopathic correspondence schools, and have no opinion regarding the feud between “naturopathic physicians” and “traditional naturopaths,” except to observe that the latter may be less of a threat to public safety because they don’t claim to be primary care physicians.

8. Self-Regulation by Naturopaths

Naturopaths and their patrons claim that they are capable of responsible self-regulation.

Response:

Standard Naturopathic Practice is Substandard Medical Practice

There is no reason to believe that naturopaths can provide responsible self-regulation. The absurd and dangerous practices that permeate the field are not merely on its fringes, but are the standards of practice. Such claims are promoted in the schools, in multiple treatises by naturopaths, on the website of the AANP, and in the *Textbook of Natural Medicine*. Consider the implications for self-regulation by comparing this with evidence-based medical practice: the vast majority of medical doctors know that these entities have no basis in fact or reason and that professing them constitutes unethical practice. When physicians think of discipline among their own ranks, they think of ridding the profession of such practices. It would be inconceivable to see such claims condoned by any board of registration, legitimate professional society, specialty board, medical school, examination, or textbook. In naturopathy, on the other hand, the very leaders of the field are touting these claims.

An Illustrative Case

Here is an example that illustrates this point. In 1999 the Medical Board of California disciplined an internist for treating a child suffering from ADHD (attention deficit hyperactivity disorder) with an anti-fungal drug. The internist had based this treatment on the belief that the child suffered from “candida (yeast) overgrowth” of the gut. This is a spurious “diagnosis” not confirmed by any evidence, but popular among some pseudoscientific practitioners, including naturopaths. It is promoted in the *Textbook of Natural Medicine* by co-editor Joseph Pizzorno, Jr., the former president of Bastyr University (see p.31 of the *Naturopathy Monograph*). The California medical board correctly recognized this treatment as falling outside the standard of acceptable medical care:

The use of any antifungal medication based on the diagnosis of ADHD and/or the history and physical examination of this patient was a departure from the

¹³ By the American Naturopathic Medical Certification and Accreditation Board (ANMCAB). See: <http://www.anma.com/>

standard of practice. * [Footnote: The asterisks (*) in this document denote matters which are negligent, do not meet the standard of practice and are aggregated together as repeated negligent acts which constitutes unprofessional conduct under 2234(c) of the Business and Professions Code.]¹⁴

The Board's decision, which was reaffirmed by an administrative law judge, was to revoke the physician's license unless he submitted to a five-year period of rigorous retraining and observation. Two physicians in New Jersey have also been disciplined for invoking the bogus "candida overgrowth" diagnosis.¹⁵

Consider the paradox that would result from the establishment of a board of naturopathy: diagnosing "candida overgrowth" of the gut as an explanation for ADHD, which is a clear example of quackery, would be accepted as the standard of care for a group of licensed health practitioners in Massachusetts.

Patient Safety Initiatives would be Undermined by a Naturopathy Board

The Massachusetts legislative and executive branches are currently involved in initiatives to reduce medical errors. This will involve, among other things, systematic efforts to discourage substandard care. It would be irrational and self-defeating for the legislature to establish a new board that would legitimize substandard practices.

Health Fraud and the Office of Consumer Affairs

The Office of Consumer Affairs (OCA) is rightfully concerned with protecting Massachusetts' citizens from health fraud. Its "Medical Care Information" web page provides a link to the FTC/FDA statement on fraudulent health claims, which includes several examples of mainstream naturopathic claims.¹⁶ The establishment of a naturopathy board would thus pose an irreconcilable conflict within the OCA, which would house this board.

The Paradox of Naturopathic Self-Regulation

The pro-licensure report includes language intended to persuade the legislature (and the public) that a self-regulating board of naturopaths will provide responsible oversight of naturopathic practitioners. In particular, Part IV, 12 states: "the regulatory authority should be empowered to take disciplinary action against licensees for: (2) fraud, deceit or misrepresentation of facts in connection with the diagnosis, evaluation or treatment of any patient." Legislators might note, however, that virtually every interaction that a naturopath has with a patient

¹⁴ Medical Board of CA vs. Robert Sinaiko, MD. Available at: <http://www.quackwatch.com/11Ind/sinaiko.html>

¹⁵ Barrett S. Dubious "Yeast Allergies." *Quackwatch*. Available at <http://www.quackwatch.com/01QuackeryRelatedTopics/candida.html>

¹⁶ Available at: <http://www.state.ma.us/consumer/Info/health.htm> which links to: <http://www.ftc.gov/bcp/conline/pubs/health/frdheal.htm>

involves “fraud, deceit or misrepresentation of facts.” This is to be expected of a field that is based on preconceived fantasies and conjectures, rather than real knowledge. Appended to this report is a series of quotations by leading naturopaths, covering a wide variety of diseases, that further illustrates this point. It is inconceivable that a self-regulating board of naturopaths would take disciplinary action against licensees whose “misrepresentations of facts” are the very standards of the field.

The Arizona Inspector General’s Report

Last year, the State of Arizona conducted an audit of the Arizona Naturopathic Physicians Board of Medical Examiners. The result is a scathing report that describes all manner of corruption and incompetence. This occurred in a state that has had licensure of naturopaths for more than 60 years, and that harbors one of the naturopathic schools. It is of some concern to us that the existence of this document was known to at least one patron of the pro-licensure effort for several months, but he did not to reveal it to the Commission. As the definitive governmental study of naturopathic licensure, the Arizona Report should have been the subject of extensive comment at Commission meetings and in the majority report. Its findings, however, are highly critical of naturopathy and as such were never allowed to be presented. The full text is attached for the objective review of the reader.

9. “Collaboration” with Medical Doctors

The pro-licensure report states that “the Commission believes that naturopathic medicine is complementary to conventional medicine” and recommends that “the naturopathic licensing board, in consultation with the Department of Public Health and the Board of Registration in Medicine, promulgate regulations to establish standards for collaboration between naturopathic doctors and conventional medical doctors.” (Part IV, 5.)

Response:

Naturopaths Do not Seek Collaboration

The authors of the pro-licensure report are mistaken. Naturopaths do not think of what they do as “complementary” to evidence-based medicine. They think of naturopathy as “a distinct system of primary health care,” as revealed by the official definition quoted in Part II of the pro-licensure report itself.¹⁷ This fact is further demonstrated by every naturopathic treatise, which includes a systematic denigration of standard medicine as treating “only the symptoms, not the underlying cause,” and warns the reader against modern, proven pharmaceuticals, which naturopaths call “toxins.”

¹⁷ AANP Definition of Naturopathic Medicine (emphasis added). Available at: <http://aanp.net/position.papers/PP.definition.html>

It is thus highly unlikely that naturopaths could be wedged into a “collaborative” role with medical doctors. This is entirely different from the MD/nurse practitioner issue, in which there was no quarrel between the two groups regarding the rational basis of medicine itself. If naturopaths were to agree to a bill that requires collaboration as a condition of licensure, that should be viewed with suspicion: their training and tenets suggest that they would agree only as a matter of political expediency, and hope to minimize its effects on their practice later. Moreover, any medical doctors who would agree to work with naturopaths are either naïve, or of dubious character themselves. The fact that there may be such MD’s should provide little comfort to anyone concerned with public welfare or professional ethics.

Ethical Requirements for M.D.’s

Indeed, the prospect of medical doctors collaborating with pseudoscientific practitioners is in direct conflict with medical ethics, and hence with the charge of the Board of Registration in Medicine. Medical doctors are bound by a code of ethics that effectively prohibits them from engaging in any collaboration that involves gratuitously unscientific practices. The relevant passages from the American Medical Association Code of Medical Ethics¹⁸ are as follows (emphasis added):

E-3.01 Nonscientific Practitioners.

It is unethical to engage in or to aid and abet in treatment which has no scientific basis and is dangerous, is calculated to deceive the patient by giving false hope, or which may cause the patient to delay in seeking proper care.

E-3.04 Referral of Patients.

A physician may refer a patient for diagnostic or therapeutic services to another physician, limited practitioner, or any other provider of health care services permitted by law to furnish such services, whenever he or she believes that this may benefit the patient. As in the case of referrals to physician-specialists, referrals to limited practitioners should be based on their individual competence and ability to perform the services needed by the patient. **A physician should not so refer a patient unless the physician is confident that the services provided on referral will be performed competently and in accordance with accepted scientific standards and legal requirements.** (V, VI) Issued prior to April 1977.

¹⁸ AMA Code of Medical Ethics. Available at: <http://www.ama-assn.org/ama/pub/category/2503.html>

E-8.20 Invalid Medical Treatment.

The following general guidelines are offered to serve physicians when they are called upon to decide among treatments:

(1) Treatments which have no medical indication and offer no possible benefit to the patient should not be used (Opinion 2.035).

(2) Treatments which have been determined scientifically to be invalid should not be used (Opinion 3.01).

E-9.132 Health Care Fraud and Abuse.

The following guidelines encourage physicians to play a key role in identifying and preventing fraud:

(1) Physicians must renew their commitment to Section II of the AMA's Principles of Medical Ethics which states that "a physician shall deal honestly with patients and colleagues, and **strive to expose those physicians deficient in character, competence, or who engage in fraud or deception.**"

V. A physician shall continue to **study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public**, obtain consultation, and use the talents of other health professionals when indicated.

The Massachusetts Medical Society promulgates the same code of ethics, as follows:

The Council of the Massachusetts Medical Society on February 9, 1983, voted to adopt the AMA Principles of Medical Ethics as the Massachusetts Medical Society Code

of Ethics. This Code is intended to establish general principles and rules of conduct for membership in the Society.¹⁹

Science, Honesty, and Informed Consent

Such language, requiring a scientific underpinning for the practice of medicine, represents a fundamental transformation of medical ethics over the past century. It is no longer ethically permissible for physicians to base their judgments primarily on the vicissitudes of personal opinion, patient satisfaction, testimonials, social trends, conjecture, or the many other non-scientific considerations. All of these play a role in compassionate medical practice, of course, but objective evidence must always come first. Even when there is no scientifically validated treatment for a condition, physicians are obliged to explain this to patients in the most honest terms. This is the very basis for our modern understanding of informed consent. It is the most important ethical innovation that modern medicine has to offer.

Naturopaths lack this ethical foundation. They claim that their methods are “continually reexamined in the light of scientific advances,”²⁰ but this is plainly false. Many naturopathic claims are refuted *prima facie* by science: consider the assertion regarding hydrogen peroxide and asthma on p.12 above. Other claims, implausible but not impossible, could long ago have been proved or disproved by simple, straightforward studies that naturopaths have failed to perform: consider the assertion regarding strep throat described on p.15 above. Many more of both types of claims are discussed in the *Naturopathy Monograph*. Naturopaths have not studied their methods for the simple reason that they have always been certain that they work. By any reasonable modern standard, this certitude is unwarranted and dishonest. It is a throwback to the 19th century origins of the field, and not in keeping with the integrity that can reasonably be expected of health care providers in the 21st century.

Ethical Physicians would Oppose Collaboration with Naturopaths

Evidence-based physicians, therefore, are bound by their ethical code to oppose any scheme that would establish a formal collaboration between themselves and naturopaths, because this would inevitably result in unscientific, fraudulent practices being rendered by such a team. The examples given in this report and its appendices provide ample evidence of this truth.

Medical licensees who condone naturopathic methods or premises could be vulnerable to discipline: for unscientific, substandard care; for conduct that undermines public confidence in the medical profession; or for ethical violations such as selling unproven herbs from the office at substantial profits, which are fundamental and are recognized universally by physician licensing boards in this

¹⁹ Code of Ethics. Available at: <http://www.massmed.org/about/ethics.asp>

²⁰ AANP Definition of Naturopathic Medicine. op cit.

country and abroad. For the legislature to nullify such discipline by an act of law would be a negation of the highest order of medical ethics, and a defeat for the public interest.

The DPH should not Condone Naturopathy

Language in the pro-licensure report suggesting that the Department of Public Health be involved in “promulgating regulations to establish standards for collaboration” is subject to the same objections. The DPH, which is interested in patient safety, should not appear to promote implausible, unproven methods in any fashion.

Licensed naturopaths would, moreover, be a giant, unnecessary headache for the DPH. Naturopaths would continue to proclaim that multiple toxins and food allergies are the underlying causes of disease, that heavy metal poisoning is common, that water fluoridation is a health hazard, that bioterrorism can be prevented by homeopathic preparations, that childhood immunizations are dangerous and unnecessary, that most people suffer from chronic yeast infections, and that there are esoteric methods, known only to naturopaths and other “alternative” practitioners, for preventing cancer and other serious diseases. All of these claims are false and in direct conflict with the efforts of the DPH, but would have the appearance of validity once espoused by licensed practitioners. It would be self-defeating, and confusing to the public, for the DPH to appear to play a role in legitimizing such claims.

10. Licensure in other States

Naturopaths claim that their licensure in other states lends legitimacy to their quest for licensure in Massachusetts.

Response:

The Reality of Naturopathic Licensing in Other States

Licensure of naturopaths in other states is a result of several factors, none of which has to do with legitimacy. First, it exists in only 11 states. The real question, then, is why has it been rejected in 39? Some states that license naturopaths have done it for decades, dating to the early part of the 20th century, when modern medical advances were still in their infancy. Most states that had licensure at that time later rescinded it, after it became clear that rational medicine is in the public’s best interest. In two states, Tennessee, and South Carolina, naturopathy is illegal. A few states have granted licensure to naturopaths relatively recently, without any real consideration of the *content* of naturopathic claims and practices, as though somehow the exercise of codifying an otherwise illegitimate practice will make it safe for the public. This is what the licensure effort in Massachusetts attempts to do, and why there is no mention of the real issues involved, i.e., naturopathic claims and practices, in the pro-licensure report.

The Arizona report, as previously described, illustrates the folly of naturopathic licensure in a state that has a relatively large number of practitioners.

Licensure of Naturopaths is Fostered by Disingenuous Business Interests

The recent, successful licensure effort in at least one state, Utah, was financed by the multi-billion dollar dietary supplements industry, which stands to profit from the promiscuous overselling of supplements by naturopaths. This history is documented on p.20 of the *Naturopathy Monograph*, and is typical of the unethical business interest that exists between naturopaths and purveyors of supplements and “natural medicines.”

11. Public Demand for Naturopathy

Naturopaths and their patrons claim that there is an increasing public demand for “complementary and alternative medicine” that justifies the licensure of naturopaths at this time.

Response:

The Demand for Naturopathy is Small

While there may be a public *interest* in “CAM” that is more noticeable now than several years ago, this does not reflect an increasing demand for *naturopaths*. Surveys of CAM use in the past decade have documented that most of it consists of relaxation techniques, massage, and casual self-treatment with dietary supplements, readily available to all consumers in the wake of the 1994 Dietary and Supplement Health and Education Act (DSHEA). The largest recent survey of actual use of CAM *practitioners*, also the most representative of the American population, found that about 8% of Americans (not 44% as stated in the press) seek such consultation, and this is mostly accounted for by chiropractors and massage therapists. Naturopathic consultations of any sort were too infrequent to be mentioned, and must be assumed to be included in the category labeled “other,” which accounted for 0.4%.²¹ Even many states with licensing have had little demand. New Hampshire, for example, currently licenses only twenty-six naturopaths, although licensure has existed there since 1993.

Interest Alone Does Not Justify Licensing Prior to Investigation

The recent public interest in “CAM” has been fueled, undoubtedly, by DSHEA and the abundance of irresponsible claims made for various implausible methods. The public would like to know if these claims might actually be true.

Enthusiasm for “alternative” methods does not imply that every claim be given *carte blanche* by the state to be portrayed to the public as safe and effective prior

²¹ Druss BG and Rosenheck RA. Association between use of unconventional therapies and conventional medical services. *JAMA*. 1999 Aug 18;282(7):651-6.

to investigation. Dr. Edzard Ernst, Director of the Department of Complementary Medicine, School of Postgraduate Medicine and Health Sciences, University of Exeter, England, has echoed this point. Dr. Ernst is enthusiastic about “alternative medicine” but believes that it must be evaluated according to strict, scientific criteria. In a statement that seems directed at this debate, he writes:

Those who would prefer to bypass rigorous research--for example, by shifting the discussion towards patients' preference--and hope to integrate unproved treatments into routine health care are unlikely to succeed in the long run. Those who believe that regulation is a substitute for evidence will find that *even the most meticulous regulation of nonsense must still result in nonsense.*²²

Evidence-Based Medicine will Inevitably Incorporate Proven Methods

The demand for “alternative” practices can be met, and already is, without a state-sponsored promotion of naturopathy or any other unproven, implausible, and dangerous method. In particular, responsible studies of various herbal preparations are in progress in many settings, and to the extent that these prove useful they will inevitably be incorporated into medical practice.

A Title Protection Act is not Designed to Meet Demand

It is not at all clear, in any event, that a “title protection” act would increase the numbers of naturopaths in Massachusetts, even if it resulted in an increase in the number seeking licensure. If it also resulted in a flight of other naturopaths who, at present, number approximately 70 here, the result could be a net reduction in the number of naturopaths. If the patrons of licensure seriously believe, as stated in their report, that the goal is to fulfill popular demand, they will have defeated their own intent. It seems likely that the real goal is to persuade government to favor one group of naturopaths over another, thus limiting competition.

Why not License Heroin Dealers?

Rational thinking dictates that even if there were a significant demand for the services of an inherently dangerous practice, this would not automatically translate to any legislative action favoring such a practice. Otherwise, why wouldn't the legislature seek to license heroin dealers?

²² Ernst E. The Role of Complementary and Alternative Medicine. *British Medical Journal* 2000;321:1133-1135 (4 November). (Italics added)

The Nature of the Evidence Offered to the Commission by Advocates of Naturopathy

We reiterate that the only comprehensive investigations of the beliefs and claims of naturopathy heard by the Commission were those prepared by the Massachusetts Medical Society and the Board of Registration in Medicine. The pro-licensure report includes several assertions regarding naturopathic treatments and popularity that are false. Here are two examples:

- “Evidence presented to the Commission shows that the science supporting naturopathic medicine is evolving and demand for treatment is increasing.”
- “If delivered by well-trained practitioners, modalities employed by naturopathic doctors are successful in treating a variety of health conditions.”

The Commission heard no evidence to support either of these assertions. Legislators might consider challenging naturopathic advocates to provide even a single example of a method, specific to naturopathy, that has been proven to “successfully treat” any disease.

The naturopathic representatives provided only two “expert” witnesses: Amy Rothenberg, a naturopath who is editor of the *New England Journal of Homeopathy*, and Dr. Alan Trachtenberg, a medical doctor who had taught at one of the naturopathic schools during the 1980’s.

Ms. Rothenberg’s presentation mentioned a few naturopathic clinical practices, which were the only ones presented by advocates. These included the use of various “natural medicines” for the treatment of real diseases, for which there is no evidence of efficacy (see the *Naturopathy Monograph*, pp.13-22, and appendix I); the use of homeopathic preparations, for which there is neither evidence nor plausibility; and a few innocuous practices of dubious value, such as “wrapping the feet with wet blankets to draw the congestion out of the ear.” It is clear to medical experts that the real effect of such ministrations is to offer comfort to naïve patients. There is nothing wrong with offering comfort, of course, but the naturopathic claim is that these practices cure real diseases. Ms. Rothenberg assured the Commission that naturopaths know when to refer patients to medical doctors. Her lack of training in evidence-based medicine, together with her unwavering confidence in naturopathic ministrations, suggested otherwise.

Ms. Rothenberg avoided discussion of the more obviously disturbing naturopathic practices, such as enemas for “detoxification,” “aromatherapy” for the treatment of the acute stroke patient, manipulation of the bones of the skull to treat childhood learning disorders, gems and minerals “worn as jewelry, or placed around the home in special places” for the treatment of asthma, referrals of cancer patients to Mexican clinics for Laetrile and other illegal or discredited treatments, “electrical current in the form of positive galvanism, applied transrectally” for cancer of the prostate, and many more.

Dr. Trachtenberg did not discuss the actual practices of naturopaths. He did believe their claim to be primary care physicians when he stated that they “compare favorably to nurse practitioners and physician’s assistants.” We note that in Massachusetts, nurse practitioners and physician’s assistants are not given the scope to practice independently, but must practice under physician supervision. These practitioners, furthermore, are distinctly more qualified than naturopaths. Any comparison between naturopaths and nurse practitioners must acknowledge that the latter understand that there is a rational, ethical basis for the practice of medicine, while the former do not. Dr. Trachtenberg failed to make this distinction.

Dr. Trachtenberg also made the following assertions, excerpted from the Commission’s minutes:

- “The pre-clinical, basic sciences curricula at naturopathic medical schools is at least as rigorous as that for chiropractors, who are already subject to state licensure.”
- “The scientific evidence about the efficacy of naturopathic medicine is mixed.” (He offered no examples)
- “Some naturopathic interventions are actually superior to commonly-accepted and commonly-used conventional medical interventions.” (He offered no examples)

The first statement is irrelevant, but suggests that the basic science curriculum at naturopathic schools lacks rigor; the other two are false.

Dr. Trachtenberg betrayed a naiveté concerning naturopathic claims when he suggested to the Commission that naturopaths could be the “learned intermediaries” that the public needs to make sense of the myriad “natural remedies” that are freely available because of the Dietary and Supplement Health and Education Act of 1994. In fact, naturopaths lack the scientific expertise and the will to critically evaluate these materials, but promote them anyway. Naturopaths typically sell these agents, at a considerable profit, directly to patients. These points are extensively documented in the *Naturopathy Monograph* (pp.13-22 and appendix I).

The Majority on the Commission did not Wish to Evaluate Naturopathic Claims

The Commission did not Solicit Expert Opinions

It is worrisome that the signatories of the pro-licensure report seemed uninterested in evaluating the claims of naturopaths according to accepted scientific and ethical standards. For example, we must assume that they were skeptical of Dr. Atwood’s critique, perhaps imagining that it represented the slanted view of organized medicine. If so, why did not these members seek independent verification? Why, for example, didn’t they ask for a pulmonary specialist to examine naturopathic claims regarding asthma? Why didn’t they seek a pediatrician to discuss ear infections? Why didn’t they consider a physiologist, who needn’t have been a medical doctor, to discuss naturopathic

pretensions to understanding basic science? Why didn't they ask for a public health specialist, readily available from the DPH (which was represented on the Commission), to address childhood vaccinations, food allergies, and "toxins?" Why didn't they consult an ethicist to consider the conflict of interest at work when naturopaths sell herbs and vitamins to their patients? That is a problem with far worse implications, both for health and for commercial fraud, than is suggested by the pro-licensure report. Suggestions such as these were made by us to the Commission, but were unheeded.

Conjecture vs. Fact

We are concerned that several members of the Commission viewed the arguments merely as differing points of view, with each side having equal validity. This is false. The basic disagreements between medical scientists and naturopaths are not matters of conjecture but of fact. The skin can't absorb enough oxygen to help a victim of acute asthma, any more than a lead brick dropped from the top of the Prudential Center will go to the moon. Laetrile doesn't work. An infant with a temperature of 101° F needs urgent medical attention. There is no relation between the skin's electrical resistance and the presence of a parasite infection. "Ozone enemas" have no role in the treatment of cancer. Squeezing a child's skull cannot cure a learning disorder. These are not examples of "paradigm" differences or political preferences or turf protection or closed-mindedness. These are matters of fact.

Another disturbing assertion made repeatedly by advocates for naturopathic licensure was that the lack of scientific evidence for naturopathy and other "alternative" practices does not distinguish them from evidence-based medicine, because "only 15% of conventional medical practices have been proven scientifically." This is also false, and was misleading to those members of the Commission who are not medically knowledgeable.²³ Misrepresentations such as these are unbecoming a state Commission whose charge is to advise the legislature concerning matters of health and safety.

The Effect of Licensing Health Professions

Public Perceptions

State licensing of a profession inevitably leads to increased public acceptance of the services offered by that profession. In health care, this implies that the government assures the validity of the claims made by the licensed profession. Thus the government has a covenant with its citizens to act with the utmost care and integrity with regard to the licensing of health-related fields.

Health Insurance

Licensing is also a necessary precursor to insurance coverage. The appearance of state endorsement encourages unscientific practitioners to pressure both public and private institutions for reimbursement for ineffective methods. All private insurers in the state of

²³ The evidence for standard medical practices is strong, and growing stronger all the time. See, for example: Imrie RH, Ramey DW. The Evidence for Evidence-based Medicine. *Sci Rev Altern Med* 2001;5:(2)108-108. See, also, pp. 45-48 of the *Naturopathy Monograph* for a further discussion of this point.

Washington, for example, must now reimburse naturopaths by force of the “every category of provider” law.²⁴ This outrageous law turns the concept of “freedom of choice” on its head: the vast majority of subscribers, who recognize the folly of pseudoscientific claims, are now required to subsidize the small minority who don’t. The insurers themselves, who should respect the ethical code of the profession (medicine) that makes their existence possible, are forced by law to violate that code. The Commonwealth of Massachusetts should resist this state of affairs with every fiber of its legislative being.

Public Safety

The public derives benefits from licensure of a health profession only when it can be demonstrated that the profession operates according to established ethical and scientific standards, that deviation from these standards will result in public harm, and that the state has the capacity to oversee the work of licensed providers. Naturopathy fulfills none of these criteria.

During the course of our deliberations, one of us (Dr. Atwood) corresponded with William Jarvis, Ph.D., the executive director of the National Council Against Health Fraud and a professor of public health at Loma Linda University. He has been studying naturopathy for years. Here is what he wrote:

I believe that it is a disservice to the public to give ND’s the look of legitimacy by licensure. True believers will go to ND’s whether they are licensed or not. Licensure places in jeopardy relatively unsophisticated members of the general public who cannot be blamed for thinking that state licensure indicates validity and trustworthiness.

Previous Investigations of Naturopathy have Reached Similar Conclusions

The 1968 Medicare Report

In 1968, naturopaths asked the U.S. Department of Health, Education and Welfare to consider Medicare reimbursement for their practices. The department conducted a thorough investigation and returned an unfavorable decision. The HEW report concluded:

Naturopathic theory and practice are not based on the body of basic knowledge related to health, disease, and health care that has been widely accepted by the scientific community. Moreover, irrespective of its theory, the scope and quality of naturopathic education do not prepare the practitioner to make an adequate diagnosis and provide appropriate treatment.²⁵

²⁴ Insurance Coverage at Bastyr Center for Natural Health.

<http://www.bastyr.edu/clinics/bastyr/info/insurance.asp>

²⁵ HEW Report on Naturopathy (1968). Available at:

<http://www.quackwatch.com/01QuackeryRelatedTopics/Naturopathy/hew.html>

The Most Recent Large Study

Little has changed since that time. A recent treatise on naturopathy came to similar conclusions:

In our research for this chapter, we provided naturopaths and their professional associations ample opportunity to refute the conclusions of several major commissions of inquiry over the years that deemed their therapeutic rationale lacking in scientific credibility. None of our informants was able to convince us that the field had taken these earlier critiques to heart; in fact, precious few seemed to recognize that a problem still exists. [O]ur own bibliographic searches failed to discover any properly controlled clinical trials that supported claims of the profession, except in a few limited areas where naturopaths' advice concurs with that of orthodox medical science. Where naturopathy and biomedicine disagree, the evidence is uniformly to the detriment of the former.

We therefore conclude that clients drawn to naturopaths are either unaware of the well-established scientific deficiencies of naturopathic practice or choose willfully to disregard them on ideological grounds.²⁶

Government should not License Belief Systems

Naturopathy is best understood as a cult. It is based not on science but on a mix of beliefs and testimonials. Naturopaths from different schools disagree on what is included in naturopathy, other than a belief in "the healing power of nature." The Commonwealth of Massachusetts does not and should not license cults, belief systems, or philosophies.

The Commonwealth does not license psychics or astrologers, for example. To do so would be unwarranted, because their claims are evidenced only by the testimonials of their clients but are contradicted by facts. Such claims are remarkably similar to those of naturopaths, and there is likewise a clear, if small, public demand for psychic and astrologic "services." We maintain that to license naturopaths would be equivalent to licensing psychics or astrologers, who have training programs, periodicals, continuing education courses and other trappings of legitimacy, and who make similar claims regarding "healing."²⁷

²⁶ Beyerstein BL and Downey S. Naturopathy. In: Sampson W and Vaughn L, eds. *Science Meets Alternative Medicine: What the Evidence Says about Unconventional Treatments*. Amherst, NY: Prometheus Books; 2000: 141-163

²⁷ See, for example, the websites of the Berkeley Psychic Institute (<http://www.dnai.com/~dejavu/>) and the Kepler College of Astrological Arts and Sciences (<http://www.kepler.edu/index.html>)

We ask, again, that the legislature consider the question of why those favoring naturopathic licensure did not insist on validating naturopathic claims. The majority on the Commission was curiously uninterested in the actual content of naturopathic practices. Why this may be escapes us, for it is this consideration that bears most on public safety.

Conclusions

Naturopathy

After conducting extensive research, we are steadfastly opposed to the licensure of naturopaths. It is obvious to us that doing so would legitimize, in the eyes of the public, a dangerous and unethical practice. Naturopaths themselves have presented data showing that in some states in which licensure has been implemented, their numbers have risen rapidly, and the pressure for more legitimacy, e.g., insurance coverage, is intense. We view such results as a threat to public safety, and maintain that the continuation of the current status of non-licensure, together with laws proscribing the illegitimate practice of medicine, is the best way to protect the public.

The Commonwealth of Massachusetts must not be in the business of promoting quackery, even if it occurs as a result of well-intentioned efforts to provide regulation. Health care misrepresentations by naturopaths, including the several mentioned above and many more discussed in the accompanying documents, abound in the public domain. No legislation can reach into the Internet or censor popular books to refute such misconceptions. Licensure would only appear to legitimize it. Self-regulation by naturopaths is a classic example of “the fox guarding the chicken coop.” Wisdom dictates that the best course for the Commonwealth of Massachusetts is to deny official endorsement of naturopathy and let it remain the relatively insignificant, fringe practice that it has always been.

“Complementary and alternative medicine” in General

1. “Complementary and alternative medicine” (CAM) is not a single entity, but a huge, eclectic assortment of beliefs and claims about health care. These include the traditional, prescientific health beliefs of various cultures and other, relatively modern initiatives stemming from many sources. Many are the fanciful musings of one or a few charismatic figures, frequently from 19th century Europe or America: examples are homeopathy, the subluxation theory of chiropractic, and naturopathy itself. If there is any common thread that binds these widely disparate claims, it is their lack of scientific validation: many have already been disproved, others have not been scientifically evaluated, and many are incompatible with biological and physical facts.

Thus it is not reasonable to make blanket statements favoring “CAM” as a general concept. Those who do so are either naïve or are ideologues. Each CAM claim

must be evaluated according to its own merits. Any future Commission formed to study nonstandard medical claims should consist of a majority that is interested in a fair and expert evaluation of such claims. It should not consist of ideologues.

2. There will always be fanciful health claims that range from the relatively innocuous to the outright dangerous. Most of these will inevitably fall through the regulatory cracks, in spite of the best intentions of government. It would be impossible to regulate all of them, and unwise to try. Existing laws governing consumer fraud, assault, and the illegitimate practice of medicine should be invoked when necessary. Licensure and registration schemes, however well intentioned, tend to encourage illegitimate health practices, rather than to limit them.

3. The best way for government to help citizens make sense of nonstandard health claims, while respecting freedom of choice, is through education. We recommend that the legislature direct the Department of Public Health and the Office of Consumer Affairs to collaborate on an educational program. We recommend that in doing so, these agencies seek counsel not from advocates, but from experts. There are numerous experts in Massachusetts, covering every medical field, who could help with such a project. There are also organizations of experts who are familiar with nonstandard claims and have already applied scientific scrutiny to many of them. Examples are the National Council Against Health Fraud, now headquartered in Peabody, MA, and the Council for Scientific Medicine, whose membership includes several from the medical schools in Massachusetts. We note that the OCA has already made a good start with its link to the FTC/FDA statement on fraudulent health claims, as described above, but a more comprehensive effort is needed.