COMPETENCIES FOR PUBLIC HEALTH AND INTERPROFESSIONAL EDUCATION IN ACCREDITATION STANDARDS OF COMPLEMENTARY AND ALTERNATIVE MEDICINE DISCIPLINES

Jennifer Brett, ND, LAc,1 Joseph Brimhall, DC,2# Dale Healey, DC,3 Joseph Pfeifer, DC,4 and Marcia Prenguber, ND5

This review examines the educational accreditation standards of four licensed complementary and alternative medicine (CAM) disciplines (naturopathic medicine, chiropractic health care, acupuncture and oriental medicine, and massage therapy), and identifies public health and other competencies found in those standards that contribute to cooperation and collaboration among the health care professions. These competencies may form a foundation for interprofessional education. The agencies that accredit the educational programs for each of these disciplines are individually recognized by the United States Department (Secretary) of Education. Patients and the public are served when healthcare practitioners collaborate and cooperate. This is facilitated when those practitioners possess competencies that provide them the knowledge and skills to work with practitioners from other fields and disciplines. Educational accreditation standards provide a framework for the delivery of these competencies. Requiring these competencies through accreditation standards ensures that practitioners are trained to optimally function in integrative clinical care settings.

Key words: Complementary and alternative medicine, health care education, accreditation, naturopathic medicine, chiropractic medicine, massage therapy, acupuncture

INTRODUCTION
Patients and the public are served when healthcare practitioners collaborate and cooperate. This is facilitated when those practitioners possess competencies that provide the knowledge and skills to work with practitioners from other fields and disciplines to them. Educational accreditation standards provide a framework for the delivery of these competencies. Requiring these competencies through accreditation standards ensures that practitioners are trained to optimally function in integrative clinical care settings.

Identifying shared competencies, those that are common among health care profession educational programs, provides a foundation for interprofessional education (IPE) that encompasses the expectations of providers from different disciplines. Competencies in public health and health promotion generally are taught in all healthcare education programs. Additional competencies, such as communication, wellness promotion, record keeping, information literacy, and professional ethics, appear in many of the accreditation requirements of each profession.

This review examines the educational accreditation standards of four licensed complementary and alternative medicine (CAM) disciplines (naturopathic medicine, chiropractic health care, acupuncture and oriental medicine, and massage therapy), and identifies public health and other competencies found in those standards that contribute to cooperation and collaboration among the healthcare professions. These competencies may form a foundation for interprofessional education. The agencies that accredit the educational programs for each of these disciplines are individually recognized by the United States Department (Secretary) of Education.

ACUPUNCTURE AND ORIENTAL MEDICINE
Acupuncture and related Traditional Chinese Medicine (TCM) therapeutic techniques have been practiced for over 2000 years. The first document that unequivocally described an organized system of diagnosis and treatment that is recognized as acupuncture is The Yellow Emperor’s Classic of Internal Medicine, dating from about 100 BCE. During the Ming Dynasty (1368–1644) The Great Compendium of Acupuncture and Moxibustion was published with principles
recognizable as pertaining to modern acupuncture and oriental medicine (AOM) practices.

Many Americans first became aware of acupuncture in 1971 when James Reston described his experience having been given acupuncture during recovery from an emergency appendectomy in China, in the New York Times. The publicity brought about new interest in the US, and within 2 years the first schools of AOM in the US started accepting students.

Acupuncture was given another boost in the US in 1998 when an NIH consensus conference reported that there was positive evidence for its effectiveness, at least in some conditions. In this report, the authors note that “Acupuncture as a therapeutic intervention is widely practiced in the United States.”

Acupuncture/Oriental Medicine Accreditation

The Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) is the national accrediting agency recognized by the US Department of Education for the accreditation of first professional master’s degrees and programs in acupuncture and Oriental medicine (M.Ac., M.AOM), and professional doctoral programs in acupuncture and in Oriental medicine (DAOM). The first US schools achieved pre-accreditation ("candidacy") with ACAOM in 1984 with the first school of acupuncture achieving accreditation in May 1985 (Maryland University of Integrative Health, formerly Tai Sophia). Currently, ACAOM has over 60 schools and colleges with accreditation or candidacy status; many with multiple programs; a few offering programs in multiple languages and some with multiple campuses.

Chinese Medicine and Public Health

Since the earliest of texts in Chinese Medicine, the AOM profession has promoted prevention. The Yellow Emperor’s Classic identifies an individual’s health as coming from being in balance both with internal substances and from being in harmony with the external milieu. The superior acupuncture physician is one that can help patients remain well and in balance with their internal and external environments.

The current accreditation standards for AOM education focus on the safety of patient and practitioner. Specific ACAOM accreditation language includes requirements for training in asepsis, clean needle technique, proper sterilization, and aseptic procedures. These standards focus on protecting the health and safety of the patient and the healthcare provider related to infectious diseases, sterilization procedures, needle handling and disposal, and other issues relevant to blood borne and surface pathogens. The focus of these and similar specific standards is on personal hygiene and allaying the concerns members of the public often voice when considering having needles inserted for therapeutic purposes.

The only practical exam required for acupuncture licensure is a clean needle course and exam that strongly emphasizes the use of single-use disposable sterile needles and repeated hand washing during patient visits before and after every AOM procedure. The clear focus has been on acupuncture needling. Other AOM modalities (cupping, gua sha, plum blossom needling, etc.) have not received as consistent attention for the purposes of hygiene. This is expected to change with the 7th edition of the Clean Needle Technique (CNT) Manual due to be released in Fall 2013.

Accreditation standards relating to Chinese herbal therapeutics include required training in contraindications, precautions, issues regarding mode of administration, and understanding the potential side effects of a minimum of 300 different herbs. Training in pharmaceutical–herb interactions and general principles of pharmacognosy is also mandated in the ACAOM standards.

These ACAOM standards and the Clean Needle exam have helped reduce the number of infections and other adverse effects relating to the practice of acupuncture and oriental medicine in the US during the past 30 years.

Interprofessional Education

Accreditation standards for both the Masters level (M.Ac., M.AOM,) and postgraduate doctoral-level degrees (DAOM) for AOM include required training in consultation and collaboration between the acupuncture/oriental medicine practitioner and others, including patients, clients, and other healthcare professionals. Specifically, “Practitioners need to be able to collaborate effectively with other healthcare providers to determine an appropriate plan of care.”

Additional standards require AOM practitioners to understand the need for and ability to provide patient referrals and to communicate with other healthcare professionals regarding patient care, utilizing commonly understood medical terminology.

The number of standards and competencies relating to interprofessional education and patient care is expected to increase as ACAOM moves towards more competency-based educational requirements.

Interprofessional Training—Impact on the AOM Profession

Increasingly, AOM practitioners work in collaborative and interprofessional environments in hospitals and outpatient care centers in, such areas as cancer care, rehabilitative medicine, and drug addiction. In many cases, these interprofessional uses of AOM enhance patient outcomes. Use of AOM therapeutics in combination with conventional medicine in interprofessional settings increases patient satisfaction and reduces the chronic use of drugs such as pain medication. Long-term benefits of such relationships for both practitioners and patients are currently being studied.

CHIROPRACTIC

Accredited doctor of chiropractic degree programs in the United States prepare graduates to practice as primary care chiropractic physicians. Chiropractic developed as a distinct healthcare profession in the United States in the 1890s and since that time has become the nation’s third largest direct portal of entry primary healthcare profession. The chiropractic profession has traditionally focused on manual techniques to treat joint dysfunctions, particularly of the spine, and has evolved to incorporate a variety of diagnostic and therapeutic services in a whole-person approach to the conservative care of patients.
Strong and expanding research support for its efficacy, cost-effectiveness, safety, and patient satisfaction has bolstered the acceptance and integration of the chiropractic profession. Long considered one of the so-called “complementary and alternative” health professions, chiropractic has become more “mainstream” in recent decades with improved educational and licensing standards, legal recognition and regulation in all states, and coverage by private and Medicaid insurance plans, automobile policies, and state and federal workers’ compensation systems. Chiropractic services have been integrated into multiple military bases for the care of active duty service personnel and into numerous Veterans Administration sites for the care of veterans. Emerging scientific research and common practice experience provides support for the role of chiropractic physicians in whole-person care, lifestyle guidance, and the management of conditions other than musculoskeletal disorders. These factors, coupled with a worsening shortage of medically trained primary care physicians, have fostered efforts to expand chiropractors’ scope of practice in several jurisdictions.

**Accreditation of Chiropractic Educational Programs in the USA**

The importance of quality chiropractic education was recognized early in the profession’s history. The first educational criteria for chiropractic programs were developed by a Committee on Educational Standards (CES) created by the National Chiropractic Association (NCA) in 1939 and were utilized to provisionally approve 12 institutions in 1941. Today, the Council on Chiropractic Education (CCE) is the sole agency recognized by the U.S. Secretary of Education for accreditation of programs and institutions leading to the doctor of chiropractic degree. The CCE is also recognized by the Council for Higher Education Accreditation (CHEA) and is a member of the Association of Specialized and Professional Accreditors (ASPA).

The CCE systematically, on a 5-year cycle, reviews and revises its Standards for accreditation of doctor of chiropractic programs. Fifteen doctor of chiropractic degree programs at eighteen campuses in the United States are currently accredited by CCE.

**Educational Standards Related to Public Health and Interprofessional Education**

The current CCE accreditation standards for doctor of chiropractic programs (DCPs) make numerous references to requirements related to public health and interprofessional education. The preface to the standards state that DCPs train graduates to follow best practices in the management of health concerns and coordinate care with other healthcare providers as necessary. Additionally, the standards specify that DCP graduates are trained to promote health, wellness and disease prevention by assessing health indicators, and by providing general and public health information directed at improving quality of life. The accreditation standards for DCPs specify student educational outcomes, requiring that graduates are competent to promote health, wellness, safety and disease prevention; communicate effectively with patients, doctors of chiropractic and other healthcare professionals, regulatory agencies, third-party payers, and others as appropriate; and understand and practice the ethical conduct and legal responsibilities of a healthcare provider.

The CCE standards require that every graduate of a DCP demonstrates the attainment of practice competencies in the following areas: assessment and diagnosis, management planning, health promotion and disease prevention, communication and record keeping, professional ethics and jurisprudence, information and technology literacy, and intellectual and professional development. Management planning includes developing a patient care plan for positively impacting a patient’s health and well-being, and may include case collaborative care. Required components in this area include determining the need for emergency care, referral and/or collaborative care, determining the need for changes in patient behavior and activities of daily living, and incorporating patient values and expectations of care in the management plan.

In the domain of health promotion and disease prevention, the standards specify a requirement for understanding and application of epidemiological principles regarding the nature and identification of health issues in diverse populations and recognition of the impact of biological, chemical, behavioral, structural, psychosocial, and environmental factors on general health. Required components include assessing the patient’s health and determining areas of potential health improvement (e.g. disease screening, ergonomics, nutrition, fitness, posture, smoking cessation, and risk-factor reduction), coordinating health improvement strategies with other healthcare professionals, and identifying public health issues relevant to patients. Requirements for communication and record keeping include communicating effectively, accurately and appropriately, in writing and interpersonally with diverse audiences.

**Practical Applications and Implications of Accreditation Standards for Interprofessional Training**

One example of interprofessional training for chiropractic students is rotations within Veterans Administration Medical Centers, in which students interact with other chiropractic providers as well as practitioners of other healthcare disciplines in the care of patients. Such interactions increase awareness and appreciation of each discipline for one another, while allowing patients to benefit from the application of the various approaches of each discipline that are best suited to their needs and preferences in a given circumstance. Students trained in such environments are expected to be better prepared to engage in interprofessional practice and communications after graduation, fostering more collaborative and integrative approaches to the care of patients.

Contemporary accreditation standards emphasize the qualitative outcomes of education rather than the process of training. Accordingly, accredited DCPs will not only need to provide training and experiences that promote the development of the required competencies, but they will also need to employ methods to evidence that each student demonstrates the attainment of those competencies.
MASSAGE THERAPY

Evidence of massage exists across multiple cultures going back thousands of years. In many cases, the practice appears to have emerged independently across cultures. While it may be difficult to identify the exact origin of massage therapy as a practice or profession, there is no denying that massage therapy is one of the oldest and most widely practiced tools for pain and stress relief.

Throughout the history of massage therapy, many well-intended organizations and individuals have attempted to define elements of the profession and the role of a massage therapist. However, the Commission on Massage Therapy Accreditation (COMTA) is the only accrediting agency recognized by the U.S. Department of Education (USDE) to offer programmatic accreditation for massage therapy schools complete with competencies developed by the profession itself. Programmatic accreditation gives COMTA the authority to require its member schools to teach and assess specific competencies, such as those discussed in this paper. Unfortunately, COMTA currently only accredits 88 massage schools and programs, which represents less than 10 percent of all massage therapy schools.

COMTA began as the Commission on Massage Training/Accreditation (COMTA) in 1989 when it was created by the American Massage Therapy Association (AMTA) to set educational standards for the massage therapy profession with a goal of eventual recognition by the USDE. Over the next 13 years, with support from the AMTA, COMTA approved and accredited massage therapy training programs and created policies and procedures required for USDE recognition. In 1999, the name of the organization was officially changed to the Commission on Massage Therapy Accreditation (COMTA) and on July 10, 2002 COMTA was recognized by the USDE as an approved institutional and programmatic accrediting agency of massage therapy schools and programs. In 2004, COMTA officially became independent from the AMTA. Since that time, COMTA's recognized scope has expanded to include academic and occupational associate degree programs as well as esthetics and skin care programs.

Public Health and IPE Competencies

While hundreds of thousands of massage therapists contribute to public health by providing relief of suffering to millions, massage therapists have the potential to play a far greater role in the public health arena. Ironically, massage therapy's broad appeal across a myriad of practice environments may have limited its potential to impact public health by prompting the question “How can a profession which is practiced on the beach or in a hotel spa have a meaningful impact on public health?”

COMTA competencies do not speak directly to a true public health role for massage therapists. However, a liberal interpretation of the list of competencies, yields the following subset as a foundation from which true “public health competencies” could develop.

- Identify and practice appropriate methods of sanitation and personal hygiene in the performance of massage and bodywork sessions.
- Describe and demonstrate standard precautions.
- Demonstrate techniques that are appropriate for each body area, including endangerment sites.
- Vary the choice and application of techniques as appropriate to the client’s needs, including those of special populations.

On the topic of interprofessional education (IPE), COMTA requires the following competencies focused on skills required for the massage therapist to responsibly refer patients to other healthcare professionals and to develop and maintain healthy relationships with those professionals:

- Identify strategies for effective communication with other professionals regarding client care and referrals.
- Describe the process used to identify the scope of practice of allied health professions.
- Describe the appropriate use of medical release and consent forms.
- Discuss the process for establishing and maintaining professional relationships in the workplace.
- Discuss strategies for establishing and maintaining professional relations with peers and with other professionals.
- Identify strategies for conflict resolution with other professionals, including the need for documentation.

Examples of Interprofessional Training/Education

Two examples of how IPE is finding its way into massage therapy education are illustrated here. The first is the Pillsbury House Integrated Health Clinic, a partnership among Pillsbury House United Communities, and area CAM- and allopathic-focused institutions. Pillsbury House is a social service organization that provides services to over 40,000 underprivileged and underserved people each year. Care at this clinic is delivered by conventional and CAM practitioners and students—practicing and learning together. Chiropractic, acupuncture and oriental medicine, massage therapy, psychology, medicine, health coaching, and other therapies are delivered at the clinic.

The second example is the training provided through Hospital-Based Massage Therapy (HBMT) courses. HBMT courses typically focus on the unique practice setting of the hospital for massage therapists and teach interprofessional skills in the communication, documentation, clinical, and other domains needed to succeed in this environment. Students are then able to put these skills into practice through clinical rotations at a local partnering hospital.

Implementation of Accreditation Standards

While these examples of IPE relate in part to the COMTA IPE competencies, they may not be typical in all massage therapy schools. COMTA schools are required to show evidence of both educational activities designed to help students achieve each of the competencies as well as evidence that student competence is being assessed for each competency. Schools are able to interpret the level at which the competency is taught and assessed. For example, one school may teach and assess the competency “Describe the process used to identify the scope of practice of allied health...”
professions" through a short lecture and quiz. Another school may partner with an area nursing school and have multiple in-depth learning activities involving students from both institutions followed by clinical rotations with massage students practicing alongside other allied health professionals.

**Plans for Changes to the Standards or Required Competencies**

COMTA standards are subject to regular review by a Standards Review Committee. Input from member schools and outside organizations is sought regarding significant changes to the standards through a “call-for-comment” process. There are no immediate plans for changes to the IPE and public health-related competencies. Because massage schools vary significantly in their philosophy of what constitutes an appropriate scope of practice for massage therapy as well as resources available, COMTA competencies have evolved to reflect a broadly accepted and therefore relatively “low-bar” standard for these competencies.

A challenge with relying on specific accreditation competency standards to promote these skills within the profession is that programmatic accreditation is not yet required of all massage therapy schools. Institutional accreditation, which does not require specific competency standards, is available through a number of USDE recognized national accrediting agencies. The broad scope and efficiency of these accrediting agencies are often seen as a less onerous route to accredited status and access to federal title IV funding. Schools may also prefer not to be bound by a list of specific competencies.

However, support is building among massage therapy trade and professional organizations toward graduation from a programatically accredited institution as a requirement to receive a state massage therapy license.

Massage therapists are in an ideal position by virtue of their wide acceptance to have a real impact on public health through participation in interprofessional clinical settings. However, the wide range of environments in which massage therapy is welcomed is a blessing and curse to the profession. Massage therapy is as common on the beach as it is in the hospital. While the provision of massage therapy services in non-healthcare settings may be considered beneficial by some, its presence in those environments may hinder the profession’s acceptance and integration as a health care profession. In order for massage therapists to maximize their impact on public health, they will need to embrace their responsibility as true healthcare providers and not retreat to the shelter of the limited scope of technicians.

**NATUROPATHIC MEDICINE**

As defined by the American Association of Naturopathic Physicians (AANP), Naturopathic Medicine is a distinct method of primary health care—an art, science, philosophy, and practice of diagnosis, treatment, and prevention of illness, based on the philosophical premise of the inherent healing power of nature. This approach dates back to the traditions of Hippocrates and ancient Greece. Many of the guiding principles of naturopathic medicine are those same principles that were central to the tenets of the practice of medicine in the Hippocratic schools. The first American School of Naturopathy was founded in the late 19th century.

The Council on Naturopathic Medical Education (CNME) is the programmatic accrediting agency for the 4-year naturopathic colleges and programs in the United States and Canada. CNME was founded in 1978 and is recognized by the United States Secretary of Education as the national accrediting agency for programs leading to the Doctor of Naturopathic Medicine (N.D. or N.M.D.) degree. Currently, the CNME accredits five naturopathic programs in the United States and two in Canada. Upon approval by CNME, naturopathic medicine programs are awarded accreditation for a period of time not to exceed 7 years. CNME also approves accredited naturopathic medicine programs to offer postdoctoral training programs in naturopathic medicine (residencies). Standards are rigorously applied in the scheduled reviews of each naturopathic program, and commendations and deficiencies are identified. Deficiencies are explicitly noted; timelines are provided for correction, and follow-up is completed through the review of documentation and/or return visits. Annual reviews of each program also ensure that the areas of concern previously identified are adequately addressed. CNME standards are reviewed every 8 years, are spearheaded by the Committee on Standards, Policies and Procedures, and include various representative members of the naturopathic community.

**Public Health and IPE Competencies**

The standards, policies, procedures, and governing documents related to accreditation of naturopathic programs are found in the CNME Handbook of Accreditation. Accreditation standards address competency-based achievement in anatomy, physiology, pathology, microbiology, biochemistry, genetics, environmental and public health, pharmacology, pharmacology, diagnost, therapeutic (botanical medicine, homeopathy, emergency and legend drugs, clinical nutrition, physical medicine, exercise therapy, hydrotherapy, counseling, medical procedures/emergencies, and minor surgery), as well as clinical subject matter, e.g. cardiology, endocrinology, gastroenterology, urology, neurology, rheumatology, and oncology. Accreditation standards for the practice of naturopathic medicine include the principles that guide this practice of health care, and include the following: The healing power of nature; First do no harm; Identify and treat the cause; Treat the whole person; Doctor as teacher; and Prevention.

The standards of accreditation that specifically address public health require coursework on epidemiology, clinical ecology, immunology, and infectious diseases. Understanding the determinants of health and disease, and strategies to promote wellness through lifestyle counseling regarding healthy development and behaviors that prepare students to advise patients on prevention and wellness are also required. Competencies that address skills in the area of interprofessional education (IPE) are found throughout the accreditation standards. Communication, specifically involving the interactions with other health care providers to facilitate and coordinate integrated health care, are found in the sections on Delivery and Integration. The program’s academic component fosters students’ development of a full understanding of their scope of practice, and its strengths
and limitations. The clinical educational components teach students to be integral members of the healthcare profession, to collaborate effectively with providers in other healthcare fields, and to work in an integrative healthcare setting with opportunities to develop the skills, attitudes, and behaviors necessary to establish effective professional relationships with colleagues and other healthcare practitioners.

Standards for naturopathic program accreditation include the development of skills that are applicable to an integrated practice. They require opportunities for students to develop an awareness of the larger context of health care along with the roles of other healthcare disciplines, including how these roles may be integrated for optimal patient care. The standards for clinical educational require components that enable students to develop the clinical competence and professionalism necessary for successful clinical practice.

**Examples of Interprofessional Training/Education**

Many of the colleges that offer naturopathic programs are multidisciplinary, and offer other degree programs such as acupuncture and certificate programs such as massage. These educational settings provide various opportunities for IPE in both the academic and clinical settings. The opportunities for promoting IPE in outreach clinic settings vary among the programs, and most often the clinic settings provide services to underserved populations.

**Plans for Changes to the Standards or Required Competencies**

Evaluation of students’ competencies to educate and to learn with students and providers of other disciplines within these integrative settings demonstrates each program’s ability to meet the related accrediting standards. The naturopathic programs and students alike have sought out the development of integrative clinics to foster skills critical for patient care in integrative settings. As both primary and specialized health care moves toward a more integrative approach to care, the need for clear competencies to demonstrate skills in this area will need to be developed by all disciplines.

**SUMMARY**

As the focus of healthcare delivery moves further toward defining the values and benefits of healthcare services, professionals must become more competent in working together as collaborators and colleagues for the benefit of patients and the public. Interprofessional education provides students with the competencies and tools necessary to successfully partner with practitioners of different disciplines in order to enhance the quality of outcomes, and to improve access to health care for all. To accomplish these aims, educational programs must move beyond discipline-specific skills and train students in those competencies that will foster and promote interprofessional dialog, cooperation, and mutual support. Establishing accreditation standards that require competencies in public health, communication, health promotion, and related areas will help facilitate interprofessional education among health care providers.

**REFERENCES**


