
Mainstreaming Acupuncture: Barriers and Solutions

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Abstract

There is a place for the acupuncture profession within primary care. Nationwide, community clinics that serve the population of under- and uninsured persons are facing a tremendous shortage of primary care practitioners. Marginalized health care professions, that is, acupuncture, chiropractic, and naturopathy, are being drawn into a primary care role. An unanticipated workforce opportunity exists to fill the caregiver gap in community clinics. This transition can be quickly realized in states such as California where statutory code states that acupuncture is to be regulated and controlled as a primary care profession, but the requisite training has yet to be provided. Specific clinical experience in primary care settings would help overcome long-standing barriers that have resulted in the marginalization of the profession, high under- and unemployment among acupuncturists, and result in greater access to acupuncture treatment. A 1-year primary care training program for licensed acupuncturists (LAc), which features clinical and didactic training, akin to what a physician assistant receives, would prepare acupuncturists to work in mainstream medicine. With appropriate training and biomedical collaboration skills, the participation of acupuncturists in mainstream medical settings can be accomplished with support from the acupuncture profession and mainstream medicine.

Keywords

acupuncture, evidence-based medicine, primary health care, integrative medicine, oriental medicine, complementary therapies, acupuncture training

Introduction

Support for Change and Integration

The demand for acupuncture has increased significantly over the past three decades (Barnes, Bloom, & Nahin, 2008; Eisenberg et al., 1993; Eisenberg et al., 1998;). During the same period, the evidence

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base has shown that acupuncture can be effective for treating certain common conditions (Cheng, 2009; Ezzo et al., 2006; Linde et al., 2009; Vas & White, 2007). Licensed acupuncturists (LAc) should be enjoying the benefits of strong demand for their services while patients enjoy the benefits of increased access to acupuncture care. Instead, the acupuncture profession is facing a new round of introspection concerning its role in the United States (US) health care system.

A group of acupuncturists, including current or former directors of the national acupuncture professional association—the American Association of Acupuncture and Oriental Medicine (AAAOM), has endorsed a professional doctorate degree as an entry degree to achieve licensure (Ergil, Morris, Dierauf, & Jabbour, 2009). This degree would coexist with established masters-level programs creating a tiered profession of practitioners. At the same time, an association representing various complementary and alternative health care professions, the Academic Consortium for Complementary and Alternative Health Care (ACCAHC), is polling its member schools and accrediting bodies to explore “the ability of members of the professions we represent to better meet the nation’s primary care needs” (ACCAHC memorandum, December 2009, p. 2). We propose a third option that bridges the exploratory approach promoted by the ACCAHC with the proposed doctorate program: a 1-year post-license certificate program that immerses LAc in primary care clinical training with the specific goal of placing graduates in community clinics that serve uninsured and underinsured populations.

The Primary Care Licensed Acupuncturist (PC LAc) certificate would validate that the acupuncturist possesses sufficient clinical experience in mainstream medicine settings to work within his scope of practice in an integrated setting such as a community or safety net clinic and, under supervision of a physician assistant (PA), nurse practitioner (NP), or medical or osteopathic doctor (MD or DO), would assign patients for appropriate treatment, that is, conduct initial triage.

Whether expressed in the language of caution (exploration of a new role), or a specific call to overhaul clinical training (the new professional degree calls for copious clinical training alongside conventional providers), the acupuncture profession in the United States appears unsettled at best and in crisis at worst. Pressures are building within as well as outside the profession to fundamentally change how acupuncturists are trained so they might integrate more effectively with the conventional health care system.

The Institute of Medicine (IOM) anticipated that primary care would play a generally larger role within mainstream medicine (Donaldson, Yordy, Lohr, & Vanselow, 1996). The IOM also recognized that a growing number of Americans were seeking out complementary and alternative medicine (CAM) treatments, even speculating on a primary care model blending “conventional primary medical care (usually internal medicine or family practice) with nontraditional (CAM) medical care housed in the same setting” (Complementary and Alternative Medicine in the United States: IOM, 2005). However, the IOM did not foresee the intersection wherein more and more Americans began looking to CAM providers as their primary care providers. An opportunity has been created that can strengthen the health care workforce, increase access to care for under- and uninsured people, and enable underused licensed health care providers to help overused mainstream providers. Arguably, health care practitioners and policy makers have a moral responsibility to heed the call. Certainly, given the high levels of under- and unemployment among LAc (Kuo, Christensen, Gelberg, Rubenstein, & Burke, 2006), and limited roles available for LAc to occupy (Dower, 2003), there is a workforce ready to adapt to the new role. The CAM professions and their regulators must ensure licensees are prepared to competently meet this social expectation.

We present our views on how a transformed acupuncture profession might fit within the U.S. health care system; what the most important changes might include; and how training in primary care can lead to an unprecedented role for LAc on the integrated health care team.

The Available Workforce

Surveys that document why patients seek out acupuncture services are abundant (Bonafede, Dick, Noyes, Klein, & Brown, 2008; Burke, Upchurch, Dye, & Chyu, 2006; Gray, Pronk, & O'Connor, 2002), yet descriptions of the acupuncture workforce are difficult to find. The most recent workforce data present facts confirming half of all graduates are unable to earn a living in their chosen field even when they elect to work less than 40 hr (California Acupuncture Board Occupational Acupuncturist Occupational Analysis report, 2009; National Certification Commission on Acupuncture and Oriental Medicine report, 2008). The handful of published workforce studies reveals a profession reliant upon a failing business model as a solo practitioner (Dower, 2003; Kuo et al., 2006). The two most recent reports, which have the largest samples and best stratification schemes, are a national survey conducted by the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) and a 2009 statewide survey conducted by the California Acupuncture Board of California acupuncturists. The NCCAOM 2008 national survey of 712 acupuncturists reported that half the acupuncturists in their sample borrowed, on average, \$49,000 to finance training and retained \$40,000 in student debt postgraduation. The report found 70.1% earned less than \$60,000 annually. The most recent report from 2009 surveyed 553 LAcS in California. This survey found one third worked 40 or more hours weekly, whereas 28% worked less than 20. These two reports suggest that a workforce could be mobilized to work in mainstream settings where the need for a new stratum of primary care workers is greatest. This presents a short-term opportunity for appropriately trained acupuncturists to enter conventional health care.

Barriers to Integration of Acupuncture Into Mainstream Medicine

Historically, the acupuncture profession has argued that its exclusion from mainstream medicine was, in part, due to a lack of public awareness as well as resistance from the medical associations (Devitt, 2006). We argue that the greatest barriers to integration, however, originate with acupuncture training programs based on European metaphysical ideas (Kendall, 2008) and therefore do not ensure graduates have a sufficient understanding of quality biomedical knowledge, competent evaluation of research (Hammerschlag, 2006), and mainstream medicine, including primary care. Without adequate knowledge or exposure to mainstream medicine, graduates are unprepared to (a) function effectively on an integrative health care team, (b) provide competent primary care to patients, or (c) make appropriate referrals to physicians and other mainstream providers.

Adherence to the current form of Oriental medical training (Scheid, 2002) as the exclusive pedagogical foundation for training programs has resulted in a deficit of conventional medical knowledge, which has in turn resulted in the marginalization of LAcS. Current acupuncture training programs focus on teaching concepts according to the epistemology of Traditional Chinese Medicine or TCM. The underpinnings of TCM include the concepts of qi—a life force or energy; meridians—a system of channels in the body through which qi flows; and the five elements—water, wood, fire, earth, and metal (Kavoussi, 2007; Maciocia, 2005). Debate on the use of these principles along with the use of pīnyīn terms (described below) as a condition for integrating acupuncture with mainstream medicine covers a spectrum of views including sensitivity to cultural differences versus medical accuracy (Caspri, Bell, Rychener, Gaudet, & Weil, 2000; Hui & Pritzker, 2007a; Hui & Pritzker, 2007b) and possible inclusion in the forthcoming 11th revision of the International Classification of Diseases (ICD-11; Bruno, 2008).

Primary care and acupuncture. California is a leading state for acupuncture in the United States for two significant reasons: many barriers to primary care practice have been removed and 40% of all U.S. acupuncturists are licensed in the state (Acupuncture Today Acupuncture Density Map, 2010).

California licensing legislation between 1976 and 1982 included several important stipulations: (a) acupuncture was specifically described as a primary care profession; (b) the physician referral requirement was removed; (c) the definition of practice was limited to needling, moxibustion, cupping, and electroacupuncture with the broader practice of “Oriental medicine” excluded; and (d) acupuncturists were authorized to read images and order laboratory work (Knight & Chang, 1993). California is one of three states that in statute describe acupuncture as a primary care profession. By many measures, the California model for acupuncture practice was crafted so that acupuncturists might be prepared to enter the health care mainstream.

Shortage of Primary Care Providers

There is a profound shortage of primary care providers in the United States that, according to forecasts, will only worsen in the very near term (Donaldson et al., 1996; Merritt Hawkins & Associates, 2008). Recent testimony before the California Assembly Select Committee on Healthcare Workforce (2009) described the shortage of primary care providers immediately needed to adequately staff California’s more than 800 safety net clinics (2009). These clinics are the entry point of care for 3.36 million uninsured and underinsured patients in the state (Saviano & Powers, 2005). All the effort to redirect the uninsured from emergency rooms to community clinics is for naught, if these clinics are inadequately staffed (Community Catalyst, 2009; Grumbach, Chattopadhyay, & Bindman, 2009).

Where will these new providers come from? Experts testifying before the California committee suggested familiar solutions: train more NPs, PAs, and family MDs. Unfortunately, this strategy is inadequate. For example, a 10% increase by each California PA, MD, and BSN training program would generate approximately 200 new providers with the first cohort emerging over 3 to 8 years. Even though it is likely that salaries will decline for established primary care providers, the ability of community clinics to hire these new graduates from traditional primary care programs on more than a part-time basis will still be out of reach due to high salaries. The advent of new revenues flowing to community clinics from newly insured patients will permit clinic administrators to hire a new class of primary care practitioners to supplement the existing providers. The cost-effective solution proposed here is to prepare these new practitioners from existing workforces that are currently unable to participate as employees within conventional health care.

A new stratum of practitioner. The ability to work in a mainstream setting, such as a community or safety net clinic, presents a new business model for graduates as well as a practical component for health care reform. If LAcS received appropriate training in community clinics working alongside nurse practitioners, physician assistants, and primary care physicians, LAcS could become qualified for hire within those same clinics. The need to identify a new stratum of primary care practitioners, such as acupuncturists and chiropractors, represents an innovative solution that belongs within health care reform.

Community acupuncture network (CAN): A grassroots solution. Appropriate training of LAcS in conventional health care protocols and evidence-based medicine is critical for reasons other than clinical preparation. The acupuncture profession is calling for improved practice standards for licensees and training programs. The profession needs to embrace higher internal standards before it becomes culturally irrelevant to mainstream medicine. The emergence of the CAN represents a grassroots response to the absence of standards of practice among LAcS as well as the lack of care accessible to middle-class individuals and families. CAN is a de facto embodiment of the acupuncturist’s role as primary care provider and a clear indication of the need for primary care training. Membership in the CAN movement is voluntary and self-directed. A December 2009 survey sponsored by CAN

estimated that approximately 100 CAN-inspired clinics have been established since 2002. CAN leaders view their model as a response to a profession they characterize as an “esoteric and inaccessible . . . overpriced, exotic, New Age indulgence” (Rohleder et al., 2008, p. 5).

The strongest selling points of CAN correspond directly to the existing weaknesses within the acupuncture profession. This group offers a business model based on targeting a population—in this case, uninsured and underinsured consumers—and offering services on that basis. Acupuncture services are cash based. The model features optimum use of time to treat patients in groups, minimal clinical intakes, and omits insurance billing, thereby eliminating considerable management overhead. CAN supports technician-level training that is shorter, cheaper, and focused on needling technique and AOM protocols.

Facilitating Mainstreaming Acupuncture: Proposed Solutions

Practices such as the use of *pīnyīn* terms and TCM diagnoses within the acupuncture community promote isolation from mainstream medicine. The widespread use of *pīnyīn* terms when communicating in collaborative settings is a case in point. *Pīnyīn* terms are Romanization syllables intended to help non-Chinese speakers properly enunciate Chinese characters (Wiseman, 2001a). *Pīnyīn* terms were first introduced by the British ambassador in China, Thomas Francis Wade, in 1867 and refined by Herbert Allen Giles and his son Lionel Giles in 1912. Continued refinements led to a phonetic pronunciation guide approved by the Peoples Republic of China in 1958, which became widely accepted (Wiseman, 2001a).

Phonetic terms are meaningless in absence of the actual character, including its tone symbol. For example, English dictionaries also use phonetic guides that help non-English-speaking people pronounce English words; however, the phonetic word does not replace the written English word. When conveying diagnostic information with mainstream practitioners in an integrative clinical setting, using *pīnyīn* terms is nonsensical (Wiseman, 2001b) and arguably misleading. The subject is highly controversial with wide variance among leading scholars in terms of “priorities, goals, and philosophical biases” (Hui & Pritzker, 2007a, p.66).

Mainstreaming acupuncture with modern health care in the United States cannot depend on a philosophical or political debate that transcends clinical practice. Competencies that include communication and collaboration skills will assist in making this form of medicine culturally relevant and more easily adopted and used by medical institutions, physicians, and patients. Additionally, adopting a universal way to describe how acupuncture works (Kavoussi, 2007; Ulett, 1998; Ulett & Han, 2002), along with treatment strategies, will promote a continued evolution of acupuncture theory and understanding.

Unaligned progressive groups are working separately to bring acupuncture closer to mainstream medicine. The AAAOM has endorsed a working group of its members to identify themes central to the doctorate degree proposal (Beychok, 2009). The authors of this article support the 1-year PC-LAc certificate program. Each proposal seeks to bring acupuncture practice into the mainstream of health care, increasing access and ending professional isolation. Although proposals differ on the specifics, both groups agree that much needed solutions include new training models, new business models, and higher standards for professionalism. The urgent need for primary care practitioners in safety net clinics makes the short-term program especially appealing.

Solution #1: Converge Training, Scope, Regulations, and the Public Interest

Acupuncture training must be brought up to date with modern standards for health professions training. Such shifts are already taking place slowly in the United States, the United Kingdom, Sweden, Germany, and other countries. National and regional organizations should implement educational

and certification standards that emphasize quality training, along with evidence-based research models based on community medicine, specialty certifications, and primary care competencies.

Solution #2: Make Acupuncture Education Relevant

Sweeping structural changes and reevaluation are necessary. Leadership groups must actively advocate for the primary care model as a cornerstone for training and practice and acknowledge the obligation and social responsibility for accepting this role in U.S. health care. The California model must strongly inform a national standard instead of being viewed as the exception, for the profession to survive.

Solution #3: Make Acupuncture Education More Rigorous

We advocate greater rigor in all aspects of the educational programs. Didactic content should increase emphasis on relevant biomedical concepts. Training programs must feature a majority of clinical hours in mainstream medicine settings; currently, there is no mainstream medicine clinical training requirement. Primary care clerkships must become routine. The national accreditation body requires 70% of didactic curriculum be devoted to Oriental medical theory, diagnosis, and treatment techniques (ACAOM Accreditation Manual, 2008). As a result, training falls far below current educational standards for professions in medical, nursing, physician assistant, and physical therapy curricula. Entrance criteria including a bachelor's degree, relevant and standard pre-health professions training, and an entrance exam should be the minimum preadmission standard for every applicant.

Institutional transparency, accountability, ethical responsibility, and standard admission requirements must be adopted and enforced across all training programs. The presence of single owner schools that are family-owned and operated as for-profit ventures must be addressed.

Solution #4: Consider the Scientific Basis of Chinese Medicine

In addition to refocusing aspects of acupuncture training programs, the entire field of acupuncture must evaluate a culturally relevant way to communicate the history, science, diagnostics, and treatments. The strength of the historical roots of Chinese indigenous medicine must be preserved under an attitude of scholarly inquiry that allows for its ancient roots and meanings to be constantly reevaluated in a modern context. The community of Chinese medicine authors and researchers that are widely published but rarely referenced must be recognized as a branch of legitimate acupuncture scholarship. The unpopular topics they represent include the (a) lack of evidence for the existence of qi and meridians (Kavoussi, 2007; Kendall, 2008); (b) origins of needling therapy outside China (Kendall, 2002; Schnorrenberger, 2008; Unschuld, 2003;); (c) the importance of placebo controls in acupuncture research (Bausell, 2007); and (d) research suggesting that pinpoint placement of needles is irrelevant (Moffet, 2008). The arguments presented by these skeptics merit discussion. An evidence-based international dialogue on their works should be immediately engaged.

Solution #5: End Professional Isolation; Join the Mainstream Team

In the 1980s, legislative changes in California that described acupuncture as a primary care profession, authorized acupuncturists to order labs and images, and opened wide the door to mainstream medicine. Even though California statute appears to favor primary care training in lieu of training in Oriental medicine, schools have resisted restructuring their training. It is time to reconsider that invitation and retool curricula, as well as support changes by regulatory agencies to compel training

programs to meet modern standards for health care training, which will prepare acupuncturists to work in mainstream medicine.

Mainstreaming acupuncture is consistent with health care reform. Health care reform is focused on expanding access to primary care for the nation's uninsured citizens; saving costs; and increasing national employment (Executive Office of the President Council of Economic Advisors, 2009). Acupuncture has proven value as a modality for treating chronic pain. The nation's community clinics are overwhelmed with under- and uninsured patients and are short-staffed. Half of all LAcS are unable to earn a livelihood in their profession. The integration of sufficiently trained LAcS within mainstream medicine is a win all round for under- and uninsured patients, under- and unemployed LAcS, and underfunded community clinics that sorely need more full-time affordable staff who can contribute to the bottom line of health care costs. Consider the following benefits of mainstreaming practitioners

- Shared-care relationships with physicians will help the acupuncture profession mature more quickly as well as provide a viable practice model beyond solo practice.
- Clinical practice settings available to acupuncture students as primary care rotation sites will become future work sites for those students.
- There are approximately 45.7 million uninsured (DeNavas-Walt, Proctor, & Smith, 2008) and another 25 million underinsured residents in the United States (Schoen, Collins, Kriss, & Doty, 2008). Cost-saving solutions under consideration to bolster the primary care workforce include training allied health professionals to become primary care providers (Robitaille, 2008). Extending this group to include appropriately trained providers such as LAcS and chiropractors would help fill this gap. Opportunities for LAcS to work in pain management would be within reach for all new graduates instead of only those who seek costly postgraduate training. Acupuncturists and chiropractors have successfully staffed a pain management clinic in a local safety net clinic working as part of a multidisciplinary health care team focused on the treatment of chronic pain (a project directed and evaluated by two of the authors). We observed that acupuncturists and chiropractors can be trained to provide a significant portion of cost-effective, safe care in pain management, allowing physicians to address the needs of more complicated cases and to direct the team.
- We believe a corps of LAcS would welcome additional training in primary care as well as the opportunity to earn a salary in medicine. A carefully selected cohort can acquire sufficient primary care experience and knowledge in the 1-year long PC-LAc training program that features an intensive series of clerkships working as extenders under supervision of other providers. The long-term solution should concentrate on implementing new advanced degree acupuncture training as well as significant overhaul of the current master's-level degree.

Conclusions

Mainstream medicine is the foundation of health care in the United States and much of the world. Acupuncture must now acquire a set of new tools for understanding and implementing a mainstream approach or it could disappear as the techniques of acupuncture are absorbed by other disciplines. Acupuncturists must modify their adherence to an unconventional epistemology that creates a cultural barrier preventing cross-cultural communication to the medical community. Acupuncture training programs must provide students with sufficient knowledge to communicate the science and theories underlying acupuncture in conventional medical language. Resistance to implementation of broad integrative clinical training has encouraged other professions such as medicine, chiropractic, and physical therapy to include acupuncture under their scopes of practice, redefined as

Percutaneous Electrical Nerve Stimulation (PENS; Cummings, 2001), Transcutaneous Electrical Nerve Stimulation (TENS; Yokoyama et al., 2004), and dry needling (Dommerholt, 2004), which explain the modality in conventional medical language.

Many health professions have arrived at a tipping point in their history. At the turn of the 20th century, the Flexner Report transformed mainstream medicine by forcing the closure of insufficiently funded so-called medical colleges that were in fact nothing more than diploma mills. Flexner raised the bar higher by standardizing admissions criteria and clinical training experiences (Beck, 2004). Although the Flexner process and report has been criticized for suppressing non-traditional approaches to health care, standardizing steps recommended by Flexner marked the beginning of the professionalization of modern medicine. Acupuncture education is in desperate need of such an overhaul.

With crisis comes opportunity. The participation of acupuncturists in mainstream medical settings can be accomplished by redirecting training toward primary care bolstered by a restructured, culturally relevant acupuncture profession. The result would be unprecedented access for patients and success for acupuncturists while helping address the needs of woefully underserved communities.

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Bios

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Dr. Mary Hardy, board certified in internal medicine and a specialist in botanical and integrative medicine, has actively combined complementary and alternative therapies with traditional Western medicine for more than 20 years in both her clinical practice and research projects. She founded the Integrative Medicine Clinic at Cedars-Sinai and more recently and is the former codirector of the Integrative Medicine Health and Wellness Program at the Venice Family Clinic. Currently, she is the Medical Director of the Simms/Mann-UCLA Center for Integrative Oncology.