

Matthew Phillips

Northwestern University

Development of an Integrative Medicine Program at an FQHC in Chicago

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## **Abstract:**

*Importance:* Use of Complementary and Alternative Medicines (CAM) is a vital piece of information for practicing physicians, and community health clinics developing integrative medicine programs.

*Objective:* To systematically review literature-based evidence about the most commonly used types of CAM by Hispanic patients, and to survey type of CAM familiarity, type of CAM interest, and barriers of CAM attitudes among providers at a Chicago FQHC.

*Data Sources:* PubMed and a study reference list were searched for studies about the most commonly used types of CAM in Hispanic patients. Survey data was compiled from provider respondents.

*Study Selection:* Descriptive studies with varying sample size and unassessed quality about all types of CAM use in Hispanics, but not about specific types of CAM use only, were reviewed.

*Data Extraction and Synthesis:* One investigator independently read search titles, reviewed studies, and excluded certain reviewed studies to produce the resulting reviewed studies. Desired information from resulting studies was presented in a table and narrated in the results section. The survey was administered via SurveyMonkey and emailed to a provider listserv; data was manicured and displayed in Excel. No statistical hypothesis testing was conducted.

*Main Outcomes and Measures:* Most common type of CAM used, prevalence of general CAM use, and reason for CAM use in Hispanics. Provider familiarity of and interest in types of CAM; physician attitudes towards CAM barriers.

*Results:* Fifteen studies resulted from the review and exclusion process. Only one study focused on juvenile Hispanics. Sample size varied from 31 to 3,050. Twelve studies listed either herbs or supplements as the most common type of CAM used. Prevalence of CAM use ranged from 30% to 90%. Weight loss, pain, and type 2 diabetes were all mentioned as reasons for CAM use. Forty-six out of 252 providers responded to the survey. The majority of respondents were MD's with little prior education on CAM. Meditation/Relaxation was the most familiar, nutrition therapy was of most interest, and cost of care the biggest barrier for CAM referral, among providers.

*Conclusions and Relevance:* A substantial number of Hispanics use CAM for various diseases, and among those that do, herbs and supplements are most often used. Providers have little prior education on CAM and their familiarity of and interest in types of CAM are different from what their Hispanic patients actually use.

## **Introduction:**

Complementary and alternative medicines are the specific types of medicines employed by integrative medicine. Integrative medicine is defined as the combination of conventional and complementary medicine according to the National Institutes of Health. Conventional medicine refers to allopathic, traditional practices. Complementary medicine refers to non-allopathic, non-mainstream practices used together with conventional medicine. Alternative medicine refers to non-allopathic, non-mainstream practices used instead of conventional medicine, distinct from complementary medicine, and not contained within the definition of integrative medicine. Complementary and alternative medicine are together referred to as (CAM), and the terms “integrative medicine” and “CAM” are confusingly often used interchangeably. There are two categories of CAM. “Natural Products” consist of herbs, vitamins and minerals, and probiotics and “Mind and Body Practices” consist of practices and services like yoga, meditation, massage, acupuncture, relaxation techniques, tai chi, and movement therapies (1).

The importance of CAM is substantiated empirically by the number of patients who choose this option of care, out of either preference or necessity. CAM serves as a counter option for patients facing cost and access barriers in conventional medicine, two well documented problems in the US healthcare system (2, 3). This claim is evidenced by the most recent prevalence estimates of CAM use among US adults by the National Health Interview Survey (NHIS), “the most current, comprehensive, and reliable source of information on the use of complementary health approaches” (22), and is independent of effectiveness claims of CAM. CAM is usually easier to access, at least for medicines that are self-administered, and less expensive than conventional medicines (4). For example, “Natural Products” are described as “widely marketed” and “readily available” (1), and many “Mind and Body Practices” are self-

completed, like yoga, meditation, and relaxation techniques etc. Further, there is good evidence for the cost-effectiveness and even cost-savings of CAM. The Open British Medical Journal published a systematic review of economic evaluations of complementary and integrative care in 2012, concluding that the results of the high-quality studies in the review indicate many highly cost-effective and even cost-saving complementary medicines. These authors also noted that 18% of the integrative medicine cost utility analyses considered showed cost-savings, compared to only 9% of all conventional medicine cost utility analyses considered in other studies (4). However, information about the effectiveness of integrative medicine as a substitute for conventional medicine is sparse, and there is no research on the cost-effectiveness of this type of medicine in 2018.

The scope of the population involved with integrative medicine or CAM, the preventive nature of these medicines, the conditions CAM is most often used to treat, and the US healthcare issues navigated by CAM all demonstrate CAM's importance to public health. The last report on CAM use by the NHIS revealed that 33.2% US adults above the age of 18 used at least one CAM 12 months prior to the survey. Many of these medicines are fundamentally preventive; for example, about 18.8 million people each year use omega-3 fatty acids, a "Natural Product" CAM commonly known as fish oil, for prevention of cardiovascular disease (1, 22). Ortiz et al. (2007)'s literature review found that 50-90% of Hispanic patients have used CAM (16), which is most likely a reflection of the poor health in this minority population (5), and self-cultivated efforts to overcome cost and access barriers in the US healthcare system in an attempt to achieve health equity.

This literature review and provider survey were conducted to inform physicians interested in developing a new integrative medicine program at Erie Family Health Center (Erie),

a federally qualified community health center with various Chicago locations, and a large Hispanic patient population. The literature review informed about the most common type of CAM used, prevalence of general CAM use, and most common reasons for CAM use in Hispanic patients. The physician survey informed leaders of the FQHC about physician familiarity and interest in certain types of CAM. We hypothesize that herbal supplements will be the most common type of CAM used (1), that the prevalence of general CAM use will be consistent across studies, and that diabetes will be the most common reason for CAM use (5). We further hypothesize that physician familiarity with certain integrative services will vary greatly across services, but that acupuncture and herbs/vitamins/supplements will be the services physicians are most interested in integrating into their patients' care, based on discussion with various Erie physicians.

### **Methods:**

Two overarching study designs were used in this paper, a literature review and a provider survey. The literature review was designed to have external validity unlimited, but the provider survey was designed to have external validity limited to the Erie provider population. Both the literature review and provider survey were approved by both the Erie and Northwestern University institutional review boards. This literature review addressed the key question: "What type of CAM are Hispanic patients most commonly using?" A Northwestern University Feinberg School of Medicine librarian was consulted for prefabricated search terms to put into PubMed. Prefabricated search terms consisted of actual strings of text that were meant to be copied and pasted into the PubMed search bar. The librarian was told that the objective of the literature review was to collect comprehensive information on integrative medicine and non-allopathic

therapy use in Hispanic patient populations, especially at FQHC's in Chicago, an objective more specific than the research question of the study. The keywords and phrases “integrative medicine”, “program evaluation”, “Latinos”, non-allopathic therapies”, “Chicago”, and “FQHC” were used by the librarian to construct search terms. Subsequently four prefabricated search terms for PubMed were created (see Figure 1). The study had three review objectives: what type of CAM is most commonly used, what is the prevalence of general CAM use, and what is the most common reason for or disease treated by CAM use by Hispanic patients?

All pre-fabricated search terms were entered into PubMed except the first term, because program evaluations are outside the scope of this study. PubMed was the only database searched. The PubMed search was supplemented by reviewing the reference list of a resulting study from the PubMed search, using the same inclusion criteria as the PubMed search; this study both matched the research question perfectly and showed extreme relevance to Erie. This was done to identify additional studies that may not have been identified in the PubMed search. The population of interest was any Hispanic patient, and all settings were included. Reviewed articles were chosen based on the following inclusion and exclusion criteria. To be included: articles had to have the terms “integrative”, “complementary”, or “alternative”, and “Latino”, “Hispanic”, or “Mexican American”. There was one exception to these inclusion criteria: a study describing CAM use in a “United States-Mexico border city” was also included. To be excluded: studies had to mention a specific type of CAM in the title. One reviewer independently read 694 titles and reviewed 24 studies. To be excluded as a resulting study after review: articles had to fail to provide information on the most commonly used type of CAM by Hispanic patients. Failing to quantify prevalence of general CAM use or reasons for and diseases treated by CAM use, were not criteria for exclusion from resulting studies. For example, one study quantified predictors of

types of CAM use, but not the actual use of these types of CAM. There was no exclusion based on the date the study was published. No ongoing surveillance of recently published studies that met inclusion criteria occurred during the completion of this study. No quality assessment or strength of evidence summary of the studies were conducted.

A table was created for all reviewed studies that met inclusion and exclusion criteria, as well as the one exceptional study (see Table 1). The study table included details about the study authors, patient population, sample size, most common type of CAM used, prevalence of general CAM use, and most common reason for CAM use. For studies conducted on a disease specific subgroup of Hispanic patients, such as Hispanic colorectal cancer patients, that did not independently report the most common reasons for CAM use, the disease of the patient subgroup was assumed to be the most common reason for CAM use and is reported accordingly in Table 1. Results of the literature review, including details from the table, were also presented in narrative format in the results section.

Background research for this study revealed an article that employed a physician survey with objectives very similar to the proposed provider survey at Erie. This article was titled “Longitudinal survey on integrative medicine education at an underserved health centre” and was written by Liu et al. in 2015 (23). Michael Liu, the lead author of the study, was contacted, and permission to use and modify the survey was granted. The survey introduction and questions were modified with help from Erie physicians and operations members to suit the objectives of the Erie Family Health Center Integrative Medicine Taskforce. Demographic questions asking about years in practice and degree were added to the beginning of the survey. All questions that prompted ratings were converted to a five-part Likert scale. The word document version of the survey was inputted into SurveyMonkey online software (Copyright © 1999-2018

SurveyMonkey). The SurveyMonkey version of the survey was administered to all nurse practitioners, physician assistants, resident physicians, and physicians at Erie via the provider email listserv. Respondents were presented a link in their email that navigated them to the survey. The survey was optional, and respondents did not have to submit every question to complete it. Unidentifiable, anonymous, and unique respondent ID's were requested at the beginning of the survey for tracking purposes in a proposed future provider survey. The survey consisted of 10 questions (see Supplement: Provider Survey).

Two weeks of response time were allowed before the survey was closed. Once closed, SurveyMonkey online software converted and compiled the results into an Excel spreadsheet (Microsoft Excel for Mac, Version 15.41). Descriptive statistics for demographic information were calculated by hand using data from the Excel spreadsheet, and were displayed in a Microsoft Word table (Microsoft Word for Mac, Version 15.41) (see Table 2). For non-demographic survey questions, Excel software was used to count the number of different responses for each question and category. For non-demographic questions with Likert responses, category counts were converted to category percentages based on the total responses for that category. Likert response percentages for each question and category were used to make "100% Stacked Bar" charts in Excel (see Figures 3-5). No hypothesis testing was done on any question, because the entire population of Erie providers were eligible for the survey.

## **Results:**

Six hundred ninety-four titles were read and 24 studies were reviewed. Six hundred fifty-four titles were produced from Search 2 (Search 1 was never included), 5 titles from Search 3, and 1 title from Search 4. The sole title identified in Search 4 was previously identified in Search



2. No titles produced from Search 3 met inclusion criteria. Thirty-four titles were present in the extremely relevant supplement article's reference list, which produced 4 resulting studies.

Ultimately, 15 studies resulting studies were included (see Figure 2). Not all of the 15 resulting studies contained information about the prevalence of general CAM use and most common reason for or disease being treated by CAM use review objectives.

Only one study focused on juvenile Hispanic patients. The remaining 14 studies focused on adults. Of the 14 adult studies, only 1 focused solely on women, and none focused solely on men. Four studies focused on patients in Texas and 2 studies focused on patients in California. Four of the 15 studies mentioned a specific disease or reason for CAM use in their title; colorectal cancer, weight loss, type 2 diabetes, and idiopathic arthritis and arthralgia were the diseases mentioned. Sample size varied from 31 to 3,050; one study had no information on sample size because it was a literature review.

Obtaining information about the most commonly used type of CAM was the main review objective, and the only review objective that served as an exclusion criterion. Therefore, all 15 studies provided information about the most commonly used type of CAM. Twelve studies listed either herbs or supplements as the most common type of CAM used. Prayer was reported as the most common type of CAM used in 2 studies, and a chiropractor was reported as the most common type of CAM practitioner used in 1 study. Prickly pear/nopal, lemon juice, and chamomile were the only specific herbs or supplements reported as the most commonly used CAM.

Eleven studies provided information on the second review objective: prevalence of general CAM use in Hispanic patients. The prevalence sought after in this objective was not the prevalence of the most commonly used type of CAM in the study, but rather the prevalence of

use of any type of CAM. All studies that reported prevalence of general CAM use reported it in this way. Prevalence of general CAM use ranged from 30% to 90%. The highest estimate of prevalence of general CAM use, 90%, came from a literature review; the highest estimate of prevalence of general CAM use from a survey of a descriptive study was 69%. Four studies estimated general CAM use prevalence between 60% and 69%, and 3 studies estimated general CAM use prevalence between 40% and 49%. Four studies provided no information on this review objective.

Information about the most common reason for, or disease being treated by CAM use was the most difficult review objective. Five studies did not provide this information, and of the 10 studies that did, some did not explicitly provide this information, forcing assumptions to be made about the specific disease mentioned in the title. Two studies reported weight loss, 2 studies reported pain, and 2 studies reported diabetes as the most common most common reason for, or disease being treated by CAM use. Other reasons and diseases mentioned by single studies include colorectal cancer, stress, hypertension, asthma, infection, and digestive problems.

Forty six out of the 252 Erie providers responded to the survey, a response rate of 18.3%. Among respondents, 60.9% were between the age of 31 and 45, 34.8% had between 1-4 years of practice, 45.7% had an MD degree, 63.0% spent between 76-100% of their time on patient care, and 54.3% had little prior education on CAM (see Table 2).

Eighty-five percent of respondents believed that if cost and reimbursement were not a consideration, the integration of CAM/IM consultation and therapies at the Erie would either be strongly accepted or accepted by patients. When respondents were asked if they had ever referred an Erie patient to a CAM practitioner, 60.9% of respondents said they had, specifically noting “OMT, massage, acupuncturist, OMM, yoga, and Pacific College of Oriental Medicine”.

When asked if integration of CAM/IM consultation and therapies at the Erie would change overall health outcomes of patients, 71.1% of respondents believed CAM would either strongly increase or moderately increase patient health, and no respondents believed CAM would decrease patient health. Meditation/Relaxation was the most familiar type of CAM to the level of understanding of clinical application but not comfortable counseling patients (see Figure 3). Ayurveda was the least familiar. Providers were most interested in nutrition therapy, and least interested in chiropractic being integrated into their patients' care plans (see Figure 4). Providers considered cost of care the greatest barrier, and efficacy norms the smallest barrier to CAM referral (see Figure 5). Other barriers listed included lack of time in the room with patients for CAM referral, social stigma of CAM services, and lack of evidence on the benefits of CAM.

### **Discussion:**

Different amounts of varying information were available for each review objective, but a few trends in the review are clear. There is great evidence that herbs and supplements are the most commonly used type of CAM by Hispanic patients. The prevalence of general CAM use ranged, but the highest sample size studies indicate that the prevalence is between 30% and 45%. The most common reason for, or disease being treated by CAM use review objective had the least clear trends. Weight loss, pain, and diabetes were all presented as reasons or diseases in more than one study, but the sample sizes were limited in all of these studies.

There are not many other studies that specifically review the literature for the most common type of CAM used by Hispanic patients; however, there are some studies with similar research questions. A study, included in this study, did a literature review of CAM use among US Hispanics, utilizing multiple databases such as MEDLINE and EMBASE etc., and finding

that nopal, lemon juice, and traditional herbs (specific herbs and supplements) were the most common type of CAM used for treating diabetes, hypertension, and asthma respectively (16). This finding is consistent with our finding that herbs and supplements are the most commonly used type of CAM for treatment of a variety of diseases. Barnes et al. (2008) studied the CAM pertinent information in the 2007 NHIS, on behalf of the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS), and found a prevalence of general CAM use among Hispanics of 23.7% (21), a prevalence only slightly lower than our prevalence between 30% and 45%.

The two similar studies did not collect the same information as the current study though. The literature review by Ortiz et al. (2007) summarized the most common types of CAM used for specific diseases from specific studies but did not comment on the most common type of CAM used across different diseases and different studies. Further, these authors did not limit their review to studies with information about the most commonly used types of CAM, and the study is now over 10 years old (16). The analysis conducted by Barnes et al. (2008) had great information on most commonly used type of CAM, the prevalence of general CAM use, and most common reason for CAM use for the entire US population, but only examined very broad classes of CAM use, such as biologically based therapies or mind-body therapies, at the Hispanic population sublevel. Our study also included 7 studies published since the publication of the aforementioned studies.

This study found that herbs and supplements were the most commonly used CAM across all but 3 of the 15 resulting studies. We did not segment the most commonly used CAMs based on reason for use or the disease treated, rather, presented the absolutely most commonly used type of CAM for each study. Therefore, when a Hispanic patient is encountered in a clinic, a

general environment where a variety disease diagnoses can present themselves, the CAM he or she is most likely using is represented by the CAM presented in this study. The main findings of this study imply that a substantial number of Hispanic patients use herbs and supplements, substances that may have contraindications to their conventional treatment, and the use of which may or may not be disclosed to their primary care physician. These findings also imply a larger message, that a substantial number of Hispanics find a reason or have a need for using a self-administered and readily available type of medicine.

Strengths of this study include that a medical school university librarian was consulted for the search terms of the review, that sample size was available in every study except one, and that the search was supplemented by reviewing the reference list of a resulting study. Using a professional librarian strengthened the study by providing prefabricated search terms more apt to PubMed software, which increased the probability of finding all studies that meet inclusion criteria. Sample size helped the reviewer roughly gage the quality and strength of evidence for each study. The supplemented search of a resulting study reference list strengthened the probability that all studies relevant to the research question were reviewed.

The number of databases searched, the lack of quality assessment of the studies, and the lack of specificity of actual CAM used are significant limitations of this study. Additional databases, such as MEDLINE and EMBASE etc., were not searched, which lowered the probability that all relevant studies were reviewed. However, the supplemented search increased the probability that all relevant studies were reviewed. Omitting study quality assessment prevented us from rightfully weighing certain results above others. However, most of the resulting studies used descriptive a survey-type design, nullifying significant quality differences independent from study sample size. The specific CAM used was often not reported in the

resulting studies, and because of the extreme breadth of types of herbs and supplements, the exact CAM being used most commonly was elusive. For example, a Hispanic patient, when reporting that they are using herbs and supplements, may be taking a substance as benign as green tea, or as potent as recreational drugs.

For the provider survey, Massage/Relaxation and nutrition therapy were the most familiar and of the most interest among types of CAM respectively, and cost of care was the greatest perceived barrier for CAM referral. Based on the literature review, herbs and supplements are the most commonly used type of CAM by Hispanic patients, which was neither the most familiar nor of most interest of being integrated into patients' care plans by Erie providers. However, 78% of providers were interested in integrating herbs/vitamins/supplements into their patients' care plans, but only 26% of providers were familiar enough with herbs/vitamins/supplements to be moderately comfortable counseling patients on its use.

The provider survey was only meant to have external validity to the level of the Erie provider population, and thus will not be compared or contrasted to other studies. The implications of the provider survey findings are that provider education on herbs/vitamins/supplements should be increased, and that a nutrition therapy program may gain the best traction at Erie from a provider standpoint. Keep in mind that weight loss was specifically mentioned as a reason for or disease being treated by CAM use in two of the studies identified in the literature review (7, 11). The strengths of the provider survey were that all Erie providers were eligible to respond, that the survey was based on a survey from a published study, and that many survey items were converted to Likert scales. Sending the survey out to all Erie providers meant that the no sampling or hypothesis testing was necessary. Using a survey already used in a published study increased the internal validity of the instrument. Converting

some questions to a five-part Likert scale ensured that responses were collected according to questionnaire convention. However, the provider survey had significant limitations, including response rate, unquantified sample bias, and limitations on the types of CAM questioned. Because the response rate was so low, familiarity and interest in types of CAM, and attitudes towards barriers of CAM referrals for the entire population of Erie providers was elusive. However, the survey remained open beyond the data collection time of this study to increase response rate for future data collection. Because descriptive statistics of survey demographic information for the entire Erie provider population was unavailable, we cannot be sure that the respondents (sample) were representative of the entire Erie provider population. Finally, the survey included limited types of CAM and barriers in its questions. There are many more types of CAM than what was questioned in the survey (1). However, respondents were allowed to write in barriers not mentioned on the survey.

### **Conclusion:**

The current US healthcare system is plagued with cost and access problems, problems that especially affect minorities like Hispanics. CAM, presents a counter option for some of these healthcare problems, and a substantial number of Hispanics already do use herbs and supplements. For Erie Family Health Center and its future integrative medicine program, increased education on herbs/vitamins/supplements may be of most use to patients, but a nutrition therapy program may gain the most traction from the provider perspective.

### **Tables and Figures:**

Table 1. Results of the Literature Review. Each row presents a different study, marked by its authors and year. Studies were analyzed for the most common type of CAM used, prevalence of

general CAM use, and most common reason for or disease being treated by CAM use. Not all studies provided all of this information. \*These authors reported CAM use in terms of CAM practitioners used. \*\*These authors reported CAM use in terms of both types of CAM and CAM practitioners. \*\*\*These authors reported the most common type of CAM used for certain diseases; the most common type of CAM used for a certain disease is presented in respective order in the table. \*\*\*\*These authors reported the most common type of CAM used in terms of providers, non-commercial CAMs, and commercial CAMs; results are presented in the table in respective order.

Study	Patient Population	Sample Size	Prevalence of CAM Use	Most Common CAM Used	Most Common Reason for or Disease Being Treated by CAM Use
Black et al. (2016)(6)	Hispanic Colorectal Cancer Patients	631	40.1%	<i>Herbal Products/Dietary Supplements</i>	Colorectal Cancer
Ho et al. (2015)(7)	Hispanic Patients at a California FQHC	150	63.0%	<i>Vitamins/Supplements</i>	Weight Loss
Keegan (2000)(8)	Mexican Americans in the Texas Rio Grande Valley	60	NA	<i>Prayer</i>	Stress
Keegan (1996)(9)	Mexican Americans in the Texas Rio Grande Valley	213	44%	<i>Herbal Medicine</i>	NA
*Lee et al. (2010)(10)	Mexican Americans	2,047	30%	<i>Chiropractor</i>	NA
Lindberg et al. (2013)(11)	Mexican American Women	31	NA	<i>Herbs and Teas</i>	Weight Loss
Loera et al. (2007)(12)	Elderly Mexican Americans	3,050	31.6%	<i>Herbal Medicine</i>	NA
Martinez (2009)(13)	Mexican Americans in South Texas	2,031	45%	<i>Herbal Therapies</i>	NA



Mikhail et al. (2004)(14)	Urban Hispanics	179	63%	<i>Herbs</i>	Pain
**Nguyen et al. (2014)(15)	Hispanic Type 2 Diabetes Patients	78	NA	<i>Herbalist, Prickly Pear/Nopal</i>	Type 2 Diabetes
***Ortiz et al. (2007)(16)	Hispanics in the US	NA	50-90%	<i>Nopal, Lemon Juice, Traditional Herbs</i>	Diabetes, Hypertension, Asthma
****Rivera et al. (2002)(17)	Patients in El Paso, Texas	547	NA	<i>Massage Therapist, Chamomile, Multivitamins</i>	NA
Trangmar and Diaz (2008)(18)	Hispanics in South Carolina	70	69%	<i>Herbal Medicine and Tea</i>	Infection
White et al. (2009)(19)	Latinos in Los Angeles, California	164	66%	<i>Herbal/Tea/Plant-based Substances</i>	Digestive Problems
Zebracki et al. (2007)(20)	Latino Children with Juvenile Idiopathic Arthritis or Arthralgia	36	56%	<i>Prayer</i>	Pain Management

Table 2. Descriptive statistics of CAM related respondent characteristics. Non-responses are included. Percentages apply to “Characteristics” categories.

<b>Characteristics</b>	<b>Proportion (n=46)</b> Number, (Percentage)
<b><i>Age</i></b>	
30 and under	2 (4.3)
31-45	28 (60.9)
46-60	8 (17.4)
>61	8 (17.4)
<b><i>Years in Practice</i></b>	
Resident	2 (4.3)
1-4	16 (34.8)
5-10	7 (15.2)

11-15	6 (13.0)
16-20	3 (6.5)
>21	10 (21.7)
Non-response	2 (4.3)
<b><i>Degree</i></b>	
NP	14 (30.4)
PA	4 (8.7)
DO	1 (2.2)
MD	21 (45.7)
Other	6 (13.0)
<b><i>Time Spent on Patient Care</i></b>	
0-25%	1 (2.2)
26-50%	1 (2.2)
51-75%	14 (30.4)
76-100%	29 (63.0)
Non-response	1 (2.2)
<b><i>General Level of Prior CAM/IM Education and Training</i></b>	
None	0 (0.0)
Little	25 (54.3)
Some	18 (39.1)
Moderate	2 (4.3)
Extensive	1 (2.2)

Figure1. PubMed Literature Review Pre-Fabricated Search Terms. A Northwestern University Librarian was consulted to search for integrative medicine and non-allopathic therapy use in Hispanic patient populations at FQHC's in Chicago. The librarian used the keywords "integrative medicine", "program evaluation", "Latinos", non-allopathic therapies", "Chicago", and "FQHC" to construct four prefabricated search terms for input into PubMed.

**Search 1: Integrative Medicine AND Program Evaluation:**

((("Integrative Medicine"[Mesh] OR "integrative medicine"[tw])) AND ("Program Evaluation"[Mesh] OR "program evaluation"[tw] OR "program sustainability"[tw] OR "program effectiveness"[tw]))

**Search 2 – Latinos AND Non-allopathic therapies (large results set, but limiting to Chicago only returns a few results. See search 3):**

((("Hispanic Americans"[Mesh] OR "latino"[tw] OR "latinos"[tw] OR "Hispanic"[tw] OR "hispanics"[tw])) AND ("Naturopathy"[Mesh] OR "Homeopathy"[Mesh] OR "Acupuncture"[Mesh] OR "Acupuncture Therapy"[Mesh] OR "Medicine, Traditional"[Mesh] OR "Shamanism"[Mesh] OR "Massage"[Mesh] OR "Physical Therapy Modalities"[Mesh] OR "Manipulation, Osteopathic"[Mesh] OR "Herbal Medicine"[Mesh] OR "Dietary Supplements"[Mesh] OR "Medicine, Chinese Traditional"[Mesh] OR "Medicine, Ayurvedic"[Mesh] OR "Therapeutic Touch"[Mesh] OR "naturopathy"[tw] OR "homeopathy"[tw] OR "naturopathic"[tw] OR "homeopathic"[tw] OR "acupuncture"[tw] OR "folk medicine"[tw] OR "traditional medicine"[tw] OR "shaman"[tw] OR "shamanism"[tw] OR "curanderos"[tw] OR "massage therapy"[tw] OR "physical therapy"[tw] OR "osteopathic manipulation"[tw] OR "herbal medicine"[tw] OR "dietary supplements"[tw] OR "ayurvedic medicine"[tw] OR "Ayurveda"[tw] OR "energy healing"[tw] OR "reiki"[tw] OR "therapeutic touch"[tw]))

**Search 3 – Latinos AND non-allopathic therapies AND Chicago:**

(((((("Hispanic Americans"[Mesh] OR "latino"[tw] OR "latinos"[tw] OR "Hispanic"[tw] OR "hispanics"[tw])) AND ("Naturopathy"[Mesh] OR "Homeopathy"[Mesh] OR "Acupuncture"[Mesh] OR "Acupuncture Therapy"[Mesh] OR "Medicine, Traditional"[Mesh] OR "Shamanism"[Mesh] OR "Massage"[Mesh] OR "Physical Therapy Modalities"[Mesh] OR "Manipulation, Osteopathic"[Mesh] OR "Herbal Medicine"[Mesh] OR "Dietary Supplements"[Mesh] OR "Medicine, Chinese Traditional"[Mesh] OR "Medicine, Ayurvedic"[Mesh] OR "Therapeutic Touch"[Mesh] OR "naturopathy"[tw] OR "homeopathy"[tw] OR "naturopathic"[tw] OR "homeopathic"[tw] OR "acupuncture"[tw] OR "folk medicine"[tw] OR "traditional medicine"[tw] OR "shaman"[tw] OR "shamanism"[tw] OR "curanderos"[tw] OR "massage therapy"[tw] OR "physical therapy"[tw] OR "osteopathic manipulation"[tw] OR "herbal medicine"[tw] OR "dietary supplements"[tw] OR "ayurvedic medicine"[tw] OR "Ayurveda"[tw] OR "energy healing"[tw] OR "reiki"[tw] OR "therapeutic touch"[tw]))) AND ("chicago"[tw] OR "chicagoland"[tw]))

**Search 4 – FQHCs:** Only one result came up <https://www.ncbi.nlm.nih.gov/pubmed/?term=25748757>

Figure 2. Flow diagram for searches, titles, studies, reviewed, and resulting studies of the literature review. Pre-fabricated search terms provided by a professional librarian were entered into PubMed. Each search term produced a certain amount of title, all of which were read. Among the produced titles, studies that met inclusion criteria were reviewed. Among the studies that were reviewed, studies that did not meet exclusion criteria were included as results. Search 1 was not included because its contents were outside the scope of this study.

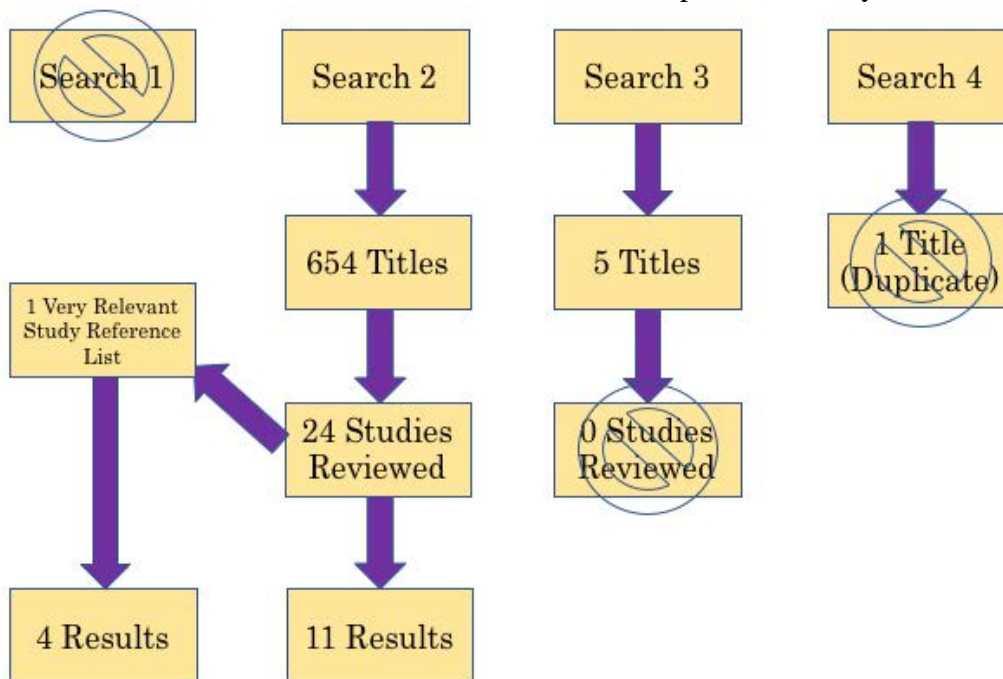


Figure 3. CAM/IM type familiarity among providers. Responses were recorded using a five-part Likert scale. Categories with no responses do not appear in the figure.

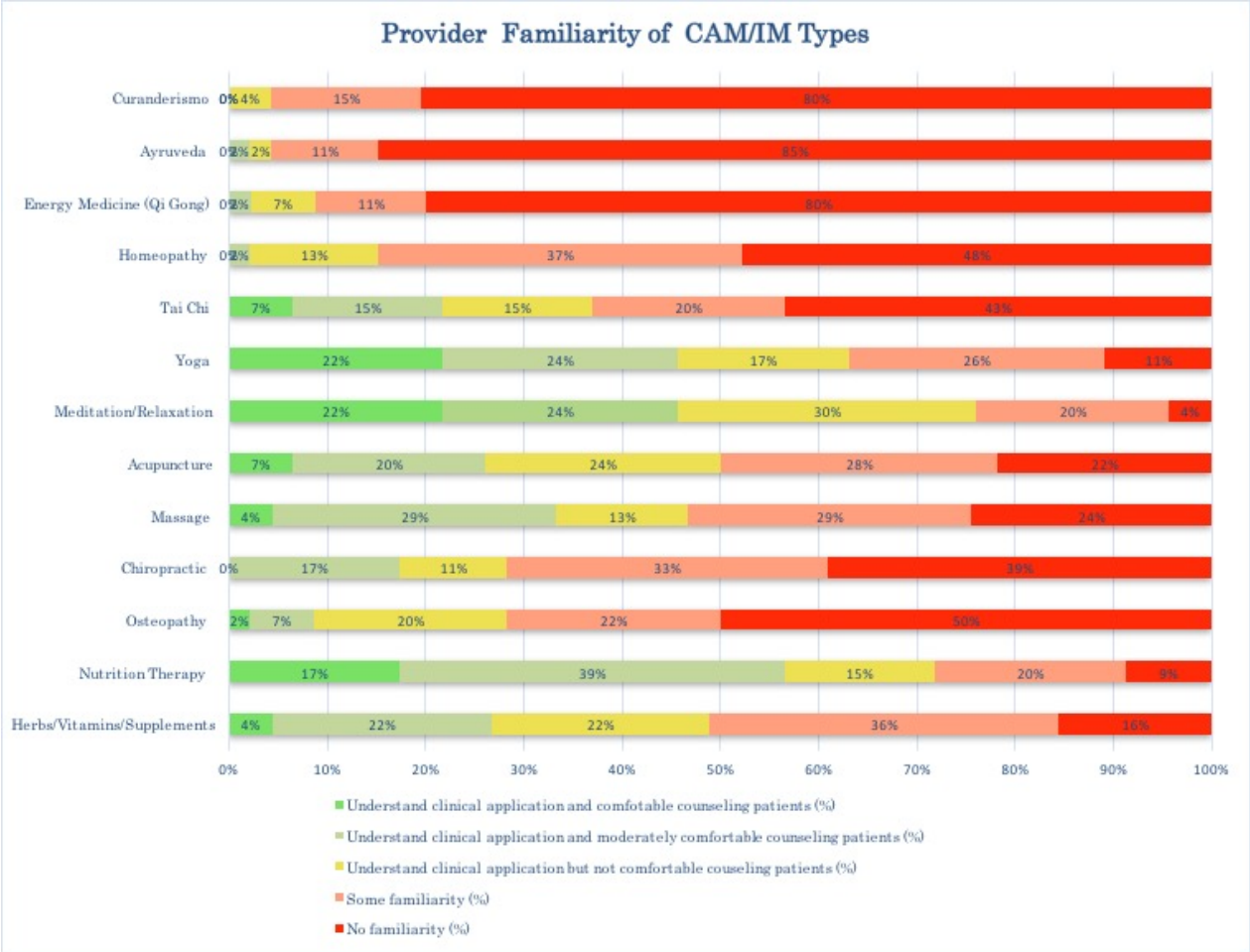


Figure 4. Interest by CAM/IM type among providers. Responses were recorded using a five-part Likert scale. Categories with no responses do not appear in the figure.

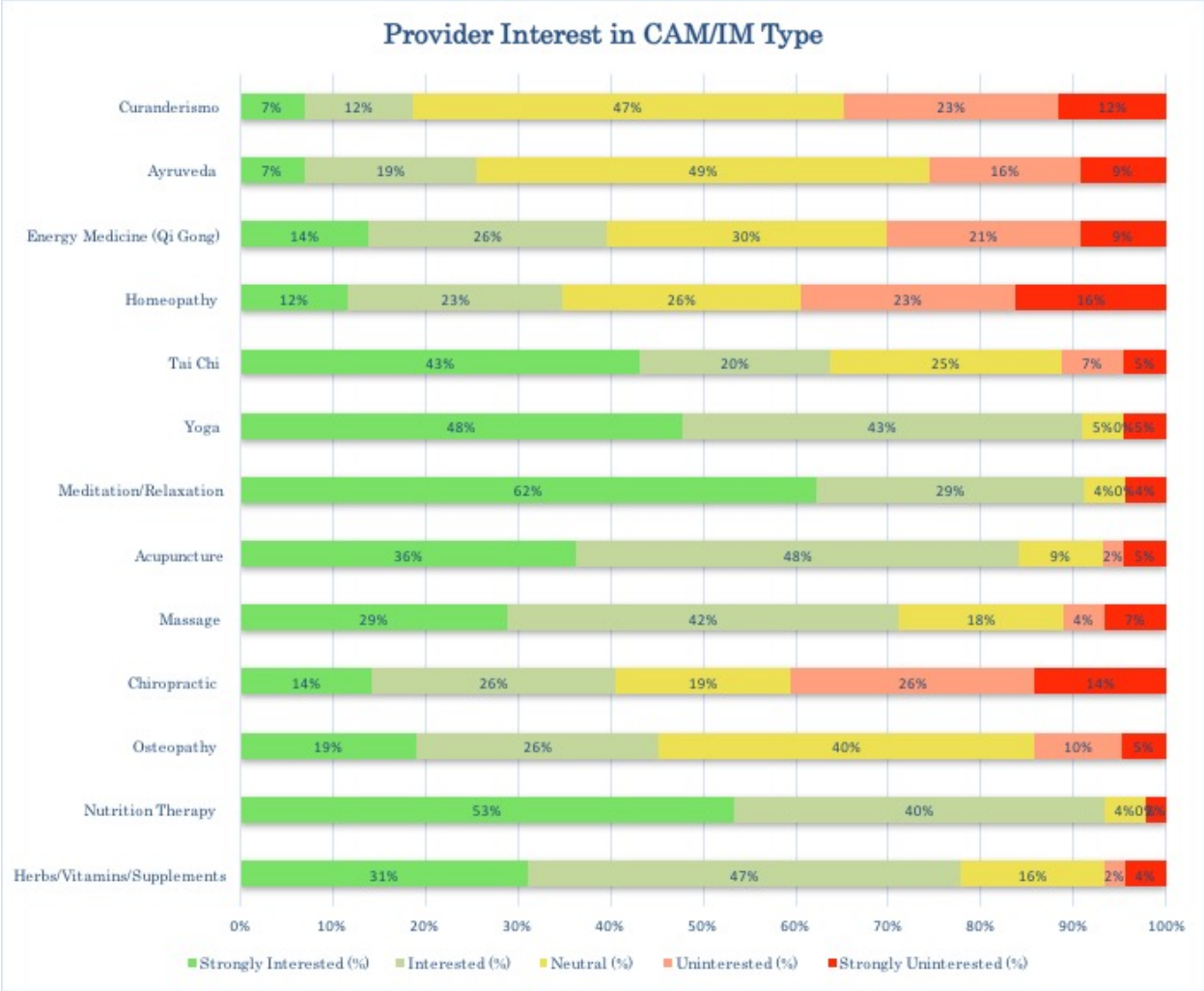
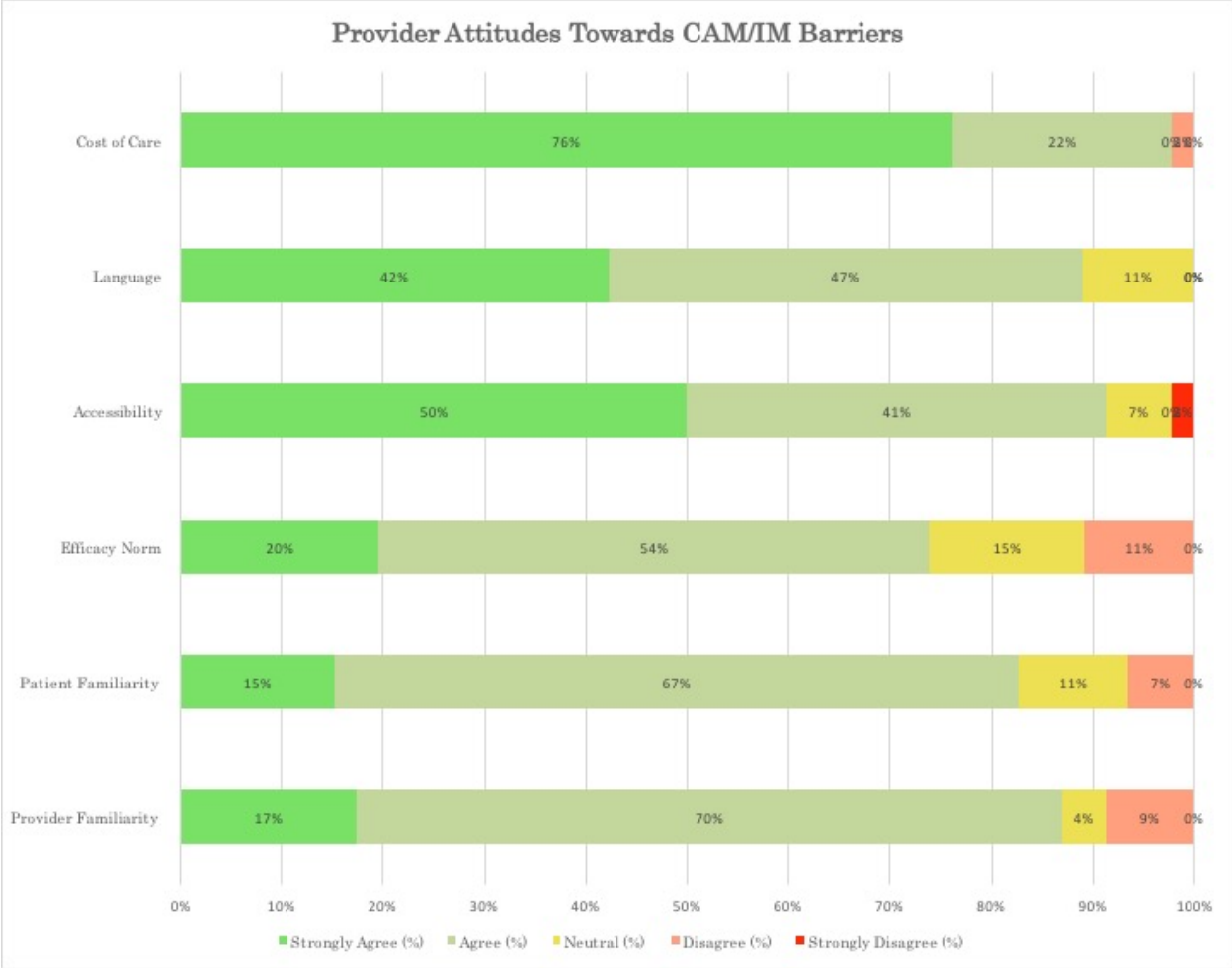


Figure 5. Attitudes towards CAM/IM barriers among providers. Responses were recorded using a five-part Likert scale. Categories with no responses do not appear in the figure.



**Supplement:**

Annotated bibliography for resulting studies of the literature review. Studies were analyzed for population, setting, sample size, methods, results of direct literature review relevance, and results of less relevance. This information served as the basis for the results of the literature review.

Black DS, Lam CN, Nguyen NT, Ihenacho U, Figueiredo JC. **“Complementary and Integrative Health Practices Among Hispanics Diagnosed with Colorectal Cancer: Utilization and Communication with Physicians.”** J Altern Complement Med. 2016 Jun 1; 22(6): 473–479.

This study examined complementary and integrative service use among Hispanic patients with colorectal cancer. The authors used in-person and telephone-based interviews to survey complementary and integrative service use by colorectal cancer patients greater than 21 years old, while their demographic and clinical data was taken directly from their medical records. Six hundred thirty-one patients were surveyed, 40.1% of which reported having ever used a complementary or integrative service, the most common service used being herbal products/dietary supplements. Results of less relevance include that 76.3% of surveyed patients

did not discuss complementary and integrative service use with their physician, and that women reported significantly higher use of complementary and integrative services than men.

Ho DV, Nguyen J, Liu MA, Nguyen AL, Kilgore DB. **“Use of and Interests in Complementary and Alternative Medicine by Hispanic Patients of a Community Health Center.”** J Am Board Fam Med. 2015 Mar-Apr;28(2):175-83.

This study examined CAM used among Hispanic at an FQHC in Irvine California. The patient population consisted primarily of Hispanics and was objectively underserved; for example, many of these patients (44%) did not have medical insurance. These authors report a modest rise in the use of alternative or integrative medicine from 2002-2007 based on the literature, a finding that they attribute to cost and delay associated with the current healthcare system. Other findings based on the author’s review of the literature include that the use of CAM was more common among those without health insurance, and that Hispanics are second largest ethnic group to use CAM services. Alternative or integrative medicine, as the authors state in their introduction, is usually used to treat chronic illness, making its formal practice most suited to the primary care setting. The authors also noted that a California statewide study found that vitamins, supplements, and herbs were the most commonly used CAM, consistent with the findings in the Hispanic population in this paper. Vitamin, supplement, and herb use can cause adverse drug interactions, and those using these CAM services are at increased likelihood of having a chronic illness; physicians should be aware of these potential and prevalent contraindications. Very interestingly, most survey participants did not practice Hispanic folk medicine, which the authors say is consistent with other nationwide Hispanic CAM use studies, though some smaller studies found moderately prevalent use of Hispanic folk medicine in Hispanic patient populations. The authors also noted the link between weight loss being a common reason for CAM use and the problem of obesity in America, particularly in Hispanics. The authors also found some interesting literature concerning CAM usage communication, noting the apparent conflict between the fact that the majority of participants in this study were comfortable disclosing CAM usage to their physicians and the fact that other studies show that greater than 60% of racial minorities do not disclose CAM usage.

A 13-item cross sectional survey was administered in 2013 over a three-month period. To be eligible for the survey, people had to be: a patient at UC Irvine Santa Ana FHC, speak English or Spanish, and be at least 18 years old. Surveys were administered during clinic hours by student volunteers using a protocol that fully informed subjects of the contents of the survey before participating, and no incentives for completing the survey were provided. Incomplete surveys resulting from lack of time or interest were discarded. Surveys were offered in both English and Spanish (the Spanish surveys was reviewed by a translator for proper translation), and Spanish interpreters were available on request for patients who could not speak English. The survey started with a set of demographic questions and then provided a definition of Complementary and Alternative Medicine (CAM), with a brief description of each CAM modality mentioned in the survey. Following this introduction, the survey asked participants to circle each CAM modality they have used within the past year, and allowed participants to write in modalities that were not included in the survey; participants were then asked to choose a reason for CAM use from a list of chronic diseases and health reasons. Participants were also asked to circle CAM modalities they were interested in having at the FQHC. Next, participants were asked to specifically disclose any vitamin, herb, and supplement use. Finally, participants

were asked to rate statements regarding communication of CAM usage based on the Likert scale. The chi-squared test of proportions and the Fisher exact test were used to compare differences between CAM users and nonusers, Hispanics and non-Hispanic whites, people born inside and outside the US.

The response rate was 70% and a total of 150 patients completed the survey. Of participants who completed the survey, 65% were women and 35% were men, the mean age was 41, 74% were Hispanics, 55% were born outside the US, 56% were medically insured, and 55% had a high school education or less. There was no significant difference in demographics between CAM users and nonusers, but when comparing Hispanics and non-Hispanic whites, there was a significant difference in medical insurance, US birth, and college education, with Hispanics doing worse in each category. Among all survey participants, 63% reported using at least one CAM modality in the last year. The most commonly used alternative or integrative medicines in order of most prevalent to least prevalent were vitamins/supplements, herbal medicine, dietary/nutritional therapy, massage, meditation/relaxation, and chiropractic, yoga and acupuncture. For herb, vitamin, and supplement, the most prevalent types were multivitamins, omega-3 fish oil, calcium, and standard single vitamins. The most common herbs used were herbal tea, chamomile, lemon, and mint. The most common reasons for CAM use, from most prevalent to least prevalent were, weight loss, sleep, diabetes, pain, high blood pressure, indigestion, lack of energy, and other reasons such as cold, cough, and stress. Among all survey participants, 72% were interested in having additional CAM resources at the FQHC. The most desired alternative or integrative medicines were healthier cooking classes, diet and nutrition classes, massage, herb and supplement use guidance, relaxation techniques, yoga, and acupuncture. As far as CAM provider communication goes, 61% either strongly agreed or agreed that they were comfortable disclosing CAM use. The majority of patients (58%) believed that physicians should have basic knowledge of this type of medicine, and 47% desired physicians to ask about the use of these medicines. There was a significant difference in CAM use communication preferences between CAM users and nonusers, but not between US-born and non-US-born participants.

Keegan L. **“A comparison of the use of alternative therapies among Mexican Americans and Anglo-Americans in the Texas Rio Grande Valley.”** Journal of holistic nursing : official journal of the American Holistic Nurses' Association. 2000 Sep;18(3):280-95.

This study examined differences in the use of alternative services between Mexican Americans and Anglo-Americans. Sixty Mexican Americans and Sixty Anglo-Americans were administered a one-page survey asking about alternative service use. The most common alternative service used by Mexican Americans was prayer, and the most common reason for use was stress. Results of less significance include that the Mexican Americans and Anglo-American rates of use for certain alternative services, such as relaxation techniques and herbal medicine, significantly pointed to different populations, or in other words, were significantly different.

Keegan L. **“Use of alternative therapies among Mexican Americans in the Texas Rio Grande Valley.”** J Holist Nurs. 1996 Dec;14(4):277-94.

This study examined general prevalence of alternative service use, specific type of services used, and self-reporting of this service use among Mexican Americans in the Texas Rio Grande Valley. Two hundred and thirteen patients selected from convenience samples were



surveyed via a one-page bilingual written questionnaire. The most commonly used alternative service was herbal medicine, and 44% of responding patients reported using at least one alternative practitioner at least once in the last year. Results of less significance include that 66% of responding patients reported that they do inform their primary care physician about their use of alternative practitioners.

Lee JH, Goldstein MS, Brown ER, Ballard-Barbash R. **“How does acculturation affect the use of complementary and alternative medicine providers among Mexican- and Asian-Americans?”** J Immigr Minor Health. 2010 Jun;12(3):302-9. doi: 10.1007/s10903-008-9171-1.

This study examined the effects of acculturation on CAM use for Mexican and Asian Americans, particularly ethnically related CAM use. Nine thousand one hundred eighty-seven patients were sampled from the California Health Interview Survey Complementary and Alternative Medicine, of which 2,047 were Mexican American, via a computer-assisted telephone interview survey. For Mexican-American use of CAM providers, 30% reported that they had ever used a CAM provider. The most commonly used CAM providers was a chiropractor. Results of less relevance include that both Mexican and Asian Americans who have spent more time in the US are less likely to use ethnically related CAM providers compared to chiropractors and massage therapists.

Lindberg NM, Stevens VJ, Elder C, Funk K, Debar L. **“Use of alternative medicine for weight loss among Mexican-American women.”** J Immigr Minor Health 2013;15:982–5.

This study examined what CAM therapies Mexican-American women use to lose weight. A telephone survey was administered to a group of 31 patients enrolled in a culturally tailored clinical weight loss trial for Mexican-American women. The survey asked about CAM service use, weight loss attempts, and general views on CAM services compared to conventional medicine. Herbs and teas were the most common CAM service used.

Loera JA, Reyes-Ortiz C, Kuo YF. **“Predictors of complementary and alternative medicine use among older Mexican Americans.”** Complement Ther Clin Pract. 2007 Nov;13(4):224-31.

This study examined the predictors of CAM use, both generally and specifically, in elderly Mexican Americans. Three thousand and fifty patients from the Hispanic Established Population for the Epidemiologic Study of the Elderly were asked during one of the cohort follow-up waves whether they had used certain CAM services in the past 12 months. Among the patients, 31.6% reported using any of the queried CAM services in the past 12 months, and herbal medicine was the most commonly used CAM therapy for these Mexican Americans. Results of less relevance include that female gender, being on Medicaid, frequent church attendance, and higher number of medical conditions were the best predictors for general CAM use.

Martinez LN. **“South Texas Mexican American use of traditional folk and mainstream alternative therapies.”** Hisp J Behav Sci 2009;31:128–43.

This study examined the association between certain demographic predictors, like income, gender, education, confidence in medical doctors, acculturation, and self-rated health and traditional folk and mainstream CAM use. A telephone survey was administered to 2,031 border and non-border Mexican Americans in Texas. The survey asked questions pertaining to the predictors of interest as well as traditional and mainstream CAM use. Herbal therapies were the most common CAM service uses, and 45% of respondents had used at least one CAM service in the last year. Results of less relevance include that traditional folk CAM users had lower self-rated health, less confidence in medical doctors, and lower acculturation, compared to nonusers. In comparing mainstream CAM users to nonusers, users had higher income and self-rated health than nonusers.

Mikhail N, Wali S, Ziment I. **“Use of alternative medicine among Hispanics.”** J Altern Complement Med. 2004 Oct;10(5):851-9.

This study examined the prevalence and pattern of use of alternative medicine among Hispanics, particularly urban Hispanics. One hundred and seventy-nine Hispanic inpatients, outpatients, and church members were surveyed via interview about their use of alternative medicine. Sixty-three percent of respondents reported ever using alternative services. The most commonly reported alternative service was herbs. The main reason for alternative service use was pain. Results of less significance include that the majority of alternative service users had more confidence in their physician than their alternative medicine provider, and 45% believed that prescribed medication was safer than alternative medicine; only 7% believe the opposite.

Nguyen H, Sorkin DH, Billimek J, Kaplan SH, Greenfield S, Ngo-Metzger Q. **“Complementary and alternative medicine (CAM) use among non-Hispanic white, Mexican American, and Vietnamese American patients with type 2 diabetes.”** J Health Care Poor Underserved. 2014 Nov;25(4):1941-55. doi: 10.1353/hpu.2014.0178.

This study examined CAM used among non-Hispanic White, Mexican American, and Vietnamese American patients with type 2 diabetes, observing racial differences in both the “types of providers seen as well as in the herbs and dietary supplements used”. Four hundred and 10 type 2 diabetes patients, 78 of which were Mexican American CAM users, completed a survey assessing CAM use. For Mexican American CAM users, the most commonly reported type of practitioner used was an Herbalist, and the most commonly reported herb and supplement used was prickly pear/nopal. However, only 15.4% of Mexican American CAM users report using any practitioner, while 96.1% of Mexican American CAM users report using an herb or supplement. Results of less relevance include that non-Hispanic white patients use CAM in addition to their type 2 diabetes medication significantly more frequently than Mexican American patients, but that Mexican American patients use CAM instead of their type 2 diabetes medication significantly more frequently than non-Hispanic white patients.

Ortiz BI, Shields KM, Clauson KA, Clay PG. **“Complementary and alternative medicine use among Hispanics in the United States.”** Ann Pharmacother. 2007 Jun;41(6):994-1004.

This study examined CAM service use among US Hispanics, as well as services that were likely to be unfamiliar to practitioners. A literature search of multiple databases, such as

MEDLINE, International Pharmaceutical Abstracts, and EMBASE etc. was conducted using search terms such as Hispanic, Latino, complementary and alternative medicine etc.. This review found that general CAM use ranged from 50-90%. The most common integrative service for certain diseases were the following: nopal (cactus) for diabetes, lemon juice for hypertension, and traditional herbs for asthma.

Rivera JO, Ortiz M, Lawson ME, Verma KM. **“Evaluation of the use of complementary and alternative medicine in the largest United States-Mexico border city.”** Pharmacotherapy. 2002 Feb;22(2):256-64.

This study examined CAM use, across various levels of professional and commercial involvement, such as providers, herbal and home remedies, and commercial products, in the largest United States-Mexico Border City. Although this study did not explicitly mention Hispanics or Latino’s in its title, it was included because of its setting; consequently 83% of patients were Hispanic. A semi-structured interview-based survey was delivered to 547 patients. The most common CAM provider used was a massage therapist, the most common herbal or home remedy used was chamomile, and the most nutritional or commercial product used was multivitamins. Results of less relevance include that 599 CAM services were identified that may have adverse drug reactions with commonly used drugs in conventional services.

Trangmar P, Diaz VA. **“Investigating Complementary and Alternative Medicine Use in a Spanish-Speaking Hispanic Community in South Carolina.”** Ann Fam Med 2008;6(Suppl 1):s12–5.

This study examined CAM use among Spanish-speaking Hispanics in South Carolina. A questionnaire only offered in Spanish was administered to 70 patients at a community-based residency practice or a rural community health center. These clinics both serve predominantly Hispanic populations, in areas where either construction and factory work or agriculture are the major employers. Herbal medicines and teas were the most commonly used CAM service, and, 69% of patients reported that they have ever used CAM. The most common reason for CAM use was being taught to do so by family members, and the most common condition being treated with CAM was infection.

White B, Knox L, Zepeda M, Mull D, Nunez F. **“Impact of immigration on complementary and alternative medicine use in Hispanic patients.”** J Am Board Fam Med 2009;22:337–8

This study examined whether immigration status, specifically whether patients immigrated less than or more than nine years ago, impacted frequency of or reason for CAM use. A survey was administered to 164 patients at a federally qualified health center in inner-city Los Angeles, which consisted primarily of Latinos. The most commonly reported CAM service used was herbal/tea/plant-based substances, and 66% of patients reported using at least one CAM in the last year. Digestive problems were the most frequent reason for CAM use. Results of less relevance include that of all the 250 CAM substances reported to be used, 64% were from a store or market, 23% were grown at home, 6% were from specialty herb shops, and 7% came from obscure sources like TV commercials or out of the country. There was no significant difference

in CAM use between recent immigrants (those who immigrated in the last nine years) and long-term immigrants.

Zebracki K, Holzman K, Bitter KJ, Feehan K, Miller ML. **“Brief report: use of complementary and alternative medicine and psychological functioning in Latino children with juvenile idiopathic arthritis or arthralgia.”** J Pediatr Psychol. 2007 Sep;32(8):1006-10.

This study examined the association between CAM use and psychological functioning in Latino children with either juvenile idiopathic arthritis or arthralgia. Parents of 36 Latino children completed a survey assessing their child’s CAM use and psychological functioning during routine pediatric rheumatology clinic visits. Fifty-six percent of parents reported that they used at least one CAM service for their child; the most common service used was prayer. The most common reason for CAM use was pain management. Results of less relevance include that CAM was associated with decreased anxiety and dysthymia in child patients with arthralgia, but not in child patients with juvenile idiopathic arthritis.

Provider Survey. Template survey from Liu et al. (2015) was modified with author permission to produce the survey below. The survey was administered via SurveyMonkey and sent out in the Erie Family Health Center listserv. All rating-type questions employed a five-part Likert scale.

## TEST: Interest and Knowledge of Integrative Medicine

### Help Contact Info

*Displays survey help/contact information provided at publish*

#### Introduction

Lead Researcher

Dr. Anuj Shah

Erie Family Health Center

ashah@eriefamilyhealth.org

Other Researchers

Dr. Sreela Namboodiri

Dr. Keli Tahara

Dr. Frances Baxley

Dr. Daisy Wynn

Dr. Deborah Edberg

You are being asked to participate in a research study to evaluate the perceptions and education background on Complementary and Alternative Medicine (CAM) among the physicians at the Erie Family Health Center and to assess provider’s attitudes towards the implementation of CAM therapies into the clinic.

You are eligible to participate in this study if you are at least 18 years of age or older; an Erie faculty or medical resident associated with the Erie Family Health Center.

The research procedures involve completing a 10 minute online survey asking about your use of and perceptions/attitudes towards Complementary and Alternative Medicine.

This study involves no more than minimal risk. There are no known harms or discomforts associated with this study beyond those encountered in normal daily life. Your identity will not be associated with your survey.

There are no direct benefits from participation in the study. However, this study may explain a greater understanding of learning preferences in regards to Complementary and Alternative Medicine here at Erie.

The research team and authorized Erie personnel may have access to your study records to protect your safety and welfare. Any information derived from this research project that personally identifies you will not be voluntarily released or disclosed by these entities without your separate consent, except as specifically required by law.

If you have any comments, concerns, or questions regarding the conduct of this research, please contact the researcher listed at the top of this form.

Participation in this study is voluntary. There is no cost to you for participating. You may choose to skip a question or a study procedure. You may refuse to participate or discontinue your involvement at any time without penalty. You are free to withdraw from this study at any time. If you decide to withdraw from this study, you should notify the research team immediately.

### **Instructions**

For purposes of this survey, note that the terms "CAM/IM" (Integrative Medicine) refer generally to the areas defined by the NIH National Center for Complementary and Integrative Medicine, including herbal/nutrition therapies, mind body, acupuncture, yoga/tai chi, manipulative therapies, energy therapy (qi gong), and whole medical systems (traditional Chinese medicine, homeopathy, etc).

Please enter the first letter of your first name along with your birth month and birth day. This is for tracking purposes. For example, Matthew born on May 30 would enter: M0530

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1.

Did you read the definition for Complementary and Alternative Medicine (CAM) in the instruction section above?

- Yes
- No

2.

## Demographics

Age:

- 30 or under
- 31-45
- 46-60
- >60

Years in practice:

- Resident in training
- 5-10 years
- 10-15 years
- 15-20 years
- 20+ years

Degree:

- MD
- DO
- NP
- PA

Other:

Time spent on patient care:

- 0-25%
- 25-50%
- 50-75%
- 75-100%

3.

General level of prior education and training in CAM/IM:

- Extensive training: i.e. Fellowship, or multiple courses in several CAM disciplines
- Moderate training: in depth coverage of 1 or 2 areas in prior educations
- Some training: one or two courses or conferences or periodic reading
- Little education: occasional article or website reference
- None

4.

How familiar are you with the following CAM/IM treatments and discussing their use with patients?

	Not familiar	Some familiarity	Understand clinical application but NOT comfortable counseling patients	Understand clinical application and only moderately comfortable counseling patients	Understand clinical application and comfortable counseling patients
Herbs/ vitamins/supplements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nutrition therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Osteopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chiropractic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Massage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acupuncture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meditation/relaxation (Mind-body therapies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yoga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tai Chi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homeopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy Medicine (Qi Gong)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ayurveda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curandismo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5.

Current Use:

Have you ever referred an Erie Family Health Center patient to a CAM practitioner or for CAM/IM treatments?

- Yes
- No

If yes, which practitioner(s) or treatment(s):

6.

Are you interested in integrating the following CAM treatments into your patient's care plan? Please rate below.

	Strongly Not Interested	Not Interested	Neutral	Interested	Strongly Interested
Herbs/vitamins/supplements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Nutrition therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Osteopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Chiropractic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Massage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Acupuncture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Meditation/relaxation (Mind-body therapies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Yoga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Tai Chi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Homeopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Energy Medicine (Qi Gong)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Ayurveda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Curanderismo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

7.



If cost/reimbursement were not a consideration, do you think the integration of CAM/IM consultation and/or therapies at the Erie would be accepted by our patients?

- Strongly Not Accepted
- Not Accepted
- Neutral
- Acceptance
- Accepted

8.

If cost/reimbursement were not a consideration, do you think the integration of CAM/IM consultation and/or therapies at the Erie would change overall health outcomes of our patients?

- Decrease overall health
- Neutral
- Minimal increase
- Moderate increase
- Strong increase

9.

Do you think the following are barriers to referring patients to CAM/IM services? Please rate below.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Provider familiarity with the modality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Patient familiarity with the modality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Norms about efficacy of CAM/IM	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Cost of care to patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Geographic accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Patient language barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Other barriers not listed:

10.

List any comments or suggestions that you may have:

**Closing Text**

Thank you for completing this survey.

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