

Culturally Informed Clinical Practices for Healthy Hmong Lifestyles

2015



Table of Contents

Executive Summary	Page 4
Introduction	Page 11
Recommendations for Healthcare Organizations to Promote Healthy Lifestyles in the Hmong Community	Page 14
General recommendations for administrators to support clinic staff to promote healthy lifestyles	
General recommendations for clinic staff to promote healthy lifestyles	
Promote Healthy Weight	Page 17
Data	
Historical and cultural background	
Programs to promote healthy weight	
Recommendations for clinic staff to promote healthy weight	
Promote Healthy Nutrition	Page 20
Data	
Historical and cultural background	
Programs to promote healthy nutrition	
Recommendations for clinic staff to promote healthy nutrition	
Promote Physical Activity	Page 28
Data	
Historical and cultural background	
Programs to promote healthy nutrition	
Recommendations for clinic staff to promote healthy nutrition	
Promote Tobacco Cessation and Prevention	Page 34
Data	
Historical and cultural background	
Programs to promote healthy nutrition	
Recommendations for clinic staff to promote healthy nutrition	
Recommendations for the Community	Page 39
Appendices	
Appendix A: Methods for Developing 2015 Culturally Informed Clinical Practices for Healthy Hmong Lifestyles	Page 40
Appendix B: Healing by Heart Culturally Responsive Care Model	Page 42
Appendix C: Staff Educational Resources about Hmong Cultural Backgrounds	Page 44
Appendix D: Patient Educational Resources about Healthy Lifestyles	Page 46
Appendix E: References	Page 49

Executive Summary

Goal

Culturally Informed Clinical Practices for Healthy Hmong Lifestyles is a document about culturally appropriate best practices for clinic staff to promote healthy lifestyles for Hmong in Minnesota. It was based on the Institute for Clinical Systems Improvement (ICSI) 2013 Healthy Lifestyles Guidelines. Its ultimate goal is to enhance clinical effectiveness to reduce health disparities for obesity, nutrition, physical activity and tobacco in the Hmong community.

Background

The Institute for Clinical Systems Improvement (ICSI) 2013 Guidelines for Healthy Lifestyles are evidence-based recommendations for clinic staff to engage and counsel patients in healthy lifestyle approaches. The evidence was established from research conducted on general American populations, so the recommendations are not tailored to fit patients from a specific social-cultural background. To create guidelines that apply to the Hmong community, Saint Paul - Ramsey County Public Health (SPRCPH) partnered with Hmong Health Care Professionals Coalition (HHPC) to form the Hmong Healthy Lifestyles Guidelines Group, which consisted of Hmong and non-Hmong professionals who have worked with Hmong in various settings to support their adopting healthy lifestyles. We conducted a literature search, discussed our experiences and wrote our recommendations for clinic staff, using the ICSI 2013 Healthy Lifestyles Guidelines format as the foundation. Evidence-based research on the Hmong population is essentially non-existent, so the creation of these recommendations is important and they are our expert opinion.

Results

We identified **three major Hmong cultural strengths** that clinic staff can build upon as they encourage Hmong families to assess their current lifestyle and implement healthy behavior changes.

#1: Hmong people are strong, resilient, and resourceful. Many parents and grandparents suffered through a horrendous war with death and destruction, endured refugee flight and resettlement processes with personal tragedies and societal upheaval, and are now surviving and thriving in Minnesota. They made this adjustment because they were able to learn new skills and new behaviors in a new location, and apply these skills to their everyday lives, while retaining aspects of traditional culture.

#2: Families take care of each other. Traditional culture places importance on people acting responsibly towards the family; everyone working for the benefit of the family, clan and society; and adults acting as role-models for children.

#3: Traditional culture had many aspects of healthy lifestyles.

- Weight: Historically, people were thin and obesity (BMI >25) was virtually unknown when refugees first started arriving in the US during 1975-1990s.
- Diet: Historically, people drank water and ate meals mostly of rice and fresh garden vegetables with occasional small amounts of meat protein and very few sweets. People only periodically ate large amounts of fatty pork during celebrations or ceremonies. Breastfeeding was the norm.
- Activity: People were physically active as they participated in subsistence agriculture without machines or animals to help them. They valued sweating and breathing heavily.
- Tobacco: Prior to the war, few adults used tobacco. During the war, some soldiers started to smoke.
- Balance: A traditional concept of health was being in balance, or being in the middle (*hauv nruab nrab*/huv nrab nraab***) and one way to restore balance was to (*caiv*/***), which means doing specific activities and eating specific foods, while avoiding certain activities and foods.

* Indicates White Hmong dialect

** Indicates Blue Hmong dialect

To help Hmong families continue their adjustment to life in America, clinic staff can emphasize their healthy traditional cultural practices, build upon their cultural pride, and encourage people to use these same behaviors in the United States. Staff could say: “Traditional Hmong ways of eating and drinking are better than ways of eating and drinking now.” (*Hmoob kev noj haus thaum ub zoo dua kev noj haus tamsim no*/Moob kev noj haus thaum u zoo dlau kev noj haus taamsim nuav***.) Or they could say: “Traditional Hmong culture was better than American culture.” (*Hmoob kev coj noj coj ua thaum ub zoo dua kev coj noj coj ua Meskas*/Moob kev coj noj coj ua thaum u zoo dlua kev coj noj coj ua Meskas***.)

Clinic staff can build upon these cultural strengths by encouraging people to:

- Be a healthy weight, balanced between not too thin and not too large.
- Take care of themselves so they can take care of the family.
- Eat a diet of healthy foods and avoid unhealthy foods.
- Eat a balanced amount of food, not too little, but not too much.
- Add physical activity so they can sweat, breath heavily, and have strong muscles.
- Stop behaviors that can harm health--such as drinking pop and fruit juices, and using tobacco.

General recommendations for administrators of clinics and health care organizations to support clinic staff to promote healthy lifestyles

- Hire multicultural and bilingual personnel and trained interpreters from the communities that the clinic serves.
- Educate clinic staff about how to promote culturally-responsive healthcare for the Hmong community.
- Educate clinic staff about how to promote culturally-responsive healthy lifestyles for the Hmong community.
- Develop electronic medical record (EMR) entry categories and decision supports so clinic staff can record patient’s height, weight, diet, physical activity, and tobacco use, can calculate Body Mass Index (BMI), and can present BMI categories for both mainstream BMIs and Asian BMIs (overweight 23-24 and obese >25).
- Train staff to deliver key messages and use brief counseling techniques and motivational interviewing approaches.
- Make sure that educational materials in the clinic are culturally and linguistically appropriate and easily accessible. Written brochures and video materials should be in low literacy English and White Hmong/ Blue Hmong, and should contain Hmong or Asian images with Hmong artistic design.
- Develop relationships with Hmong community leaders and organizations that serve the Hmong community to create and promote culturally appropriate wellness programs.
- Develop and promote workplace wellness programs at the clinic, support patients to use their workplace wellness programs, and encourage workplaces in the community to develop their workplace wellness programs.

General recommendations for clinic staff to promote healthy lifestyles with the Hmong community

- Work in teams in the clinic.
- Ask or accurately measure and record patient’s height, weight, body-mass-index, physical activity, and tobacco use into the electronic medical record (EMR).
- Use three techniques for patient-centered care.
 1. Assess readiness to change: Pre-contemplative, Contemplative, Preparation, Action, Maintenance.
 2. Follow 5As: Assess, Advise, Agree, Assist, Arrange.
 3. Use motivational interviewing and shared decision-making approaches.
- Work with patients (children, adolescents, and adults) to set goals together: minimal, healthier, optimal goals.
- Deliver efficacious clinical interventions. People not yet ready to try to change behaviors should be provided with brief messages to increase their motivation and people willing to change should be provided with effective supportive treatments in the clinic, referred for more assistance, and followed-

- up for further support.
- Develop trusting relationships with Hmong patients.
- Promote healthy lifestyles for all family members, so individuals are supported as they implement or strengthen their healthy lifestyles.
- Use culturally and linguistically appropriate educational materials in the clinic.

Specific recommendations for clinic staff to promote healthy weight

- Learn about the social and cultural context of healthy weight in the Hmong community. (*Read Cultural Information about Weight in recommendations, page 17.*)
 - ◊ Historically in Laos, most people were underweight, and few people were overweight. The traditional perspective was that being heavier was better, both for children and adults.
 - ◊ Now people are gaining the sense that both underweight and overweight can be unhealthy, although overweight (*pham pham*/phaam phaam***) infants and children are still considered healthy. Some adolescents are concerned and uncomfortable with being overweight or obese.
- Measure and document everyone's height and weight, calculate BMI and BMI percentile, and explain BMI categories and the lower BMI cut-offs for Asian adults, which the World Health Organization (WHO) endorsed because adverse cardiovascular effects of obesity can occur at lower BMIs for Asians.
- Ask patients (children, adolescents, and adults) about their perception of their weight in a respectful manner.
- Assess readiness for change, follow the 5As, and use motivational interviewing with shared decision-making.
- Deliver key messages about healthy weight in a respectful manner.
 - ◊ Some weight loss (even 5-10 pounds) can improve your health.
 - ◊ You will feel better--lighter, less short of breath, and more energetic.
 - ◊ You will decrease your risk for diseases like diabetes, high blood pressure, heart attack, stroke, and kidney failure.
 - ◊ You will be better able to take care of yourself and your family.
- Set goals together with adolescent and adult patients - minimal, healthier, optimal goals.
 - ◊ Minimal goal: Do not gain weight.
 - ◊ Healthier goal: Lose 5-10 pounds.
 - ◊ Optimal goal: Lose enough weight so BMI is in a healthy range.
- Set children's goals with children and parents together:
 - ◊ Minimal, healthier, optimal goal: Avoid gaining more weight and wait for height to increase.
- Deliver efficacious clinical interventions.
 - ◊ For those not yet interested in losing weight, clinic staff can provide brief statements to increase their motivation to change, with issues identified through motivational interviewing.
 - ◊ For those interested in losing weight, clinic staff can explore issues about diet and physical activity, and refer to nutritionists and community programs.
- Promote healthy weight for all family members.

Specific recommendations for clinic staff to promote healthy nutrition

- Learn about the social and cultural context of healthy nutrition in the Hmong community. (*Read Cultural Information about Diet in recommendations, pages 20-25.*)
 - ◊ Historically, everyday meals consisted of a large portion of rice, a smaller portion of vegetables, no meat or a small amount of meat, and no sweets or few sweets. Traditional celebratory meals included fatty pork.
 - ◊ Now generally, families eat fewer traditional meals, more celebratory meals, and more “American” foods. Many families have gardens, cook at home without much processed foods, and eat few sweets. On-demand bottles have replaced on-demand breastfeeding, making it easy to overfeed infants. Grandparents tend to indulge young children’s desires for food and drink, seeing this approach as loving (*hlob*/***). People sense that foods in the United States contain toxic chemicals from pesticides and fertilizers (but often cannot afford organically grown vegetables), and that water is harmful, leading people to buy bottled, spring, or filtered water.
 - ◊ Barriers to eating a healthy diet include: time; cost; taste of “healthy foods”; children’s preferences; and social pressures that result in over-consumption. Social pressures during cultural rituals/celebrations include hosts preparing large amounts of food to demonstrate they are generous and prosperous, hosts extolling people to “eat until you are stuffed,” and guests eating large amounts to show their respect to their hosts.

- Ask and document important points about people’s diets.

- Assess readiness for change, follow the 5As, and use motivational interviewing with shared decision-making.

- Deliver key messages about healthy diets for everyone, although particularly for overweight people.
 - ◊ Families: The Hmong Healthy Plate:
 - ✘ Eat smaller portions- *Caiv qhov ncauj los txo kev noj kom tsawg*/txu kev noj kuam tsawg***.
 - ✘ Eat 1/4 plate of rice. Eat brown rice and long-grain rice, not white rice and short-grain rice.
 - ✘ Eat 1/2 plate of vegetables, more than rice, noodles, or meat.
 - ✘ Eat 2 fruits a day.
 - ✘ Avoid fatty meats.
 - ✘ Drink water—not pop, fruit juice or alcohol.
 - ◊ Children: The Hmong Plate, with smaller portions
 - ◊ Infants: breastfeeding until 1-2 years of age, starting food at 6 months

- Set goals together with adults, adolescents and children: minimal, healthier, optimal goals.
 - ◊ Minimal goal:
 - ✘ Eat smaller portions. Stop eating before you are stuffed. Use smaller bowls and plates.
 - ◊ Healthier goal:
 - ✘ Eat less rice, eat brown rice, limit white rice, and avoid short grain and sticky rice.
 - ✘ Eat fewer noodles.
 - ✘ Eat 1/2 plate of vegetables, especially Hmong vegetables.
 - ✘ Eat more vegetables and fruits every day.
 - ✘ Use less salt (fish sauce, or soy sauce and pickled vegetables) and avoid mono-sodium glutamate (MSG)
 - ✘ Drink water and limit sugary drinks, fruit juices, and alcohol.
 - ✘ Remove fat from meats before cooking.
 - ✘ Boil, grill, or roast more than fry. Fry with small amount of vegetable oil. Stop using lard or pork fat.
 - ✘ Do not overeat at buffets or cultural events.
 - ✘ Learn healthy recipes of Hmong foods on videotapes (Refer to Appendix D).

- ◆ Optimal goal: Hmong Healthy Plate
 - ※ Eat 1 cup cooked rice per meal. Do not eat rice every meal.
 - ※ Eat 5 or more servings of fruits and vegetables each day.
 - ※ Limit meat and avoid fatty meats.
 - ※ Drink filtered tap-water with fluoride, not sugary drinks, fruit juices, and alcohol.
- Deliver efficacious clinical interventions.
 - ◆ For those not yet interested, clinic staff can provide brief statements to increase their motivation to change, with issues identified through motivational interviewing.
 - ◆ For those interested in changing their diet, clinic staff can encourage use of Hmong healthy plate and refer to nutritionists and community programs.
- Promote healthy diet for families.

Specific recommendations for clinic staff to improve physical activity

- Learn about the social and cultural context of healthy physical activity in the Hmong community. (*Read Cultural Information about Physical Activity in recommendations, pages 28-29.*)
 - ◆ Traditionally, there was no one Hmong word for exercise; rather, people used specific words for specific actions. Traditional life was physically arduous—farming without animals or machines—so there was no need to decide to exercise. Healthy physical activity was equated with sweating and being short of breath. Traditional cultural does not value adults taking time to play; it values adults working productively to benefit their families.
 - ◆ Now generally people are getting the sense that adults and children need to add physical activity to their lives. They stress the importance of sweating to get the benefits of exercise.
 - ◆ Barriers to being more physically active include: stressful schedules; busy working for family's benefit and not enough time to exercise for personal benefit; dangerous neighborhoods; expensive fitness centers and after school programs; and pains from illnesses or being out of shape.
- Ask and document people's physical activity in the EMR.
- Assess readiness for change, follow the 5As, and use motivational interviewing with shared decision-making.
- Deliver key messages about physical activity in a respectful manner.
 - ◆ You and your family members will feel better if all of you are more active.
 - ◆ You will improve your health if you are more active.
 - ◆ Be more active every day, even 10 minutes more.
 - ◆ Make small changes: park far away, take stairs, walk every day, and walk after eating.
 - ◆ Make big changes: walk 10,000 steps every day (such as up and down stairs).
 - ◆ You can join other people who are exercising, playing, and being more active- at a gym or sports team or dance group.
 - ◆ You can take care of your family better if you take care of yourself.
 - ◆ Move your body so you can sweat.
- Set goals together with adolescents and adults: minimal, healthier, optimal goals.
 - ◆ Minimal goal: Any increase in physical activity is beneficial. Sit less.
 - ※ Limit time in front of screens (TV, computer, iPads, etc) to less than 2 hours a day.
 - ◆ Healthier goal:
 - ※ Join other people in age appropriate sports teams and local gyms, and find active people on social media (i.e., Hmong Fitness Group, Hmong Volleyball Group).
 - ※ Moderate-intensity exercise for 30 minutes a day for 5 days a week.

- ✧ Vigorous intensity exercise for 25 minutes a day for 3 days a week plus
- ✧ Strength training (8-12 repetitions of 8-10 exercises) 2-3 days a week.
- ◇ Optimal goal:
 - ✧ Join age appropriate sports teams, gyms, and local groups.
 - ✧ Limit screen time to less than 2 hours a day.
 - ✧ Moderate-intensity exercise for 45 minutes a day for 7 days a week or 60 minutes a day for 5 days or 10,000 steps a day.
 - ✧ Vigorous intensity exercise for 30 minutes a day for 5 days a week plus
 - ✧ Strength training (8-12 repetitions of 8-10 exercises) 2-3 days a week.
- Set children's goals together with adults and children.
 - ◇ Minimal goal: Any increase in physical activity is beneficial.
 - ✧ Limit time to just sit, including watching computer and television screens to less than 2 hours a day.
 - ◇ Healthier and Optimal goal: Join age appropriate sports teams.
- Deliver efficacious clinical interventions.
 - ◇ For those not yet interested, clinic staff can provide brief statements to increase their motivation to change, using issues identified through motivational interviewing.
 - ◇ For those interested in changing their physical activity, clinic staff can encourage use of pedometers and refer to organizations that support advancing physical activity.
- Support physical activities for families.

Specific recommendations for clinic staff to support tobacco cessation and promote tobacco prevention

- Learn about the social and cultural context of tobacco use in the Hmong community. (*Read Cultural Information about Tobacco in recommendations, pages 34-35.*)
 - ◇ Historically, there was little use of tobacco. Sometimes tobacco was offered during rituals as a sign of respect. Some soldiers started smoking during the Vietnam War in Laos. Some people who smoked opium became tobacco smokers.
 - ◇ Now, a small number of elderly men smoke. In addition, an increasing number of male and female young adults smoke, having started smoking "to fit in and be cool". While there are few opium users, some people drink alcohol and use other drugs, from marijuana to methamphetamines.
 - ◇ Barriers to quitting tobacco include: tobacco as a stress reliever; physical addiction; social pressures; concern about gaining weight; and lack of knowledge about quitting resources.
- Identify and document everyone's exposure to tobacco in the EMR.
- Assess readiness for change, follow the 5As, and use motivational interviewing with shared decision-making.
- Deliver key messages for tobacco and secondhand smoke in a respectful manner.
 - ◇ Using tobacco (whether smoking, chewing, or e-cigarettes) is dangerous to your health and to your family members' health.
 - ◇ Quitting tobacco and avoiding tobacco smoke improves your health and your family's health.
 - ◇ Be a good role-model for your children and grandchildren. If you want them to be non-smokers, you need to be a non-smoker.
 - ◇ It may be hard to quit tobacco, but it is possible. Many people have done it.
 - ◇ We can help you in many ways, depending upon what you want.
 - ◇ Do not allow smoking in your apartment, apartment building, house, car, or work place. Even if

people smoke outside, they still carry the smoke on their clothes.

- Set goals together with adolescents and adults: minimal, healthier, optimal goals.
 - ◊ Minimal goal: Discuss change process--quitting/ reducing exposure.
 - ◊ Healthier goal: Adopt and implement an action quit plan.
 - ◊ Optimal goal: Eliminate all tobacco use/ all tobacco exposure.
- Deliver efficacious clinical interventions.
 - ◊ For those not yet interested, clinic staff can provide brief statements to increase their motivation to change, with issues identified through motivational interviewing.
 - ◊ For those interested in quitting, clinic staff can provide effective treatments:
 - × Counseling, goal setting, practical suggestions.
 - × Medicines- nicotine replacement therapy (NRT), bupropion (Zyban®), and varenicline (Chantix®).
 - × Interaction with a tobacco cessation counselor, repeated over time as necessary
 - × Telephone quit-lines with pro-active counseling.
 - × Group support for those who are willing to attend.
- Support tobacco cessation and prevention activities in families.



Introduction

General

As clinics expand from focusing on diagnosing and treating diseases to promoting health and preventing diseases, clinic staff team members need to encourage all patients to acquire and maintain healthy lifestyles. Given this challenge, the Institute for Clinical Systems Improvement (ICSI) 2013 Guidelines for Healthy Lifestyles (Kottke et al., 2013) was written to support clinic staff to use evidence-based approaches to supporting healthy lifestyles. The evidence-based guidelines arose from research that was mostly conducted on mainstream American populations and did not include separate discussions about what information is available for other populations, ethnic groups, and cultural sub-groups. As Minnesota has patients from a wide variety of backgrounds, Saint Paul - Ramsey County Public Health (SPRCPH) decided to explore and create culturally tailored recommendations for various communities, starting with the Hmong community.

SPRCPH partnered with Hmong Health Care Professionals Coalition (HHPC) to create the Hmong Healthy Lifestyles Guidelines Group, which consisted of Hmong and non-Hmong professionals who have worked with Hmong in various settings to support their adopting healthy lifestyles. We created these guidelines by conducting an extensive search to identify relevant materials (published articles, unpublished manuscripts, and internet resources), discussing the information, and reflecting on our professional and personal experiences, and then reviewing our results with HHPC members, ICSI Healthy Lifestyles group, and practicing Hmong clinicians. (See Appendix A: Methods for Developing.) Finding little to no direct evidence-based research about the best approaches for Hmong people to make healthier lifestyle choices, these guidelines are the result of expert opinion more than evidenced-based practices. We focus on four areas of healthy lifestyles: weight, diet, physical activity, and tobacco, while acknowledging that ICSI 2013 Healthy Lifestyles Guidelines address other important areas that we could not include in this version: substance abuse, stress, and sleep.

One note of caution. While we address issues that are relevant to elders, adults, teenagers, and children, this is not a complete manual to describe all Hmong people at all places in their lives. We recommend that healthcare professionals use this information as a cultural background primer, while using motivational interviewing and patient-centered approaches to listen to each individual and their family members, and not use this information to impose generalities upon individuals and families, as stereotypes.

General Hmong cultural strengths relevant to health lifestyles recommendations

In 2013, over 77,000 Hmong people lived in Minnesota, with median age of 21.8 years (U.S. Census Bureau, 2013). Since their arrival in Minnesota as refugees when the Vietnam War ended in 1975, Hmong families have faced incredible lifestyle changes. They left their rural agricultural life without machines and without need for literacy and formal education, and arrived in a complex urban society where technology was pervasive and literacy and education were needed for employment. All of these changes impacted Hmong families, both physically and mentally. Some of these changes have improved people's health; infant mortality rates have plummeted, vaccines have wiped out devastating diseases, and life expectancy rates have soared. However, other changes have harmed people's health; more people are becoming obese, are smoking, and are developing diseases such as diabetes, hypertension, heart attacks, strokes, cancer, and renal failure (Culhane-Pera & Xiong, 2003; Culhane-Pera et al., 2004). After 40 years, many Hmong families are still learning to adjust to a new life and environment, which have imposed new challenges on families, including economic stresses and impaired mental health. Some families struggle with employment, language, housing, and transportation. Clinic professionals are encouraged to understand more about Hmong lifestyles in Minnesota so they can effectively work with Hmong patients to improve their diet, increase their physical activity, and reduce their tobacco use, as first steps in both preventing and managing chronic diseases.



Before we describe our general and specific recommendations for clinic staff, we want to highlight three Hmong cultural strengths that clinic staff can build upon as they encourage people to make healthy lifestyle changes. These cultural strengths may be most relevant to adults and elders, since many young adults and teenagers have been influenced by a blend of Hmong family cultural norms and mainstream American cultural practices.

#1: Hmong people are strong, resilient, and resourceful.

Many parents and grandparents suffered through a horrendous war with death and destruction, endured refugee flight and resettlement processes with personal tragedies and societal upheaval, and are now surviving and thriving in Minnesota. They made this adjustment because they were able to learn new skills and new behaviors in a new location, and apply these skills to their everyday lives, while retaining aspects of traditional culture. Staff can build upon this resiliency and ability to adjust, by providing information and supporting acquisition of healthier behaviors.

#2: Families take care of each other.

Traditional culture places importance on people acting responsibly towards family and working for the benefit of the family, clan and society (Culhane-Pera & Xiong, 2003; Cha, 2003). Adults are motivated to act responsibly and take care of vulnerable family members, particularly elders and children. How other people view them is extremely important. Saving face and being seen as respectful, reasonable, responsible and upstanding adults are extremely important. Adults also recognize the importance of their being role-models (ua qauv*/**) for children and grandchildren, and generally teach more by example than by words or explicit directions.

Clinic staff can use this core value, emphasizing the importance of adults taking care of themselves so they can fulfill their responsible adult roles for other family members; reminding people about the importance of adults choosing healthy practices in order to be healthy role-models for their children and grandchildren; and encouraging individual patients to work with their family members in planning and making dietary and physical activity changes for the whole family.

#3: Traditional culture had many aspects of healthy lifestyles.

- Weight: Having relatively little to eat and being very physically active, people were not heavy (BMI <25) when they left Laos and arrived as refugees in the US. Traditionally, being undernourished (BMI<18) was seen as problematic, while being heavier (such as BMI 18-24), was seen as healthy, and obesity (BMIs >25) was virtually unknown.
- Diet: People drank water and ate daily meals that consisted mostly of rice and fresh garden vegetables with occasional small amounts of meat protein and very few sweets. People only periodically ate large amounts of fatty pork at cultural celebrations a few times a year such as New Year's, weddings, funerals, and shaman rituals. Breastfeeding was the norm, and children were breastfed until the next pregnancy, or until two to five years of age.
- Activity: People were physically active as they participated in subsistence agriculture without machines or animals to help them. They recognized the importance of sweating and breathing hard in the context of their strenuous daily lives.
- Tobacco: Prior to the war, very few people used tobacco. Its use was mostly restricted to rituals, when it was used as a symbol of respect between men of different families.
- Balance: A traditional concept of health was being in balance or being in the middle (*hauv nruab nrab*/ hus nraub nraab***) between the physical, psychological, social, and spiritual realms of life. One way to achieve or restore balance was to *caiv*/***, which means doing specific activities and eating specific foods, while avoiding certain activities and foods. (Culhane-Pera & Xiong, 2003; Cha, 2003; Thao, 1986).

* Indicates White Hmong dialect

** Indicates Blue Hmong dialect



To help Hmong families continue their adjustment to life in America, clinic staff can emphasize their healthy traditional cultural practices, build upon their cultural pride, and encourage people to use these same behaviors in the United States. Staff could say, *“Traditional Hmong ways of eating and drinking are better than ways of eating and drinking now.”* (Hmoob kev noj haus thaum ub zoo dua kev noj haus tamsim no*/ Moob kev noj haus thaum u zoo dlau kev noj haus taamsim nuav**.) Or they could say, *“Traditional Hmong culture was better than American culture.”* (Hmoob kev coj noj coj ua thaum ub zoo dua kev coj noj coj haus Meskas*/Moob kev coj noj coj ua thaum u zoo dlua kev coj noj coj haus Meska.***) Clinic staff can ask everyone about their sense of being healthy and in balance, or being unhealthy and out of balance, and inquire about how their emotional, social, and spiritual health are influencing their physical health and lifestyle choices.

Developing a trusting relationship with Hmong patients, clinic staff can build upon these traditional cultural strengths by encouraging people to:

- Be a healthy weight, balanced between not too thin and not too large.
- Take care of themselves so they can take care of the family.
- Eat a traditional diet of healthy foods and avoid unhealthy food.
- Eat a balanced amount of food, not too little, but not too much.
- Add physical activity so they can sweat, breath heavily, and have strong muscles.
- Stop behaviors that can harm health--such as drinking pop and fruit juices, and using tobacco.



Recommendations for Healthcare Organizations to Promote Healthy Lifestyles in the Hmong Community

General recommendations for administrators of clinics and health-care organizations to support clinic staff to promote healthy lifestyles

Hire multicultural and bilingual personnel and trained interpreters from the communities that the clinic serves.

For those clinics who serve Hmong patients, we support bilingual/bicultural community members throughout the organization, such as doctors, nurses, medical assistants, nutritionists, health education counselors, care coordinators and community health workers. We encourage clinics to hire and work with trained medical interpreters to ensure high quality communication, which can lead to effective health care diagnoses and plans.

Educate clinic staff about how to promote culturally-responsive health care for the Hmong community.

To be grounded in patient-centered care, clinic staff members need to understand patients' cultural needs and desires, and tailor their healthcare approaches to explore and respond to patients' personal attributes, including culture. Multiple "culturally appropriate health care" models exist. We recommend "The Healing by Heart Model of Culturally Responsive Care" because it is comprehensive, and was developed in Minnesota in conjunction with Hmong healthcare professionals based on interactions between Hmong patients, their families, and health care professionals. (See Appendix B: Culturally Responsive Care.) We also recommend multiple resources for staff to learn about Hmong history, culture, and culturally relevant issues for health care. (See Appendix C: Staff Educational Resources.)

Educate clinic staff about how to promote culturally-responsive healthy lifestyles for the Hmong community.

In general, clinic staff may benefit from understanding the rationale behind the shift of focusing on patients' reasons for their clinic visits to exploring and supporting patients' healthy lifestyle choices in order to ensure long-term health and avoid chronic diseases. We support the ICSI Healthy Lifestyles Guidelines that direct clinical staff to ask, identify, counsel and refer patients to improve their health by being a healthy weight, eating well, being physical active and refraining from tobacco. In particular, clinic staff may benefit from these guidelines, exploring how history and culture can influence human behavior choices about healthy lifestyles.

Develop electronic medical record (EMR) entry categories and decision supports so clinic staff can record patient's height, weight, diet, physical activity, tobacco use; can calculate body mass index (BMI) for adults and BMI percentile for children; and can present BMI categories for both mainstream BMIs and Asian BMIs.

The World Health Organization (WHO) set cut off categories for BMI in the 1990s and then revised them in light of data interpretation that different weights can have different impacts on cardiovascular risks for different populations, particularly Asians. Hence, consider alternative cut-off points for Asians: overweight at 23 and obese at 25. (WHO Expert Consultation 2004).

Train staff to deliver key messages, brief counseling techniques and motivational interviewing approaches that staff can use about healthy lifestyles.

It is best for staff to start by asking patients about themselves, and listen to them tell their life stories that are relevant to healthy lifestyles. We propose specific approaches and language below, for weight loss, diet, physical activity, and tobacco. Training staff in motivational interviewing can benefit discussions of healthy lifestyles as well as other aspects of medical care (MINT 2015).



Make sure that educational materials in the clinic are culturally and linguistically appropriate and easily accessible in the clinic.

Written brochures and video materials should be low literacy English and White Hmong/ Green Hmong, and should contain Hmong or Asian images with Hmong artistic design.

Develop relationships with Hmong community leaders and organizations that serve the Hmong community to create and promote culturally appropriate wellness programs.

Develop and promote workplace wellness programs at the clinic, support patients to use their workplace wellness programs, and encourage workplaces in the community to develop their workplace wellness programs.

Encouraging Hmong employees to participate in healthy lifestyles (for weight, diet, physical activity, and tobacco) in the workplace is important for their health and can lead to improved insights to help patients.

General recommendations for clinic staff to promote healthy lifestyles in the Hmong community

Work in teams.

Fulfilling the clinic's goal to support patients' healthy lifestyles requires that all staff members who interact with patients participate in promoting healthy lifestyles. The team consists of the front desk staff, medical assistants, nurse assistants, nurses, and clinicians (often referred to as the healthcare provider whether doctor, physician assistant, nurse practitioner, or midwife), as well as specialist referral staff such as social workers, nutritionists, diabetes educators, fitness trainers, etc. Since limited English proficiency patients require medically trained interpreters, staff members need to have skills to communicate effectively with interpreters. Interpreters should facilitate communication and should not be expected to provide counseling, health education, or health care. As many lifestyle issues are connected with mental health issues, we recommended having a mental health counselor on the team who is skilled in counseling multicultural populations to incorporate a more holistic, integrative health approach.

Ask or accurately measure and record everyone's height, weight, diet, physical activity, and tobacco use into the EMR.

Since some patients may be defensive about their habits and lifestyles, these questions need to be discussed in a courteous manner.

Use three techniques for patient-centered care:

1. **Assess readiness to change:** Pre-contemplative, Contemplative, Preparation, Action, Maintenance. (Prochaska & DiClemente, 1983; Zimmerman et al., 2000).
2. **Follow 5As:** Assess, Advise, Agree, Assist, Arrange (Glasgow et al., 2003).
3. **Use motivational interviewing** (Miller and Rollnick, 2013; Rollnick et al., 2010; Rosengren, 2009) and shared decision-making approaches. (MINT, 2015; ICSI, 2015).

While there are no study results to support or not support the use of these three approaches to increase healthy lifestyles in the Hmong community, our expert opinion is that these approaches make sense. Understanding where patients "are at" with respect to change is the first step, which dovetails with Assess. Elicit people's stories, feelings, and desires; relate their habits to how they feel or what they see in their children; and explore people's desires and fears about change. Specifically, the motivational interviewing approach will encourage patients to speak about themselves, and help patients identify their specific desires and create a plan that fits their specific situation. Shared decision making is consistent with Hmong cultural value that patients and family members rather than doctors make decisions that are right for them.



Deliver key messages to support people's motivations to be healthier.

Each section below has our recommended key measures about **weight, diet, physical activity, and tobacco**. In general, our key messages are:

1. Being heavy, eating poorly, not being physically active, and using tobacco are bad for your health.
2. When you make changes, you will feel better.
3. When you make changes, you will be healthier. You can prevent diseases such as diabetes, heart disease, strokes, chronic obstructive pulmonary disease (COPD), and cancer.
4. You are role-model for your children and grandchildren—they learn from you. So act like you want them to act.

Work with patients (children, adolescents, and adults) to set goals together - minimal, healthier, optimal goals.

Use motivational interviewing and patient-centered approaches to identify and set goals, which are appropriate for each person. (See below for specific goals for each topic area.)

Deliver efficacious clinical interventions.

People unwilling or not yet ready to try to change behaviors should be provided with brief messages to increase their motivation to engage in more healthy lifestyles. Let them know they can return when they want more assistance. People willing to change behaviors should be provided with effective supportive treatments in the clinic and referred for more assistance, whether within the clinic or outside the clinic at community-based resources. Decisions to change behaviors should be followed up at future visits and by phone calls.

Develop trusting relationships with Hmong patients.

In general, it is important to establish a good and trusting relationship with Hmong patients and families, as one works to support changes in lifestyles. This means spending time to get to know people, listen to their experiences, understand their perspectives, and have an open mind about their various lifestyle practices.

Promote healthy lifestyles for all family members, so individuals are supported as they implement or strengthen their healthy lifestyles.

We encourage clinicians and staff to not just focus on patients as individuals, but rather expand their focus to include family members (such as spouses, parents, grandparents, children, and grandchildren), as family members can support individuals in making changes, and the family can make changes that can help individuals.

Use culturally and linguistically appropriate educational materials in the clinic.

While many teenagers, young adults, and middle-aged adults are literate in English, everyone is not, especially middle-aged adults and elders, and young adults who have recently arrived from Southeast Asia. In addition, not everyone is literate in Hmong. Clinic staff members need to evaluate literacy skills and tailor educational materials to meet them. Audiotapes or videotapes are the best media to reach non-English literate people, and should represent Hmong people, although face-to-face 1:1 sessions are the best means of communication. Written educational materials should be brief and concise, include images, be written in fifth grade English and in Hmong language (usually White Hmong but could also contain Blue/Green Hmong dialects), show culturally pleasing images such as Hmong people, and use cultural concepts to convey messages as much as possible. (See Appendix D: Patient Educational Resources.)



Promote Healthy Weight

Data about weight in the Hmong community

There are no longitudinal epidemiological studies examining the trends and rates of obesity and overweight in the Hmong community, and there is no BMI data on refugees' arrival in the 1980s-1990s. (However, our assessment of 1980s-1990s pictures of people in Thai refugee camps and in the US reveals that there were mostly thin people (BMI <25) and very few obese people (BMI>30)). A 2005 cross-sectional community study in Wisconsin found that rates of overweight and obesity in Hmong adults, who had been in the US for up to two decades, were 49% and 31%, respectively (Her & Mundt, 2005). For adult refugees who arrived from Wat Thamkrabook in Thailand into Minnesota in 2004-2006, rates of overweight and obesity were 33.4% and 14.8%, respectively (Culhane-Pera et al., 2009). A school-based study among Hmong adolescents found that more than 50% of study participants were either overweight or obese (Mulasi-Pokhriyal & Smith, 2010); and a Wisconsin middle school study cited overweight as a major issue for Hmong pre-teens (Chang, 2005). Several studies examining body image in Hmong adolescents showed high levels of body dissatisfaction among Hmong adolescents (Arcan et al., 2014, Mulasi-Pokhriyal & Smith, 2011, Stang et al., 2007). One study found that Hmong adolescents tended to diet and engage in unhealthy weight-control behaviors than their White counterparts (Arcan et al., 2013). A multi-ethnic study in Minneapolis-Saint Paul schools with 451 Asian teenagers (mostly Hmong) found that there were more parent-adolescent conversations about weight amongst Asians than Whites; particularly for overweight and obese teenagers. Indeed, the majority of Asian teens have had parent-teenage conversations about eating (68%), being physical active (67%), and weight size (50%) (Berge et al., 2015).

Cultural information about weight in the Hmong community

The traditional view of health is one of balance – balance between physical, social, and spiritual realms (Culhane-Pera & Xiong, 2003, Cha, 2003; Thao, 1986). This balance also applies to weight; those who were underweight and malnourished were seen as being unhealthy, weak, and more likely to get sick and die, and those who were heavier were seen as being healthier, stronger, and less vulnerable to life-threatening illnesses. Similarly for children, skinny malnourished (*yuag yuag*/ntxaug ntxaug***) babies, toddlers, and children were not viewed as healthy as fat and chunky (*pham pham*/phaam phaam***) babies, toddlers, and children (Culhane-Pera et al., 2002). This traditional view of weight hardly applied to being “too heavy”, as the subsistence agricultural existence on Laotian mountains did not support many fat people, and there was probably no empirical evidence that fat adults were less healthy than skinny adults especially given the low life expectancy (Yang, 1993). Nonetheless, there was an association between heavier weight people and wealth; those who had enough to eat could be heavier while poorer people with little food could be emaciated, malnourished, and more vulnerable to illness.

Programs to promote healthy weight in the Hmong community

There are no randomized control trials comparing effectiveness of different approaches to guide our recommendations for programs to promote healthy weight loss in the Hmong community. Several of the published articles about weight, diet, and physical activity end with recommendations for culturally tailored programs for the Hmong community (Arcan et al., 2014, Carter et al., 2007).

Specific recommendations for clinic staff to promote healthy weight- Measure and document everyone's height and weight; calculate body mass index (BMI); explain BMI to people and inform them about their results.

- While BMI is one tool to assist people in understanding their weight, health and risk for cardiovascular disease, there is minimal comprehension within the community. Hence, it is necessary to clearly

* Indicates White Hmong dialect

** Indicates Blue Hmong dialect



explain BMI in simple terms and graphics. (Example: "BMI between 18 and 24 is considered a healthy weight for your height and above 25 is considered too heavy. The higher the number, the higher your risk for developing heart disease.") While ICSI recommends WHO's BMI, it might be relevant to use alternative cut-off points for Hmong patients in Minnesota: BMI 18-22.9 is healthy weight; 23-24.9 is overweight and >25.0 is obese. (WHO expert consultation 2004) Staff members can explain to patients that Asians can have more adverse effects at lower weights for height than Caucasians.

Ask about people's weight in a respectful manner. It is important to elicit people's stories, feelings, and desires, examining issues that influence people's desires for change as well as difficulties or barriers to change.

- For adults, teens and older children, "What do you think about your weight? For your height, is your weight just right, too little or too much? Do you want to change your weight? If so, we can help you."
- For children, ask parents and grandparents, "What do you think about your child's weight? For your child's height, is the weight just right, or too little or too much?"
- For overweight children, "I am concerned about your child's weight. He/ she is too heavy for his/ her height." (Show graph).
- Then ask them what they have seen: "What have you noticed about your child's ability to move and breathe? Can he/ she run and play? How is his/ her breathing when he/she walks, runs, or sleeps? Have you been able to find clothes that fit him/ her? Does this concern you?"
- Then offer help: "We can help you and your child be a healthy weight."

Use three techniques for patient-centered care about healthy weight.

- Assess readiness to change (pre-contemplative, contemplative, preparation, action, maintenance).
- Follow the 5As (Assess, Advise, Agree, Assist, Arrange).
- Use motivational interviewing and shared decision-making approaches.

Deliver key messages about healthy weight for overweight and obese people in a respectful manner.

- General messages for adults and adolescents:
 - ◇ Some weight loss (even 5-10 pounds) can improve your health.
 - ◇ You will feel better--lighter, less short of breath, and more energetic.
 - ◇ You will decrease your risk for diseases like diabetes, high blood pressure, heart attack, stroke, and kidney failure.
 - ◇ You will be better able to take care of yourself and your family.
- Specific messages for adults and adolescents:
 - ◇ Writing down your weight, and measuring your weight every week at home could be helpful.
 - ◇ Talk with your family. Perhaps other members of the family want to lose weight together.
 - ◇ (See below for specific recommendations about diet and physical activity.)
- General messages for children:
 - ◇ Your child is at the 95th percentile of weight for his/ her height. This means that...
 - ◇ Your child will feel better--lighter and stronger if s/he did not weigh as much.
 - ◇ If your child stays at this weight, as his/her height grows, s/he will no longer be heavy.

Set goals together with adult and adolescent patients - minimal, healthier, optimal goals.

- Minimal goal: Do not gain weight.
- Healthier goal: Lose 5-10 pounds.
- Optimal goal: Lose enough weight so BMI in healthy range.

Set children's goals together with children and parents together.

- Minimal/ healthier/ optimal goal: Avoid gaining weight, as height increases.



Deliver efficacious clinical interventions.

- For those not yet interested in losing weight, clinic staff can provide brief statements to increase their motivation to change. These specific motivating statements should be related to the patient's specific challenges, or barriers, identified through motivational interviewing. (See Healthy Nutrition and Physical Activity below.)
- For those interested in losing weight, clinic staff can explore issues about diet and physical activity, and refer to nutritionists and community programs. (See Healthy Nutrition and Physical Activity below.)

Promote healthy weight for all family members.

- We encourage clinicians and staff to not just focus on patients as individuals, but expand their focus to include family members (such as spouses, parents, grandparents, children, and grandchildren). Family members can support individuals in making changes, and families can make changes that can help individuals.



Promote Healthy Nutrition

Data about diets in the Hmong community

The literature on diets in the Hmong community is sparse. The various studies that examined diets within the Hmong community suggest that traditional Hmong diet in Laos may protect against obesity and chronic diseases, such as diabetes (Chen et al., 2014; Harrison et al., 2005). However, the acculturation of an American diet has led many Hmong to experience dueling cultural norms in regard to healthy eating (Mulasi-Pokhriyal & Smith, 2011). Consequently, perceptions of healthy eating among Hmong adults and children are often muddled between traditional and American diets. Additional studies examining diets among young Hmong adolescents further illuminate this issue of dueling cultural diets (Arcan et al., 2007; Smith & Franzen-Castle, 2012). Data from these studies particularly show that Hmong adolescents consume less vegetables, fruit, and milk, and consume more fast food and sport drinks compared to their white counterparts (Arcan et al., 2007; Smith & Franzen-Castle, 2012). As Hmong children are in the process of acculturation, they are transitioning away from the more traditional Hmong diet, to a higher fat and calorie diet. As a result, it seems that rates of obesity and overweight within the Hmong community are rising.

Cultural information about diet: Infants, children, adolescents, adults, and elders

Historical food activities

As subsistence farmers in the highlands of Southeast Asia, Hmong villagers grew multiple varieties of rice and vegetables during the rainy season, raised farm animals (chickens, pigs, and cows), grew field corn to feed to their livestock, hunted wild animals, and harvested forest foods, such as bamboo shoots and bananas (Cooper, 1984; Kunstadter et al., 1978; Yang, 1993). Traditional daily meals generally consisted of rice, vegetables and meat, if vegetables and meat were available; or rice and vegetables; or rice alone if there was not anything else to eat (*noj mov qhuab xwb*/***). Traditional ritual foods (such as those served at New Year, weddings, funerals, or healing ceremonies) generally consisted of boiled pork, beef, or chicken, with boiled vegetables and rice. Rice, being a staple food, was the center of all meals, and was consumed in higher quantity than any other food. Indeed, the words “eat rice” (*noj mov*/***) are always coupled, as people do not eat unless they are eating rice. Foods were mostly boiled, but could also be fried (with pork fat or lard after a pig was slaughtered), steamed (such as sticky rice cakes) or roasted over an open fire. The major spice was salt (*or salty salty daw ntsev*/dlaw ntsev***), spicy hot peppers (*when combined together created kua txhob*/hov txhob***), herbs and sometimes black pepper (especially for postpartum women). The major food preservation methods were salting or pickling, and drying over a wood fire. In Laotian villages, people drank water directly from high mountain streams or after boiling, to ensure it was clean. Likewise, in Thai refugee camps, people also boiled the bottled water they obtained from camp officials.

Traditionally, everyone in a Hmong household would sit and eat food together. The rice plate, the bowls of boiled vegetables, and the bowls of boiled salty meat were placed in the middle of a low table, where everyone could dip their spoons into the plates and bowls until the food was gone. This “family meal” would be extended to any guests who were present in the home or who arrived during mealtime, as the cultural value of hospitality around food was strong. Indeed, the words “Let us eat rice” (*peb noj mov*/***) were always coupled together and the words “eat until you are stuffed” (*noj tsau tsau plab*/noj tsau tsau paab***) were said repeatedly from the cooks and hosts to the family members and guests, as signs of hospitality, wealth, generosity and wishes of well-being. The household women, particularly the young daughters-in-law, were the everyday cooks, teaching children to be independent with food preparation, while the household men were active during animal slaughters and cooking meat outdoors on festival days, as well as catching fish and hunting wild game, such as deer. The historical reality was that people did not always have enough to eat. A cultural work ethic was valued, in order to have enough to eat, and a large body size was valued

* Indicates White Hmong dialect

** Indicates Blue Hmong dialect



as a display of health, and wealth, so being fat (*rog*/***) was preferable to being skinny (*yuag yuag*/ntxaug ntxaug***).

Current food activities

Many of these cultural practices persist today: inviting people to eat together; sharing what food they have with others; extolling guests to “eat until they are stuffed”; eating a balanced meal of rice, vegetables, and meat; eating fresh foods rather than processed foods; nuclear and extended families cooking and preparing food together (particularly during ritual meals); teaching cooking and food preparation techniques to younger generations; men fishing, and hunting animals for family members to eat; family members growing their own gardens of fresh vegetables and herbs; and being active in local farmers’ markets. People’s cultural identity and social connections are related to food, cooking, and eating together (Vue et al., 2011). People’s preferences for home grown fresh vegetables and animals continue, as they work their own gardens, and butcher their own chickens, pigs, and cows at live markets. However, people’s preferences for organic foods do not always translate into their gardening without pesticides or their raising animals without chemicals, given current farming and animal husbandry practices. People’s concerns about unsafe tap water mean that they either buy bottled water or get spring water (both of which do not contain fluoride) or they boil and/or filter tap water at home.

However, some changes are happening, which can be tied to the growing obesity epidemic. While some people, particularly the elderly, still eat the traditional Hmong diets of boiled or steamed rice with vegetables in water, with a little meat to supplement, others are eating meats three times a day along with their rice and vegetables, or are eating more meat than rice and vegetables. In addition, ceremonial foods are being consumed more often, as most weekends people attend ceremonies and social events, such as funerals, weddings, birthdays graduations, soul calling rituals, shaman rituals, church baptisms and festivals, and parties for visiting family and friends. Over time, these “parties” have become more lavish, with more foods, more meat, more fatty foods, more soda and alcohol, as families respond to the social pressures of expressing wealth and hospitality, and lavishly demonstrating their love and care for family members who are being honored. Many have embraced higher calorie foods that were traditionally Asian foods (Chinese, Laotian and Thai) as Hmong meals (such as *fer (fawm)*, noodle soup, and *khaopeun* coconut curry soup with noodles and fried egg rolls). Still others are eating more “American” foods (hamburgers, French fries, pizza, spaghetti, etc.).

Decisions about food –from purchasing to preparing to eat—are made by a variety of people. They could be made by the male or female “household head”, or by the eldest family members, or by the daughters-in-law, with input from other family members, including children based on what they want to eat. Time constraints and economics influence purchasing choices. When parents feel time constraints because they are balancing work, school, and family responsibilities, they may stop and buy prepared Asian and American foods for their family to eat. Some people note that eating healthy is not cheap. Economically, large bags of rice and ramen noodles provide the most people with full stomachs at the lowest price; meat is purchased most cheaply by freezing meat from recently butchered cows or pigs; vegetables are cheapest after the family garden harvest or at Hmong farmers’ market venues, and then become more expensive at other seasons; and fruits are the most expensive of all. Adults’ busy lives that balance work and family obligations may mean that adults find it difficult to purchase and cook nutritious healthy foods and easier to purchase convenient but unhealthy fatty fast foods (Perez &Thao, 2010; Vue et al., 2011).

Many families eat two meals a day, lunch and dinner, although some eat breakfast also, and eligible children may eat breakfast at school. As a daily routine in some households, different foods are cooked and eaten by different generations. The elders may eat traditional boiled foods along with pickled vegetables and adults eat fried Asian foods, while the teenagers and children eat “American” foods. People may snack (perhaps some children snack throughout the day without sitting to eat meals), or do not snack at all (and then children are very hungry at mealtime).

Overall, it seems that people are eating larger quantities, more fat, more meat, and more salt than ever



before. There is a cultural practice of eating more to satisfy your appetite. When asked to eat less, some people experience flashbacks to being starving refugees again, whether running from the soldiers in the jungles of Laos, or living in the Thai refugee camps waiting for resettlement to the United States.

Pregnant and Breastfeeding Women

Traditional culture prescribes behaviors for pregnant, post-partum and breastfeeding women, which women followed in Southeast Asia and generally continue to follow since resettlement (Culhane-Pera et al., 2014; Rice, 2000). Generally, there are no food limitations and no prescribed amount of weight gain during pregnancy, although women should eat well, gain weight, and be physically active. Some pregnant women in the US avoid prenatal vitamins because they are concerned about vitamins causing large babies who are harder to deliver. The post-partum period of 28 days has specific recommendations to ensure restoration of women's health, fertility, and breast milk supply, based on a system of physical and metaphysical concepts of hot and cold that can restore her relatively cold body back to a healthy balanced state. Women should stay near home, be warm and stay out of the wind (sit by the fire or heater, not be in air conditioning, wear hats); only drink hot water or tea; only eat hot or warm foods; and consume a diet of "warm foods" such as rice, eggs, and chicken with herbs, and avoid "cold foods" that could harm her. This post-partum diet is an example of *caiv*/***, which means doing specific activities and eating specific foods, while avoiding certain activities and foods to restore a healthy balance.

Breastfeeding women generally breastfed their infants until their next babies were due, or until the child was no longer interested (perhaps 4-5 years of age for the youngest child). Breastmilk was meant exclusively for mothers' babies. Women had to make sure that breastmilk was not drunk by others, did not touch others, and did not fall on the ground (or tradition said that lightning would strike and kill people who came in contact or consumed infants' breastmilk). Nonetheless, some women helped other mothers with breastfeeding when needed. These prohibitions and American societal barriers make pumping and storing breastmilk difficult for some women. While almost all Hmong women breastfed when they initially arrived from Thai refugee camps in 1980-2000, over time most families have transitioned to bottle feeding of formula, for a myriad of reasons. Young reproductive age women are often going to school or working, so their family members (mothers-in-law, mothers, or others) bottle feed infants with formula, so babies are content/happy with their caretakers and do not cry for their mothers' breasts. Now it seems that while most infants are still formula fed, some Hmong women are breastfeeding and even pumping—mostly college educated women who express health reasons for breastfeeding their infants and are less concerned about traditional cultural taboos.

Infants, Toddlers, and Young Children

The traditional cultural view of raising children can be characterized by one word: *hlub*/***, or love, which is both emotion and action (Culhane-Pera et al., 2002). Motivated by *hlub*/**/love*, parents and grandparents do everything they can to please babies and young children, to keep them happy and keep them alive; otherwise their bodies may be too weak to survive, or their souls may be too unhappy to stay, with disastrous consequences. And certainly in Laos, the infant mortality rate was high (Kunstadter et al., 1978; Yang, 1993.) Since *hlub*/**/love* translates into giving infants and toddlers what they want, parents and grandparents tend to give the breast or bottle when children cry or fuss (Naftali & Thao, 2003), give them foods they want when they want, do not insist upon foods they do not want, do not insist upon mealtimes but allow snacking throughout the day, and may be more concerned about "picky eaters" than about "overeaters".

Concurrently, the traditional view about weight is that chunky (*pham pham*/phaam phaam***) babies, toddlers, and children are healthy because they are well nourished, while skinny (*yuag yuag*/ntxaug ntxaug***) children are not healthy because they are malnourished. Hence, feeding infants and young children with as much milk and foods as they desire when they desire so they are happy, contented, and fat, is seen as good parenting. Also, chunky children can still be seen as a sign of wealth, since their families are able to provide enough food for them, especially for grandparents. Finally, adults know that many children become skinnier as they grow older, and so are not concerned enough to change child feeding practices for overweight or



obese infants and children.

While many parents have been exposed to American ideas of feeding and ideal weight, and may even agree with these ideas, both parents and grandparents are actively involved in childrearing, such that grandparents have tremendous influence over child feeding practices that influence children's behaviors and expectations. Many grandparents see their role as meeting children's requests for food, and do not see the rationale in setting limits, enforcing requirements, or denying foods. Some parents/ grandparents may be concerned about children being obese, but they are uncertain what to do, as children repeatedly demand milk, sweets, or snacks.

Some children have had emotional attachments to bottles, and have had difficulty transitioning to drinking milk in cups. Sucking on a bottle of milk, while awake or while asleep, has led to baby-bottle tooth decay. Similarly, some children have had difficulties transitioning from milk to solid foods, preferring and consuming large amounts of milk, with subsequent iron-deficiency anemia from one year of age through four or five years of age (Culhane-Pera et al., 2002; Naftali & Thao, 2003).

The traditional cultural view of eating is that infants, toddlers, and young children will decide what they will eat and what they will not eat, with parents responding to children's preferences. Several American ideas are in conflict with this traditional view: setting or limiting children to child portion sizes that are less than adult portion sizes; limiting sugary sweets or sugary drinks; denying children's snacks so they can eat more at meal time; assigning fruits and vegetables as snacks rather than chips; and setting expectations about what is eaten or how much is eaten.

Older Children

At some age (around 5-6 years of age), the traditional childrearing view switches and children are expected to do as they are told without complaining, whining, or fussing. They are expected to do their chores, like cleaning, doing laundry, shopping and cooking, and they are expected to eat what is given to them. An old Hmong phrase expresses this well: "You have to eat what you're given. If not, I will cut your head open and fill it up with left-over foods." (*Noj tsi tag ce phua taub hau ntim rau huv*/ Noj tsi taag ce phua taub hau ntim rau huv**.*)

In some households children may be eating a variety of Hmong, Laotian and Asian foods that their family serves, but they also may be refusing Asian foods, and insisting on American foods (like hamburgers, spaghetti, pizza, hot dogs, etc). Parents in some homes are accommodating their children's desires, and buying prepared, or preparing these American foods. Although some parents know that children eat less food than adults, many will serve more than the child can eat. This practice leads to parents and grandparents finishing their children's leftover foods rather than waste the food.

Teenagers

The traditional cultural view of adolescence included the understanding that they would be married and become parents during adolescence, and so needed to have functional adult skills. Since traditional adult skills were gender-based, cooking was mainly a female function. Many female teenagers are actively engaged in shopping and cooking at home, especially those who have more recently arrived from Southeast Asia (Stang et al., 2007). Overall, teenagers are seen as young adults, responsible for home chores, shopping, cooking, cleaning, and deciding what the family will eat.

Currently, teenagers are involved in both cultures, such that they buy, cook, serve, and eat Hmong/Asian, and American foods (Smith & Franzen-Castle, 2012); some prefer to eat high-fat high-sugar "fast foods" of American culture as well as respond to latest American ideas about "healthy eating" (i.e., the latest ideas about carbohydrates, fats, sugars, gluten, etc.) Similarly, they are caught between traditional ideas that large body sizes are healthy and attractive, and American ideals that slim bodies are healthier than obese bodies. One study showed that, in comparison with White teens, Hmong teenagers had higher rates of



body dissatisfaction, had engaged in more efforts to decrease their weight (i.e., dieting), and had used more “extreme” measures of weight control (purging, laxatives, and skipping meals) (Arcan et al., 2014). In one multi-ethnic study in Minneapolis- St Paul schools with 475 Asian (mostly Hmong) teenagers, (Larson et al., 2015), adolescents from all ethnic groups reported higher consumption of fruits and vegetables in homes with family meals, where healthy foods were served, where parents ate healthy foods, and parents encouraged healthy eating. In addition, adolescents with higher BMI-Z scores lived in homes with more unhealthy foods, lower frequency of family meals, and lower parental modeling of healthy food consumption.

Nutrition

While the scientific concepts of “nutrition” are new to Hmong refugees, with divisions of food into macro-nutrients, micro-nutrients, and a panoply of theories about what constitutes a healthy diet, there were cultural concepts about the relationship between food and health. Indeed, cultural concepts of “healthy” and “unhealthy” foods existed. Certainly balanced “healthy” daily meals consisted of rice, vegetables and meat if available, and “healthy” celebratory meals (occurring a few times a year) consisted of large amounts of fatty meat, along with rice and some vegetables. Also, foods were divided into hot and cold foods, with directions about what should be consumed or avoided during hot or cold illnesses; children with fevers were not to be exposed to certain foods (including smelling the odors of fried foods); and post-partum women had to follow specific prohibitions and prescriptions for one month in order to have healthy amount of breast milk and have a healthy return of her menses.

A major scientific concern in the Hmong community is the impact of chemicals on people’s health: soil fertilizers that could be incorporated into foods; sprayed pesticides that kill insects; and antibiotics and super-foods that are fed to chickens, pigs, and cows to enhance their quick and fatty growth, all of which could make people sick, whether by directly poisoning them, or making them fat to develop diseases like diabetes. Despite these concerns, it seems that few people buy organic given the higher price of these foods, and gardeners themselves use fertilizers and chemicals in order to have healthier looking harvests.

Programs to promote healthy nutrition

There are no randomized control trials comparing effectiveness of different approaches to guide our recommendations for programs to promote healthy eating for helping elders, adults, adolescents, children, or infants. There are some pertinent studies that we used to guide our recommendations. Vue et al., (2011) recommended emphasizing the positive aspects of traditional meals and the negative aspects of dietary acculturation, while stressing how to adopt healthy aspects of dietary acculturation. Chen et al., (2014) built on cultural food concepts to successfully engage Hmong children and their parents in cooking healthier foods. Kim et al. (2007) recommended building on healthy Hmong diet (and concepts of healthy exercise) to decrease obesity. The Hmong Health Council in South West Wisconsin (Vang et al., 2013) designed a healthy eating campaign; they created an ideal Hmong plate to demonstrate healthy foods and optional portion size, along with a videotape to illustrate specific aspects of healthy food preparation and eating. (Refer to Appendix D.) Several studies described how eating “American” foods and increased portion sizes could be contributing to obesity (Smith & Franzen-Castle, 2012; Stang et al., 2007).

Specific recommendations for clinic staff to promote healthy diets

Ask and document salient points about people’s diets.

It is not necessary to use a specific instrument such as a 24-hour diet recall for every patient in the routine clinic setting. However, it is important to focus on main points: portion size, amount of rice eaten in a day, number of fruit and vegetable servings, and drinking water rather than sugar added beverages (soda, pop, or juice). People may be confused as to why they are being asked about their eating habits. It is important to explain that the clinic wants to promote Healthy Lifestyles for patients and families and the clinic wants to offer their services to families who want to be as healthy as possible.



Use three techniques for patient-centered care for healthy diet.

- a. Assess readiness to change (pre-contemplative, contemplative, preparation, action, maintenance).
- b. Follow the 5As (Assess, Advise, Agree, Assist, Arrange).
- c. Use motivational interviewing and shared decision-making approaches.

Deliver key messages about healthy diets for everyone, although particularly for overweight people.

Since rice is still a staple food for most people (eating it with every meal), it needs to be the focus of most dietary discussions. Some Hmong doctors stress that people must limit their cooked rice to 1 cup with each meal, or limit the cooked rice to one meal a day. One local Hmong family doctor even tells obese patients with diabetes that “rice is your enemy” (*Mov yog koj tus yeeb ncuab*/***) to dramatize the need to reduce their rice consumption. Learn healthy recipes of Hmong foods on videotapes. (See Appendix D: Patient Education Resources: *More Rice/ Less Vegetables* video and *Dr Phua Xiong’s Health Promotion Videotape*.)

Recommendations for;

- Adults/ families:
 - ◊ The Hmong Healthy Plate. (See Appendix E Resources: The Healthy Plate).
 - ◊ Eat smaller portions- *Caiv qhov ncauj los txo kev noj kom tsawg*/txu kev noj kuam tsawg***.
 - ◊ Eat 1/4 plate of rice (not more than 1 cup cooked rice per meal).
 - ◊ Eat 1/2 plate of vegetable/ salad - more than rice, noodles, or meat.
 - ◊ Eat 1/4 plate of meat.
 - ◊ Eat 2 fruits a day.
 - ◊ Drink water with fluoride—not pop, fruit juice, energy drinks, sweetened milk or alcohol.
- Children, above plus:
 - ◊ Children’s portions are smaller than adults.
 - ◊ Children can benefit from parental guidance and limits about what to eat/drink, and how much to eat/drink. Especially limit pop/juice, and sweets.
 - ◊ Children can assert their preferences when given choices of healthy foods.
- Pregnant women, above plus:
 - ◊ Gain weight but not too much (25 -35 lbs for normal weight women, 15-25 lbs for overweight weight women and 11-20 pounds for obese women) (ACOG, 2013).
- Infants:
 - ◊ Exclusive breastfeeding at least 6 months, continue until 1-2 years of age. Infants benefit more from breastmilk than formula (Horta and Victora, 2013).

Set goals together with adults, adolescents and children - minimal, healthier, optimal goals.

- Minimal goal: Eat smaller portions- *Cais qhov ncauj los txo kev noj kom tsawg*/txu kev noj kuam tsawg***. (See Appendix D.)
 - ◊ Stop eating before you are stuffed.
 - ◊ Use smaller bowls and plates.
- Healthier goal: (USDA and USDHHS 2010).
 - ◊ Eat less rice, eat brown rice, limit white rice, and avoid short grain rice and sticky rice. (Note, brown rice is not white rice with the hulls, it is a different grain).
 - ◊ Limit noodles: fer (fawm), pho (fo), ramen, khaopeun, and pasta.
 - ◊ Use less salt: fish sauce, soy sauce, MSG, and pickled vegetables.
 - ◊ Eat a half plate of vegetables, especially Hmong vegetables. Minimize corn, potatoes, squash, and pumpkin, as they are carbohydrates like rice.
 - ◊ Avoid fatty meat. Remove fat and skin from meat before cooking.
 - ◊ Boil, grill, or roast more than fry.
 - ◊ Fry with small amount of vegetable oil, such as canola oil. Do not use lard or pork fat.



- ◆ Drink filtered tap water with fluoride and not bottled water without fluoride.
- ◆ Limit sugary drinks, fruit juices, beer and alcohol.
- ◆ Limit sweets, sugars and desserts.
- ◆ Eat less restaurant prepared meals.
- ◆ Do not overeat at buffets, family celebrations, or cultural events
- ◆ Eat breakfast.
- ◆ Sit and eat meals together with other family members.
- ◆ Snack on raw vegetables and fruits, not fruit snacks, chips, or cookies.
- ◆ Avoid processed foods.
- ◆ Avoid white bread, French bread and croissants. Eat whole grain/multigrain bread.
- ◆ Drink whole milk until two years of age, and then 1% or skim milk (USDA 2014).
- ◆ Infants need to start solid foods between 4 to 6 months of age.
- ◆ Wean from bottle at 12 months of age.
- ◆ Do not eat sugared cereals.
- Optimal goal: Healthy diet (USDHHS 2010). (See Appendix D: Hmong plate.)
 - ◆ Consider other healthy diets (i.e., Mediterranean, Portfolio, DASH- which most Hmong patients will not be familiar with and would require intensive changes.
 - ◆ Eat 1 cup rice each meal and do not eat rice every meal.
 - ◆ Eat 5 servings of fruits and vegetables each day.
 - ◆ Limit meat and avoid fatty meats.
 - ◆ Drink water, not sugary drinks, fruit juices, beer and alcohol.

Deliver efficacious clinical interventions.

- For those not yet interested in changing their diet, clinic staff can provide brief statements to increase their motivation to change. These specific motivating statements could be related to the patient's specific challenges, or barriers, identified through motivational interviewing. (See Table #1)
- For those interested in changing their diet:
 - ◆ Ask what they are eating. Can do a 24-hour diet recall, but do not ask "What did you eat for breakfast, lunch, and dinner? For snacks? During the day?" as these categories can create false results. Rather, ask: "What did you first eat after you woke up? What did you eat after that? ... after that?" etc, including day and night.
 - ◆ Nutritional counseling/interviewing, especially face-to-face, will probably be the most effective strategy. Clinicians should work to understand patients, and work on supporting patients so they feel inspired and confident to make changes. Follow-up is essential, as well as helping patients find resources and navigate community programs. It might not be necessary to have Hmong counselors if the program/intervention has the right tools, including trained professional interpreters.
 - ◆ Show food portion sizes and work with patients to do meal planning. Can use food models in the clinic that represent Hmong foods, or can use common objects to depict serving sizes, like a cellphone, or a cupped hand to illustrate 1 cup of rice.
 - ◆ Encourage patients to ask questions, which facilitates their knowledge acquisition.
 - ◆ Partner with people to identify barriers to a healthier diet and discover approaches to address them.

Promote healthy diet for families, as it fits well with the culture, living situation, social structure, and time schedule. Families can make changes together, supporting everyone to be more active.

- For parents / grandparents of children:
 - ◆ Emphasize that parents and grandparents are role-models—children will watch and learn from them.
 - ◆ Discuss that while children have preferences and ultimately decide what they put in their mouths, adults can influence those preferences. Encourage parents and grandparents to set rules and



expectations that guide children towards healthy behaviors. Emphasize the difference between shaming children and guiding them to make healthy choices about types of foods and portion sizes. Parents should decide what to buy and what not to buy and parents should decide what to prepare and what not to prepare. Parents can decide whether to make multiple meals for multiple people or just one meal with varieties that everyone has to eat. This approach is consistent with the “Sharing Food Tasks” model that nutritionist use (Ikeda and Mitchell 1998). Parents decide what, when, and where food is served. Children decide how much to eat and whether or not to eat.

- ◆ It is important to talk about the long-term consequences of children’s behaviors, such as milk-induced anemia and milk-bottle tooth decay, stressing the adverse effects on children’s ability to learn well in school.
- ◆ It is important to use non-offensive and non-shaming words, so parents can feel staff are trying to help them.
- ◆ It is important to help parents take responsibility for their actions (such as buying pop, chips, hot dogs, noodles, or whole milk or having bottles in the home) rather than blaming their children for their choices.
- ◆ Acknowledge that change is not easy but that through practice and time, things will change and encourage patients to ask questions.

Table #1

POTENTIAL BARRIERS TO HEALTHY EATING	POSSIBLE APPROACHES TO BARRIERS
Lack of social support from family, friends, and hosts	Encourage people to identify family members who are interested in eating smaller portion sizes and healthier foods. Encourage them to meet together with a nutritionist. Encourage new social slogans for hosts. Instead of “Eat until you are stuffed” say “Eat until you have had enough.”
Finances	Encourage eating smaller portions of cheaper foods such as rice and noodles.
Time/convenience	Encourage strategies for cooking at home or making healthier choices of pre-cooked foods.
Confusion about what foods are healthy and unhealthy	Refer to nutritionist.
Plethora of “Asian” weight loss products	Encourage patients to bring these weight loss products to clinic, to explore pros/cons.
Parents please children by preparing multiple “tasty” and non-healthy foods	Support parenting approaches that offer healthy choices and set limits on portions and types of healthy foods. Tell parents they might need to offer foods many times (even 10-15 times) before children accepts them.



Promote Physical Activity

Data about physical activity

There is a lack of literature on physical activity within the Hmong community. Recent studies examining physical activity have shown that many Hmong have very low levels of physical activity, (Arcan et al. , 2014; Carter et al., 2007; Chang, 2005). One study that examined levels of physical activity in adolescents showed that Hmong adolescents were not meeting the national guidelines for physical activity, and many were not even aware of the national guidelines (Carter et al., 2007). As shown in one cross-sectional study, Hmong youth were only physically active for 2 days out of the 7 days of a week (Shaw, 2010). One multi-ethnic study in Minneapolis- St Paul Schools with 475 Hmong teenagers showed that those who exercised had more support from parents and had more exercise equipment at home than those who did not exercise (Eisenberg et al., 2014). Since their settlement into the United States, it seems the Hmong have become less active and have adapted a generally sedentary lifestyle.

Cultural information about physical activity

Generally, Hmong people understand the importance of physical activity for physical and mental health. The vast majority of adults would argue that they are healthier when are active (sweat and breathe heavily). Activities that foster this are walking around the lake, going to the park, and working in their gardens, rather than sitting inside watching television, babysitting children, cooking foods, or cleaning the house. However, there are multiple barriers or constraints to people's being physically active.

There are no equivalent Hmong words for "exercise" or "physical activity", just words for the activities themselves like working, walking, jumping, and playing soccer. Traditionally in Southeast Asia, Hmong were physically active in the context of their work as farmers, hunters, and homemakers in a subsistence agricultural economy (and ultimately as soldiers), where physical exertion was accompanied by sweating and shortness of breath (Culhane-Pera et al., 2007). There were some games, which children or teenagers rather than adults engaged in, such as "tops" and kataw in mountain villages, and soccer. In the context of their lives, people did not make decisions to go "exercise" or be "physically active" because they were already active in the fields.

In the US, Hmong have asserted that physical activity is important for health (Culhane-Pera et al. 2007; Kim et al., 2007; Nguyen & Seal, 2014; VanDuyn et al., 2007). People stress the importance of breathing deeply and sweating--to sweat out chemicals, poisons, toxins, or illness; indeed, exercising is understood a means to release pressure, a traditional concept important to health. Those who are active say that exercising helps them feel stronger, lighter, looser, and more flexible; they are able to breathe easier; their blood flows better; their heart rate is lower; their bodies are "in shape"; they have less fat; they have better mental health; and improved health as they age. People may now use the English word "exercise" to describe their activities like going to a gym where they sweat, which they may distinguish from "physical activity" (a new and non-specific confusing term) that encompasses daily chores and housework.

Despite the known benefits of exercise, there are many issues that interfere with adults engaging in physical activities. The major barrier, in our assessment, is that people feel the need to be engaged in worthwhile or work-related activities rather than leisure activities. So, exercise while working is acceptable—such as gardening, doing household chores, or taking care of their grandchildren. But if individuals have to stop work in order to exercise, whether to walk with friends, take their children to the playground, or go to the gym, they feel they are wasting their time and/or not using their time productively for their or their family's benefits. Studies show that other barriers to exercise include: being too busy with raising families, working, and doing homework; living in unsafe neighborhoods; limited parks and programs; not having the money for shoes, clothes, equipment, or gym fees; not speaking English well enough to join clubs; being too infirm with illnesses, diseases, or pains; and living in Minnesota with dangerous winters (Culhane-Pera et al., 2007; Kim et al., 2007; Nguyen & Seal, 2014; Perez & Thao, 2010; Shaw, 2010; Van Duyn et al., 2007).



Older adults and elders are generally sedentary, staying inside to take care of grandchildren, be safe, or with their infirmities. Many adults are happiest when gardening—being outside with the sun and wind, and moving their bodies, even if minimal exertion, which is related to their traditional lives as farmers. Elder care programs have been successful in facilitating and supporting elders in exercising at the day care centers, with treadmills, walking programs, yoga, tai chi, ping pong and outings such as bowling. Some gym clubs and community programs, such as the Eastside YMCA, have been successful in gathering Hmong adults, who invite their friends, to participate in the social environment while exercising: from sweating in the hot tub or sauna to walking on the walking path to treadmills and stationary bikes. Because these programs have fees, some community members are unable to participate. Other programs have begun new exercise regimens, such as line dancing and traditional Laotian dancing. Some men exercise intermittently while hunting and fishing. Some adults have purchased treadmill machines for their homes, so they can exercise indoors rather than brave the weather and the unsafe environment. These exercising adults seem to be motivated by diagnoses of illness (such as high blood pressure or diabetes or strokes) more than by desire to prevent diseases.

It seems that over the past 3 decades, teenagers have become heavier, although perhaps more conscious of weight, diet, and physical activity. In comparison with other students, studies show that Hmong teenagers are less physically active (Carter et al., 2007; Chang, 2005; Stang et al., 2007; Voorhess, 2014), have less knowledge about national recommendations for physical activity, and feel that physical activity is less important to their families (Carter et al., 2007). However, some teenagers play sports in school—the most common being soccer and flag football for boys, and volleyball and badminton for girls. Nonetheless, school sport fees, after-school transportation needs, home chores, and homework limit the number of children who can join these sports. Local Hmong organizations teach children to perform traditional as well as newly evolving styles of dancing and qeej^{*/**} playing (a traditional musical instrument that involves physical movement also).

Some people may continue these activities as young adults, with women dancing and both men and women's soccer and volleyball teams playing each other at local and national Hmong tournaments. Indeed, the MN Hmong Freedom Celebration over July Fourth weekend attracts 20,000 to 30,000 people every year to watch the games. While some married adults stay active, often the time constraints of their daily activities such as work, raising children, and running a household make it harder to continue the team sports or find time to exercise. These time constraints are felt stronger by women than men, as they are the main adults responsible for homemaking chores.

Family-based activities are important. Many families with children go to parks to play on playgrounds, walk around the lakes, and fish. However, many grandparents who provide daycare for young children and school-aged children do not allow children to go outside and play, preferring the safety of the home to the potential dangers of neighborhoods and parks. Also, the pull of television and electronic games with increasing screen time decreases kids being physical active. Community organizations and churches conduct organized family outings, and local festivals are based on encouraging physical activities. Examples include the Dragon Festival in August and various soccer tournaments throughout the summer.

Also, family interactions about activities seem important. Studies of parent-teenage interactions show that: Hmong teenagers engage in more moderate and vigorous activities in a positive home environment with parental modeling, parental support of physical activity and exercise equipment (Eisenberg et al., 2014); positive family functioning was correlated with more active teens with lower BMI (Berge et al., 2012); conversations about weight, diet, and exercise occurred more in Hmong families than non-Hmong families particularly with heavier weight children and occurred between fathers and sons as well as between mothers and daughters (Berge et al., 2014).

* Indicates White Hmong dialect

** Indicates Blue Hmong dialect



Programs to promote physical activity

Few studies have assessed the effects of interventions to increase physical activity in the Hmong community. One study showed that Tai Chi with Hmong elders resulted in increased Tai Chi behavior and knowledge, as well as improved flexibility, stress, and blood pressure (Sun et al, 1996). We assume that the findings to promote physical activity for other populations would also be appropriate for Hmong: build on cultural orientations and traditional practices; include social components; use pedometers or some device to support change; and short-term benefits are easier to obtain than long-term benefits.

To increase physical activity for adults and elders, we agree with recommendations from Van Duyn et al., (2007): build on activities that people enjoy doing, such as gardening, dancing, playing sports; ensure and emphasize the social components; and find low cost and free programs that people can access and use easily. In addition, we think giving specific instructions (“walk around Lake Phalen 3 times a week”) rather than general directions (“increase your exercise”) will be more efficacious. For children and teenagers, we agree with the recommendations from Kim et al., (2007): engage parents, provide free afterschool physical activity programs for children (including transportation home), and offer tournaments and community services that involve physical activity.

Specific recommendations for clinic staff to improve physical activity

Ask and document people’s physical activity in the EMR.

- There is no reliable instrument to measure physical activity for Hmong people. We assume that translating proven measurements could be effective in the Hmong community- such as the Global Physical Activity Questionnaire (IPAQ) of or World Health Organization (WHO, 2002 and 2010).
- However, we agree that ICSI’s assessment is also relevant for the Hmong community: “as a practical matter, precise quantification of physical activity is not necessarily essential for clinical interventions, as virtually all individuals would benefit from increasing their current levels of activity.”

Use three techniques for patient-centered care about physical activity.

- Assess readiness to change (pre-contemplative, contemplative, preparation, action, maintenance).
- Follow the 5As (Assess, Advise, Agree, Assist, Arrange).
- Use motivational interviewing and shared decision-making approaches.

Deliver key messages about physical activity in a respectful manner.

- You and your family members will feel better if all of you are more active. Hmong people say they feel stronger, lighter, and looser, and more flexible; they breathe easier; their blood flows better; their heart rate is lower; they have less fat and more muscle; and they feel less stressed.
- You will improve your health if you are more active. People who move more have less diabetes, less high blood pressure, less strokes, less heart attacks, and less kidney failure.
- It is best if you are more active every day, even 10 minutes more every day.
- You can feel better and your health will improve even with small changes, like taking stairs, parking farther away, exercising while watching television, walking after eating, and taking short activity breaks.
- You can feel better and help your health if you make big changes, like walk more every day- inside your house or outside. A pedometer can help you walk more - walking 10,000 steps every day can help you to live healthier life.



- You can join other people who are exercising, playing, and being more active- at a gym or sports team or dance group.
- Move your body so you can sweat.
- You can take care of your family better if you take care of yourself first. You are not “playing” when you are walking or running; rather, you are helping yourself so you can help others. As the proverb says: You need to move your body to have a fresh brain (*Siv koj lub cev mus taug kev kom hlwb tau txais cua tshiab*/ Siv koj lub cev moog taug kev kuam hlwb tau txais cua tshab***).

Set goals together with adults - minimal, healthier, optimal goals

- Minimal goal: Any increase in physical activity is beneficial. Sit less. Elders and people who are out of shape can follow YouTube videos of people exercising in and beside chairs. Limit time in front of screens (TV, computer, iPads, etc.) to less than 2 hours a day.
- Healthier goal: Join other people in age appropriate sports teams and local gyms, and find active people on social media (i.e., Hmong Fitness Group, Hmong Volleyball Group)
 - ◊ Moderate or vigorous exercise plus strength training. (WHO, 2010 and USDHHS, 2008).
 - × Moderate-intensity exercise for 150 minutes a week (30 minutes a day for 5 days a week). Examples include walking, dancing, leisurely biking, volleyball, badminton, gardening, yard work, and cleaning the house.
 - × OR Vigorous intensity exercise for 75 minutes a week (25 minutes a day for 3 days a week). Examples include running, fast bicycling, aerobic dance, martial arts, jumping rope, swimming, soccer, basketball, and heavy manual labor.
 - × Aerobic exercise for 10 minutes, followed by a few minutes of rest.
 - × PLUS strength training (8-12 repetitions of 8-10 exercises) 2-3 days a week.
 - ◊ Optimal goal: Moderate or vigorous exercise plus strength training. (WHO, 2010 and USDHHS, 2008)
 - × Moderate-intensity exercise for 300 minutes a week (45 minutes a day for 7 days a week) or 60 minutes a day for 5 days or 10,000 steps a day.
 - × Vigorous intensity exercise for 150 minutes a week (30 minutes a day for 5 days a week).
 - × PLUS strength training (8-12 repetitions of 8-10 exercises) 2-3 days a week.

Set children and adolescents’ goals together with adults and children.

- Minimal goal: Any increase in physical activity is beneficial. Limit time to just sit, including watching computer and television screens to less than 2 hours a day.
- Healthier and optimal goal: (WHO, 2010 and USDHHS 2008) Join other people in age appropriate sports teams and local gyms.
 - ◊ Moderate-to vigorous intensity exercise for 60 minutes a day
 - ◊ Most daily physical activity should be aerobic.
 - ◊ PLUS strengthening exercises, 3 times a week.

Deliver efficacious clinical interventions.

- For those not yet interested in changing their physical activity, clinic staff can provide brief statements to increase their motivation to change. These specific motivating statements could be related to the patient’s specific challenges, or barriers, identified through motivational interviewing. (See Table #2.)
- For those interested in changing their physical activity:
 - ◊ In the clinic, encourage use of pedometers (even give them away), as a way to have short-term significant increase in physical activity, decrease in body mass index, and decrease in blood



- pressure.
- ◆ Refer people to external organizations that can support advancing physical activity levels, particularly organizations that have group activities (YMCA, Elders Day Care, church groups, etc.)
- ◆ Encourage patients to ask questions, which facilitates their knowledge acquisition.
- ◆ Partner with people to identify barriers and discover approaches to reduce the barriers that impair people's being more physically active. (See Table #2.)
- ◆ Partner with people to identify barriers to being more physically active and discover approaches to address them.

Support physical activities for families.

- It fits well with the culture, living situation, social structure, and time schedule. Families can make changes together, supporting everyone to be more active. Encourage parents and grandparents to see themselves as role-models, because children will watch and learn from them.



Table #2

POTENTIAL BARRIERS TO PHYSICAL ACTIVITY	POSSIBLE APPROACHES TO BARRIERS
Lack of recognition that physical activity is important	Counsel about physical and mental benefits. Relate education specifically to people’s physical complaints, concerns, experiences or diseases.
Time pressures, with family schedule	Encourage to prioritize exercise as family-based activity and organize family’s multiple tasks to include time to exercise.
Value spending time on “productive” actions that benefit the family and not “fun” activities.	Redefine exercise from “fun” to “productive”, because it is necessary for long-term health of individuals that contribute to family’s well-being.
Unsafe neighborhoods	Give lists of parks, playgrounds and recreation areas in generally safe locations. Encourage people to attend outdoor places in groups.
Costly fitness center	Give lists of local fitness programs or centers that are free, have discounts, or include insurance reimbursement. Encourage parents to enroll their children in school activities, local events, and low-cost programs.
Costly exercise equipment	Encourage people to participate in low cost activities (i.e., walking and gardening). Encourage purchase of minimal exercise equipment (i.e., appropriate shoes), and second hand exercise machines.
Fitness centers without language or cultural adaptations	Identify fitness centers that have Hmong staff, Hmong members, or classes with Hmong people.
Cold winter weather	Refer people to indoor places where can walk (malls, etc.). Refer to indoor fitness centers, and outdoor sports programs (with winter clothing).
People’s limitations by physical diseases, ailments, or disabilities	Evaluate and treat physical ailments. Obtain assessment and exercise guide from clinicians, physical therapists, or fitness trainers.
People’s fears that pain with activity could be harmful	Encourage exercising with trainers in groups. Inform people that stretching, strengthening, and conditioning can involve discomfort and discomfort decreases with time.
Elders’ physical limitations	Refer to elder daycare centers that include physical activities (yoga, walking, exercise bikes, etc.).
Lack of seeing other Hmong people exercising	Refer to Phalen Lake East Side YMCA July 4th Freedom Festival at Como Park Dragon Festival at Phalen Lake HAP PA classes East Side Block Nurse (PA) program Top Spin Arena at public space on the east side of Saint Paul
Focus on values of “sweating” that comes from heat rather than from activity	Acknowledge that people will like saunas and hot tubs at fitness centers, and encourage people to sweat through movement also.



Promote Tobacco Cessation and Prevention

Data about tobacco in the Hmong community

The good news is that the overall rates of tobacco use are generally low for the Hmong community in the Midwest. The bad news is that the rates are increasing, as young Hmong men and women start smoking. In 2006-2007, 561 Hmong men and women were surveyed from a population-based listing (Blue Cross and Blue Shield of Minnesota, 2009). The overall current smoking rate was 5% -- 11.8% for men and 0.9% for women. Only younger women smoked (all were less than 35 years old), while both older and younger men smoked (52% were less than 35 years of age and 48% were more than 35 years of age). In 2012, a large clinic system in Minnesota reported their rates for people who reported they preferred to speak Hmong (which would generally be older people). They found that 1% of Hmong speaking women and 8% of Hmong speaking men smoked (Parker, 2010).

In contrast, a convenience sample of Hmong people who attended Wisconsin Hmong community organizations in 2002 reported higher rates of daily tobacco users (Rooney & Choudhary, 2009). Of over 1400 adolescents between 12- 17 years of age, 18.8% of men and 11.7% of women reported daily tobacco use. Of almost 1400 adults more than 18 years of age, 25.3% of men and 12.4% of women and reported daily tobacco use, with few women over 35 years of age. The researchers found that higher rates of smoking were more prevalent among people who were born in the US, had not completed college, and lived with others who smoked. In addition, they found that people generally had low levels of knowledge about the adverse health effects of tobacco. They expressed concern about the high rate of tobacco use over time, citing the dangers of acculturation in promoting poor health. Overall, they recommended addressing the cultural meaning of tobacco to achieve reduction in use.

Cultural information about tobacco in the Hmong community

Several studies have explored the cultural context of tobacco use. The DREGAN study (Diverse Racial Ethnic Groups and Nations) examined tobacco use for four Southeast Asian groups in Minnesota by conducting focus groups with community leaders (Burgess et al., 2014; Blue Cross and Blue Shield of Minnesota, 2006), focus groups with smokers (Burgess et al., 2008; Fu, 2007), and quantitative population-based telephone interviews with Minnesota residents (Constantine , 2010; Blue Cross Blue Shield of Minnesota, 2009).

While some Hmong men in Laos grew tobacco and smoked tobacco, tobacco use generally occurred primarily during traditional ceremonies (such as funerals, weddings and some healing rituals) where tobacco would be offered between head family members as a symbol of respect. In Laos, few men smoked regularly, and those who did may have had increased social status as tobacco may have been a symbol of wealth, or had decreased social status as someone who could not control their urges. However, smoking by Hmong men increased when they became soldiers during America's Secret War in Laos (1960s-1975). As soldiers, men were given tobacco as rewards from their American soldier companions. The Hmong soldiers smoked to relieve the stresses of war, connect with other soldiers, illustrate their social status, and keep mosquitoes away.

Once in the US, some men continued to smoke, from a combination of physical addiction, social connection with others, participation in rituals, and stress of adapting to the US. Some men who had been opium addicts picked up the tobacco habit. Men use tobacco in rituals in various ways, such as offering tobacco in marriage ceremonies as a sign of sincerity.

While many have heard about the dangers of tobacco use, few have specific knowledge about the associated health risks. While many may feel pressure to stop from their families and general society, they report that it is difficult to stop due to acculturative stresses, social isolation, economic hardship, prior psychological and physical trauma, and loss of power status. In addition, they report that commercial tobacco is more addictive than traditional tobacco, which makes their physical cravings a barrier to stopping. Many report they do not know that doctors, clinics, or counseling programs are available to help people stop tobacco, or that



medications are available to reduce the physical withdrawal symptoms.

The younger generation started smoking in the United States, as adolescents in high school or college. They seem to smoke for a variety of reasons: to fit in with their peer group, adjust to American society, deal with social stresses of cultural adaptations and inter-generational conflicts, and express their freedom from traditional societal roles, including gender roles. Many reported experiencing negative reactions from their parents and grandparents, particularly in the 1980s-1990s when youth did not smoke in front of parents, or potential parents-in-law. Young adults may feel less ostracized now, as they are smoking openly in public and are no longer hiding their tobacco use from their elders. It seems that the use of tobacco is aligned with the use of alcohol, which is increasing in homes, in ceremonies such as funerals and weddings, as well as in nightclubs. The ease of tobacco availability, its abundant presence, and advertisements aimed at Asian youth have played significant roles for the increase in smoking among young adults. Some young people have also picked up using other addictive and abusive substances, such as alcohol, marijuana, methamphetamines, and street drugs, such that using these substances has become problematic in the community.

Programs to promote tobacco cessation and tobacco prevention

There are no randomized control trials comparing effectiveness of different approaches to guide our recommendations for tobacco cessation for elders, middle-aged men and women, or teenagers. However, there are some pertinent studies that we used to guide our recommendations.

We believe that clinicians need to expend special efforts to reach out to Hmong tobacco users to deal with language and cultural issues. One study from a large health plan indicated that clinicians prescribed tobacco cessation medications at higher rates for whites and English speakers than for Asians and non-English/ non-Spanish speakers (Solberg et al 2010). We believe that language and cultural barriers may hinder the usual process between doctors and patients, from identifying tobacco users, to discussing tobacco cessation, to creating a plan, and including medications in that plan.

The DREGAN (Blue Cross Blue Shield of Minnesota, 2009) community-based qualitative and quantitative study recommended that tobacco control programs build on the cultural context of tobacco use. For elders, they recommended that clinics inform smokers that doctors can help people quit, teach about specific dangers of tobacco, counsel people on quitting approaches, and create alternative counseling programs such as community-based or peer-based counseling approaches (Fu et al., 2007). They recommended that programs build on the cultural value of acting in ways that benefit the family, clan and community; avoid blaming that could lead to “loss of face”; work with existing social connections; address psychological distress and social isolation; and offer medicines to deal with physical dependence. They stressed the importance of building trust between clinic staff, doctors, or other counselors to establish relationships that could successfully work towards tobacco reduction and cessation.

In their final report, they had 7 recommendations:

1. Develop strategies to counter the negative effects and build on the positive effects of acculturation.
2. Tailor interventions to the unique vulnerabilities of different segments of the community, based on acculturation, age, and gender.
3. Develop tobacco-control programs built upon traditional cultural values and beliefs.
4. Tailor communication promoting knowledge about the harm of smoking to communities' existing levels of knowledge.
5. Address the social isolation and stress that may underlie smoking behavior for certain smokers and may be a barrier to quitting.
6. Modify cultural traditions that work against tobacco control.
7. Develop effective prevention messages for health care providers.



For younger adults and youth, the researchers recommend that tobacco control programs deal with acculturation stress, (including poverty, discrimination, failure to succeed, intergenerational conflicts, and mental health such as anxiety and depression), which seems to be the main trigger for tobacco use and addiction. They recommend involving the peer-kinship network in cessation efforts, as they are the people who may be supporting tobacco use. In addition, they emphasize confidentiality, as some young women keep their tobacco use a secret from their families.

We are only aware of one tobacco cessation study with Hmong smokers. HABIT (Hmong Against Big Industry Tobacco) was a three-year program between Lacrosse County Health Department and several Hmong mutual assistance organizations in Wisconsin, 2003-2005. (See Appendix D: Patient Educational Resources about Healthy Lifestyles.) They made cultural adaptations to mainstream tobacco education curricula (American Lung Association "Take It Outside", American Cancer Society "Fresh Start" and American Heart Association program). For adults, they held individual sessions with smokers and their families. For youth, they held five weekly group sessions. For both, they referred people to the Wisconsin Quitline, with Hmong interpreters. After the program, 72% of adults and 48% of youth reported that they had used less tobacco in the previous 30 days. In addition, surveys of Hmong in La Crosse revealed lower numbers of smokers, increased knowledge about harmful tobacco effects, increased negative attitudes towards smoking, and increased support for anti-smoking policy among both adult and youth participants.

Current and past education efforts to promote tobacco prevention in the Hmong community have included television programs (ECHO-MN), local public service announcements on Hmong radio stations, infomercials or commercials on Hmong television, as well as school-based programs. (See Appendix D: Patient Educational Resources about Healthy Lifestyles.) It seems that community health education is variable and intermittent. While resources do exist, they are disseminated in short spurts rather than promoted with a concerted effort or an overall plan. Certainly, Statewide Tobacco Education and Engagement Project (STEEP) (Xiong et al., 2011), Association for Non-Smokers Minnesota (ANSR), and ClearwayMinnesota have worked and continue to work on decreasing tobacco use through clean indoor air policies and ordinances that include electronic cigarettes, smoke-free multi-unit housing and college campuses, and taxing cigarettes and cigars.

Specific recommendations for clinic staff to support tobacco cessation and promote tobacco prevention

Identify and document everyone's exposure to tobacco.

- Ask in respectful manner, using open-ended questions and listen to people's stories.
 - ◆ Do you smoke tobacco, chew tobacco, or use e-cigarettes? How much do you use? Have you thought about quitting? Do you want help to quit?
 - ◆ Are you or your children around someone who smokes (secondhand smoke)?

Use three techniques for patient-centered care about tobacco cessation.

- Assess readiness to change (pre-contemplative, contemplative, preparation, action, maintenance).
- Follow the 5As (Assess, Advise, Agree, Assist, Arrange).
- Use motivational interviewing and shared decision-making approaches.

Deliver key messages for tobacco and secondhand smoke in a respectful manner.

- Using tobacco is dangerous to your health and to your family members' health.
- Quitting tobacco and avoiding tobacco smoke improves your health and your family's health.
- You are the role-model for your children and grandchildren. If you want them to not use tobacco, you should not use tobacco.
- It may be hard to quit tobacco, but it is possible. Many people have done it.



- I can help you in many ways, depending upon what you want.
- Do not allow smoking in your apartment, apartment building, house, car, or work place. Even if people smoke outside, they still carry the smoke on their clothes.

Set goals together with adults and adolescents - minimal, healthier, optimal goals.

- Minimal goal: Discuss change process--quitting/ reducing tobacco exposure.
- Healthier goal: Adopt and implement an action quit plan.
- Optimal goal: Eliminate all tobacco use/ all tobacco exposure.

Deliver efficacious clinical interventions.

- People unwilling to try to quit can be provided with brief interventions to increase their motivation to quit.
 - ◇ Feedback to increase motivation
 - ✧ Emphasize that tobacco is harmful to smokers and to family members, making educational messages relevant to the person and family. For example, "You have disease (high blood pressure, emphysema, heart attack, etc.), so your children/ grandchildren could have disease (asthma, frequent colds, allergies, etc.)"
 - ✧ Focus on the benefits of stopping being relevant to the person and family. For example, "You will be healthier, you will cough less, you will be sick less, you will have lower blood pressure, and your children/ grandchildren will have fewer breathing problems."
 - ✧ Focus on the savings associated with quitting tobacco and having money for other uses/ needs.
 - ◇ Simple advice, health education, goal-setting, practical suggestions.
 - ✧ Explain how the clinic can help, because many people do not know that clinics can help: counseling, support plans, quit lines, and medicines. "When you are ready to talk about quitting, please return to see me."
 - ◇ Continue to follow-up with patient by office visits, phone calls, or mailings.
- People willing to try to quit should be provided with effective treatments.
- Counseling, goal setting, practical suggestions. Counseling is probably best done by a Hmong health educator, trained in tobacco counseling techniques and familiar with the general cultural issues about tobacco use in the community. As it may not be practical for each clinic to have their own Hmong patient educator, other health educators need to be familiar with Hmong cultural issues about tobacco and tobacco cessation. In addition, clinics could refer patients to community agencies or other clinics that have expertise in tobacco cessation.
- Medicines- nicotine replacement therapy (NRT), bupropion (Zyban®), and varenicline Chantix®). Whether or not to use these medicines may best be approached by shared decision making discussions between patients and clinicians. One study found that clinicians were less likely to prescribe these medicines for minority patients than for majority patients (Solberg et al., 2010); this may mean that clinicians discuss and recommend these medicines less for Asians, or that Asians refuse them more than others. Unfortunately, there is no data on the effectiveness of tobacco cessation medicines specifically for Hmong. Given that some Asians have higher rates of a genetic variant (CYP2A6) that decreases nicotine metabolism than Whites (15%-20% versus 1%), it may be that Hmong are more sensitive to the effects of nicotine, both in tobacco and in replacement therapies (Kim et al., 2007).



- More intensive interventions are more effective; more interaction with a counselor over more time is more effective. (This recommendation was supported by the review articles that looked at treatment programs for minorities (Nierkens, 2012), for Asians (Kim et al., 2007), and for Hmong in the HABILIT program, La Crosse, WI).
- Telephone quit-lines with pro-active counseling increases abstinence in the general population. While there are no studies about Hmong smokers participating in quit-lines, the data for Chinese, Koreans and Vietnamese smokers in California demonstrated that language concordant counselors on telephone quit-lines was an effective strategy for increasing abstinence. Currently Clearway has Hmong interpreters available, but does not have Hmong counselors. We believe that elders would more likely benefit from face-to-face communication than telephone communication, especially if an interpreter is used, but a telephone contact with a Hmong counselor might be effective.
- Group support increases abstinence by those who are willing to attend. Group support in peer-led workshops may be particularly helpful for youth, since they are often smoking to “fit in” and are willing to listen to their peers more than their elders. It may also be effective for elders, although elders will likely feel more comfortable meeting with people they know rather than meeting with strangers. Perhaps support groups could occur in community organizations, community centers, adult day care centers, or public housing centers.

Support tobacco cessation activities with family members.

- As it fits well with the culture, living situation, social structure, and time schedule. Families can make changes together, supporting everyone to stop tobacco, and setting limits on secondary smoke. Encourage parents and grandparents to see themselves as role-models, because children will watch and learn from them.

Table #3

POTENTIAL BARRIERS TO TOBACCO CESSATION	POSSIBLE APPROACHES TO BARRIERS
Tobacco relieves stress/pressure from daily life.	Explore other activities to relieve stress. Identify stressors and create a plan for how to reduce exposure to these stressors
Difficult to quit due to physical addiction (higher genetic predisposition in Asians).	Offer support: nicotine replacement therapies; other medicines; face-to-face counselors; phone therapy.
Fear of weight gain	Refer to nutritionist. Encourage diet and physical activity in conjunction with tobacco cessation.
Smoking socially (with friends, when drinking)	Encourage friends to stop smoking together. Encourage other social interactions. Limit time in clubs and places where people smoke.
Lack of knowledge about quit resources	Explain. Refer to QuitPlan Minnesota and to counselors.
Expensive medicines	If cost not covered through insurance, then they are free from QuitPlan Minnesota. Refer.

Recommendations for the Community

We recommend that existing Hmong community organizations, businesses, and churches expand their activities to provide education, programs, and direct services about healthy lifestyles to community members. We also recommend that existing mainstream community organizations addressing healthy lifestyle activities (such as city, county, state parks, and recreation programs and non-profit organizations) reach out to the Hmong community at large by partnering with Hmong organizations and adjusting programs for language, culture, and socio-economic realities.

We recommend that these organizations create, implement, and evaluate linguistically and culturally appropriate activities and programs for healthy nutrition, physical education, and tobacco cessation. Hmong people—whether families together or individuals—would benefit from these programs and medical clinic staff could refer patients for specific services. We call on local, county and state governments as well as community foundations to increase their funding for partnership programs.

Potential activities include:

1. Community nutrition classes about shopping and cooking healthy meals, as well as parenting skills for children who are picky or demanding eaters.
2. Educational sessions for local grocery store owners to offer healthy foods, and local restaurant owners and food vendors to cook and advertise healthier food menu items.
3. Community fitness classes with fitness trainers and exercise equipment at affordable prices.
4. Sports events and exercise activities such as sports tournaments and walking groups for Hmong adults, elders, and families.
5. Hmong Healthy Food and Physical Activity smart phone apps. In addition, publicize current apps for smart phones and computers that support healthy eating and physical activity.
6. Tobacco cessation classes.
7. Health education materials (written, audio, and audio-visual) for clinic staff to use.
8. Radio and television shows that are engaging and entertaining to support community education about healthy lifestyle guidelines and activities.
9. Flyers and posters about health issues at Hmong venues and throughout the community, so people could post them in their homes (e.g., calendars, posters, magnets, etc.). Posters of Hmong athletes engaged in their physically activity, as they can act as role models for children. Current Hmong sport celebrities include a Hmong golfer, Hmong weightlifter, Hmong bass pro fishing winner, and Hmong ice skater.

In addition, we recommend that schools, children's day care centers, and elder's day care centers provide healthy menus and support physical activity within people's abilities. For children: walking, running, playing, and age appropriate sports. For elders: walking, stretching, exercises on chairs, or using exercise machines. Schools (particularly the Hmong charter elementary and high schools) need to be instrumental in the fight against obesity and tobacco. They should consider preparing healthy meals, supporting consumption of nutritious foods, removing pop and candy machines from campus, teaching about nutrition, requiring physical activity classes, providing free team sport programs, providing transportation home to students who do participate in after-school sports, implementing prevention programs for tobacco and other substances, proving educational support groups for children who are overweight or using tobacco, and carrying messages about healthy lifestyles to the children's families.

Concurrently, programs should be evaluated and results should be available on the internet so everyone can learn what programs, processes and materials are most successful in helping individuals, families, and the Hmong community improve healthy lifestyle activities. Hence, the aim of these guidelines—to assist the Hmong community in improving their healthy lifestyles—will be advanced.

Methods for Developing 2015 Culturally Informed Clinical Practices for Healthy Hmong Lifestyles

The 2015 Culturally Informed Clinical Practices for Healthy Hmong Lifestyles is an expert opinion document. It was developed as a partnership between Saint Paul – Ramsey County Public Health (SPRCPH) and Hmong Healthcare Professionals Coalition (HHPC), with input from Institute for Clinical Systems Improvement (ICSI). A small Planning Committee consisting of Hmong and non-Hmong members from both SPRCPH and HHPC oversaw the process. The Steering Committee worked with three separate focus groups, one focused on diet, one on physical activity, and one on tobacco to create the guidelines. Steering Committee and focus group members were Hmong men and women (and members of HHPC) with professional and personal experience in nutrition, physical activity, and/or tobacco in the Hmong community, whether in clinical or community settings.

For each topic area, we conducted searches on PubMed and Google for published articles, health programs and educational resources. The Planning Committee evaluated all of the materials, created a scorecard evaluation about type of material and relevance for our work, and then placed the scorecard and all materials on a shared Google Drive for Steering Committee and focus group members to review. Led by a facilitator, each focus group discussed the available materials and reflected upon their professional and personal experiences. Our guidelines follow ICSI's 2013 Healthy Lifestyles Guideline format for clinic staff to utilize. HHPC members and two ICSI members reviewed each work group draft. The final draft was reviewed by five Hmong and five non-Hmong health care professionals (three family physicians, general internist, nurse practitioner, physician assistant, and two registered dietitians) in a focus group led by ICSI.

Our Internet searches revealed articles about rates (i.e., dietary intake and knowledge, physical activity of adolescents, tobacco use, and tobacco replacement therapy), Hmong beliefs and practices (about diet, physical activity, and tobacco), descriptions of community-based educational sessions, as well as Hmong language educational resource materials. However, we found no intervention research designed studies and few clinic-based or community-based healthy lifestyles programs or intervention studies with any evaluation. Hence, our guidelines are based on Hmong health care professionals' opinions and experiences and not on evidenced-based criteria.

Planning Committee members

Kathleen A. Culhane-Pera, MD MA, Leader and Consultant; Associate Medical Director, West Side
Community Health Services, Saint Paul MN

Mao Heu Thao, BA, Project Co-Leader; Saint Paul - Ramsey County Public Health

Patricia Barney, MPH, Project Co-Leader; Saint Paul - Ramsey County Public Health

Pa Shasky, BS, Project Co-Leader; Saint Paul - Ramsey County Public Health

Serena Xiong, BA, Student Intern; MPH Student, University of Minnesota School of Public Health

Steering Committee members

The Planning Committee plus:

Duachi Her, MPH

Tou Thai Lee, MPH

Yeng Moua, MS

Blia Vang, RD

Maytinee Xiong, CMA

Healthy Lifestyles Topic focus group members

Nutrition: Blia Vang, Duachi Her, Yeng Moua, Maytinee Xiong, and Pa Xiong

Physical Activity: Blia Vang, Duachi Her, Yeng Moua, and Maytinee Xiong

Tobacco: Thomas Tou Yang (Statewide Tobacco Education & Engagement Project) , Tou Thai Lee, Pa Xiong (Minnesota Department of Health), Alicia Leizinger (Association of Nonsmokers - MN)

Hmong Healthcare Professionals Coalition (HHPC)

The Hmong Health Care Professionals Coalition was founded by Mao Heu Thao in 1995 and currently has over 40 members representing local health departments, hospitals and clinics, health plans, social services, non-profit organizations, and community leaders. HHPC members consist of doctors, nurses, health educators, health interpreters, social workers, program directors, and coordinators who have come together to address health issues in the Hmong community.

Institute for Clinical Systems Improvement (ICSI)

Claire Neely, MD, Medical Director

Jodie Dvorkin, MD, Project Manager/ Health Care Consultant

Acknowledgements

The Planning Committee would like to thank:

Donald Gault, for his support and advocacy, which were instrumental from conception to completion.

Evalyn Carbrey, for her review and edits on the final document.

Kathy Hedin, for her graphic and design skills to produce the final document.

Megan Koral, for making the document available online at: www.ramseycounty.us.



Left to Right: (Back) Yeng Moua, Kathleen A. Culhane-Pera, Blia Vang, Duachi Her
(Front) Mao Heu Thao, Maytinee Xiong, Serena Xiong, Tou Thai Lee

Healing by Heart Culturally Responsive Care Model

Culturally Competence Care.

Culturally Sensitive Care.

Culturally Responsive Care.

These are multiple terms for the similar ideas. Health care providers can provide better patient-centered care when they have some familiarity with people's history, some understanding of the socio-cultural-economic context of people's lives, and some background information about people's cultural beliefs, values, and behaviors. All of these could be influencing people's motivation towards adapting healthy lifestyle activities.

Culturally Informed Clinical practices for Healthy Hmong Lifestyles are based on the ICSI Healthy Lifestyle Guidelines, which is based on principles of patient-centered care, patient-centered communication, and motivational interviewing, all of which require that clinicians have knowledge and skills in culturally responsive care.

There are multiple models for healthcare providers to follow. We recommend the *Healing by Heart Model for Culturally Responsive Care* because it is comprehensive, was created in partnership with Hmong healthcare professionals, and was specifically applied to Hmong patients in the casebook *Healing by Heart: Clinical and Ethical Case Stories of Hmong Families and their Western Providers* (Vawter et al., 2003) (See Figure #1). Three steps are particularly relevant to clinic staff's supporting Hmong patients to adapt healthy lifestyles (III, VIII, and IX.) Clinic staff should:

III. Learn about the prevailing health beliefs, practices, and values of Hmong patients relevant to healthy lifestyles. We have identified these in the Guidelines.

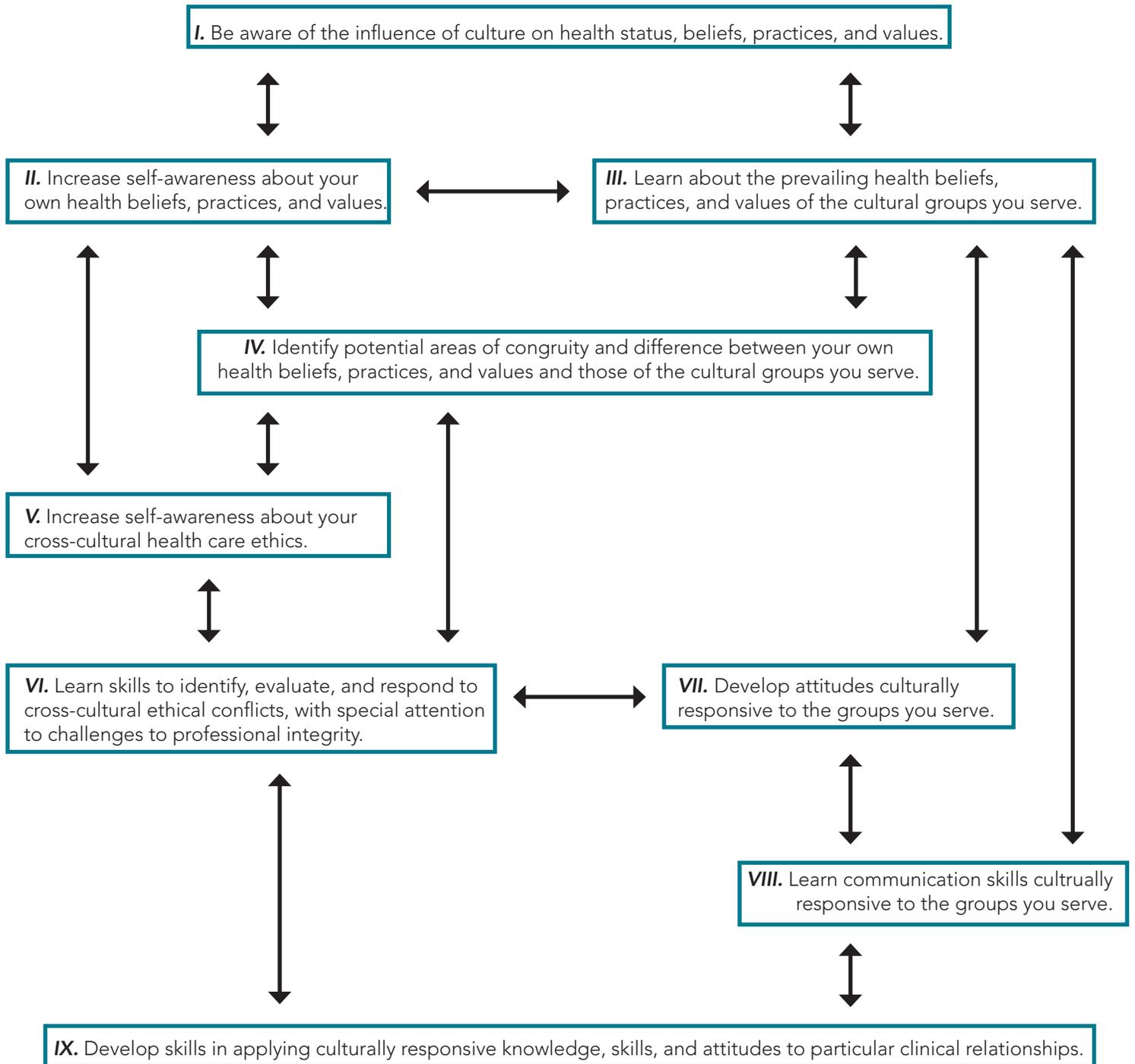
VIII. Learn communication skills that are culturally responsive to Hmong patients. These are basic motivational interviewing counseling skills: inquiring without judging; actively listening to patient's stories; establishing a trusting relationship; exploring patient's desires and goals together; and supporting patient's desires, within their socio-cultural-economic context of their lives.

IX. Develop skills in applying culturally responsive knowledge, skills, and attitudes to inquiring about, exploring, co-identifying goals, counseling about healthy lifestyle behaviors, and supporting patient's lifestyle choices using the Ask-LEARN approach. The acronym Ask-LEARN describes an approach to communication, which is consistent with motivational interviewing (Berlin & Fowkes, 1983). It includes the following:

- Ask open-ended questions.
- Listen to patient's life experiences and perspectives
- Explain your biomedical perspective about the health behavior being considered, and how it could specifically benefit that person.
- Acknowledge similarities/ differences between your perspectives and the patient's.
- Recommend an approach for behavior change.
- Negotiate an approach that is relevant to the conversation, keeps communication open, builds a trusting relationship, and includes a follow-up plan.

Figure #1: The Healing by Heart Culturally Responsive Care Model

Health care clinicians should:



Culhane-Pera KA, Vawter DE, Xiong P, Babbitt B, Solberg MM (eds.)
Healing by Heart: Clinical and Ethical Case Stories of Hmong Families and their Western Providers.
Figure 16.1. Reprinted with permission.

Staff Educational Resources about Hmong Cultural Backgrounds

The complex history of the Hmong people, and the importance of their culture and family can impact their interaction with healthcare systems and staff. Having an understanding of their history and culture can benefit the clinic interaction for both the patient and clinic staff. Below are some additional resources regarding culturally relevant issues for healthcare staff:

Internet Resources:

Hmong Cultural Center: <http://www.hmongcc.org>

Learn about Hmong – Hmong Cultural Center resources: <http://www.learnabouthmong.net>

Hmong 101 – information about Hmong culture: <http://www.hmong101.com>

Hmong Resource Center Library: <http://www.hmonglibrary.org>

Minnesota Historical Society: <http://www.mnhs.org/hmong>

Hmong Studies Journal: <http://www.hmongstudiesjournal.org>

Hmong Studies Resource Center: <http://www.hmongstudies.org>

Carteret, Marcia, M.Ed. "Providing Healthcare to Hmong Patients and Families." Available Online: <http://www.dimensionsofculture.com/2012/01/providing-healthcare-to-hmong-patients-and-families/>.

StratisHealth. "Hmong in Minnesota: Common medical issues and cultural concerns of Hmong patients." Available Online: <http://www.culturecareconnection.org/matters/diversity/hmong.html>.

Videos:



"Providing Culturally-Appropriate Health Care in Minnesota." -Diabetes, congestive heart failure, COPD, high blood pressure, and childhood obesity are growing health problems as the Hmong people become acclimated to Western culture, do less manual labor, and eat more processed foods. Life expectancy has increased significantly for Hmong elders living in the U.S., leading to an increase in chronic disease—a new concept for the Hmong. The Hmong community is traditionally rooted in health beliefs that are intermingled with the supernatural, the spiritual world, and the soul. 50 minutes. Available online: <http://www.culturecareconnection.org/resources/training/dvd-series.html> (\$34.99)



"Health Care in the Global Village: Knowing the Patient." – A 12-minute documentary that provides a brief introduction into the world of a refugee patient from Ethiopia. This documentary shows how the patient, with the help of his wife and his care team, tackles some of the difficult health challenges that stand in his way. Available for purchase online: <http://www.medicinoboxproject.org/dvd-store.html> (\$6.50)



"Health Care in the Global Village: Patient-Centered Care" - This 12-minute health care documentary introduces to some important, patient-centered strategies to be employed in a cross-cultural setting. Available for purchase online: <http://www.medicinoboxproject.org/dvd-store.html> (\$6.50)

Handouts:

Hmong Quick Reference Card: This card includes Hmong words for hello, thank you, and goodbye, the 18 Hmong clan names, and tips for working with Hmong adults and children. The file is designed to be printed two sided and cut into four cards to share with staff.

Available Online: <http://www.culturecareconnection.org/documents/HmongCard.pdf>.

Books:

Cha D. Hmong American concepts of health, New York and London: Routledge, 2003.

Chan S, ed. Hmong Means Free: Life in Laos and America. Temple University Press: Philadelphia. 1994.

Cha,YP. An Introduction to Hmong Culture. McFarland & Company, Inc: North Carolina. 2010.

Culhane-Pera KA, Cha D, Kunstadter P. Hmong in Laos and the United States. In: Ember CR and Ember E., eds. Encyclopedia of medical anthropology: health and illness in the world's cultures. New York (NY), 2004:729-743.

Culhane-Pera KA & Xiong P. Hmong culture: Tradition and change. Healing by heart: Clinical and ethical case stories of Hmong families and Western providers. Nashville, TN: Vanderbilt University Press, 2003;11-68.

Her VK and Buley-Meissner ML, eds. Hmong and American: From Refugees to Citizens. Minnesota Historical Society Press: Saint Paul MN. 2012.

Hillmer P. A People's History of the Hmong. Minnesota Historical Society Press: Saint Paul MN. 2010.

Mattison W, Lo L, Scarseth T. Hmong Lives From Laos to La Crosse: Hmoob Neej Tuaj Los Tsuas rau La Crosse. The Pump House: LaCrosse WI. 1994.

Moua, MN, ed. Bamboo Among the Oaks: Contemporary Writing By Hmong Americans. Minnesota Historical Society Press: Saint Paul MN. 2002.

Vang, CY. Hmong in Minnesota. Minnesota Historical Society Press: Saint Paul MN. 2008.

Yang, KK. The Late Homecomer: A Hmong Family Memoire. Coffee House Press: Minneapolis, MN. 2008.

Patient Educational Resources about Healthy Lifestyles

Healthy Diet and Nutrition

General Resources

- Healthy plates for children: <http://www.choosemyplate.gov/?q=kids>
- Minnesota Department of Health: <http://www.health.state.mn.us/divs/hpcd/chp/cdr/nutrition/foodtips/>
- Saint Paul Local Food: <http://www.stpaul.gov/localfood>
- UMN Extension Program – Cooking Matters classes: <http://www.extension.umn.edu/family/health-and-nutrition/partner-with-us/cooking-matters-mn/>
- UMN Extension Program – EFNEP (Expanded Food and Nutrition Education Program): <http://www.extension.umn.edu/family/health-and-nutrition/partner-with-us/efnep/>
- UMN Extension Program – Healthy and Fit on the Go – many handouts in English, pdfs, even computer games for kids to play: <http://www.extension.umn.edu/family/live-healthy-live-well/healthy-bodies/move-more/healthy-and-fit-on-the-go/>
- CAPI Asian-specific Food Shelf: http://www.capiusa.org/?page_id=23
- MN Department of Human Services (DHS) – EBT/Market Bucks Program: <http://www.northmpls.org/hmoob>
- Minnesota Department of Education – Summer Food Service Program: <http://www.education.state.mn.us/MDE/SchSup/FNS/SFSP/index.html>
- Hmong American Farmers Association (HAFA): <http://www.hmongfarmers.com/programs/>
- Hunger Solutions Minnesota – Searchable Food Help Map: <http://www.hungersolutions.org/map/>

Materials available on the Ramsey County Website

- Be A Good Role Model For Healthy Eating and Exercise Book
- Be A Good Role Model For Healthy Eating and Exercise Video
- UC Berkeley Center for Weight and Health Diet and Physical Activity Pamphlet (Hmong)
- Living Healthy Lives Pamphlet (English and Hmong)
- EBT Farmers Market Brochure (Hmong)
- EBT Farmers Market Flyer (Hmong)
- Foods To Grow On (Hmong)
- Prevent Diabetes Plan (English)

Healthy Diet Videos

- ECHO – Get Fit, Eat Smart, and Be Well: <http://www.echominnesota.org/hmn/library/nutrition-and-exercise-get-fit-get-smart-be-well>
- ECHO – Diabetes Prevention and Control: <http://www.echominnesota.org/hmn/library/preventing-diabetes>
- ECHO – Obesity and Your Health: <http://www.echominnesota.org/hmn/library/obesity-and-your-health>
- ECHO – Preventing Diabetes in Teens: <http://www.echominnesota.org/hmn/library/preventing-diabetes-teens>
- UMN Extension Program – Active Living & Healthy Eating on a Budget: <https://www.youtube.com/watch?v=CaNK7Dhqfuc>
- UMN Extension Program – Obesity and Your Health: <https://www.youtube.com/watch?v=d-ML97nkUzA>
- Healthy Roads Media - straightforward health information in spoken Hmong along with written scripts based on NLM- MedlinePlus, \$18 per video: <https://www.store.healthyroadsmedia.org/>
- Hmong Health Promotion by Dr. Phua Xiong: <https://www.youtube.com/watch?v=0BCLLP0pau4>

Physical Activity

General Resources

- Discounted membership fees at the YMCA in partnership with certain health insurance companies (e.g., Medica, HealthPartner, Ucare, etc): http://www.ymcatwincities.org/membership/health_insurance_reimbursement/
- Scholarships at the YMCA: <http://www.ymcatwincities.org/about/scholarships/>
- Minnesota Department of Health Guide to Creating Walk Groups: <http://www.health.state.mn.us/divs/hpcd/chp/cdrp/physicalactivity/docs/letssofarawalk.pdf>
- Blue Cross Blue Shield (Excellus Members): <https://www.excellusbcbs.com/wps/portal/xl/mbr/hnw/healthyrewards/>
- HealthPartners: <https://www.healthpartners.com/public/health/>
- PreferredOne: <https://www.preferredone.com/health-and-wellness/>
- Ucare: <https://www.ucare.org/HealthWellness/Pages/RewardsandIncentives.aspx>
- Let's Go 5-1-2-0 Pamphlets (English): <http://www.lets-go.org/get-involved/families/resources/>
- Hmong Diabetes Education Video: <https://www.youtube.com/watch?v=mdQhtMLK7FA>
- Hennepin County interactive map about parks: <http://gis.hennepin.us/Parks/Map/Default.aspx>
- Three Rivers Park District: <http://www.threeriversparks.org>
- Walking in Minneapolis- includes maps in English, Spanish, Hmong, and Somali: <http://www.ci.minneapolis.mn.us/pedestrian/>
- Biking in Minneapolis- with maps & videos in English, Spanish, Hmong, and Somali: <http://www.ci.minneapolis.mn.us/bicycles/>
- Active Living Ramsey County: <https://parks.co.ramsey.mn.us/alrc/Pages/activeliving.aspx>
- Saint Paul Fitness in the Parks: <https://www.stpaul.gov/departments/parks-recreation/events-entertainment/fitness-parks>
- Let's Move: <http://www.letsmove.gov/get-active>

Tobacco Cessation

General Resources

- QuitPlan MN: <https://www.quitplan.com/>
- Healthy Roads Media Kick Your Habit Handout: <https://store.healthyroadsmedia.org/hrmhandouts.htm>

Materials available on the Ramsey County Website

- American Lung Association of Wisconsin Hmong Quit Plan
- You Can Quit Pamphlet – Hmong (La Crosse County Public Health Department)
- Tobacco Presentation by Dr. Muaj Lo (Hmong PowerPoint)
- 52 Proven Stress Reducers (Hmong)
- Asthma Triggers (Hmong)
- Clear Your Home of Asthma Triggers (Hmong)
- Symptoms of Recovery (Hmong)
- The Dangers of ETS (Hmong)
- Your Kids Secondhand Smoke (Hmong)
- What To Do When The Craving Comes (Hmong)
- What is Secondhand Smoke (Hmong)

Videos on Tobacco Cessation

- ECHO – The Harm of Commercial Tobacco in Our Communities: <https://www.youtube.com/watch?v=m-6F7kF7SWE0>
- ECHO – Secondhand Smoke in Our Communities: <https://www.youtube.com/watch?v=RjSu6YQFtKc>
- La Crosse County Health Department Tobacco Video: <http://nmlm.gov/bhic/2005/01/05/hmong-tobacco-cessation-and-prevention/> (\$20 per video or DVD)
- Thai Anti-Smoking Ad: <http://youtu.be/lqbLe4EnmEM>

Community Resources for Hmong Adults

- Saint Paul Parks and Recreation Fitness Membership (\$30 per year): <https://www.stpaul.gov/departments/parks-recreation/recreation-centers/fitness-center-memberships>
- Saint Paul Parks and Recreation Programs: <https://www.stpaul.gov/departments/parks-recreation/recreation-centers/programs>
- Minneapolis Parks and Recreation Physical Activity Search: https://apm.activecommunities.com/minneapolis/Activity_Search?detailskeyword=&IsAdvanced=False&ddlSortBy=Activity+name&ActivityOther-CategoryID=22&DaysOfWeek=0000000&SearchFor=2&maxAge=100&NumberOfItemsPerPage=50&Is-Search=true
- Minneapolis Parks and Recreation Annual Events: https://www.minneapolisparcs.org/activities_events/events/
- Gardening in Saint Paul: <https://www.stpaul.gov/departments/parks-recreation/natural-resources/arts-gardens/start-gardening>
- Gardening Matters: <http://www.gardeningmatters.org/>
- Community Garden Directory: <https://www.google.com/maps/d/u/0/viewer?mid=zVzIb6Ne20vI.kOX-VAHLHZLmc>
- Open Gym Hours at Saint Paul Parks and Recreation: <https://www.stpaul.gov/departments/parks-recreation/recreation-centers/open-gym-hours>
- Eastside YMCA Fitness Activities/Programs: http://www.ymcatwincities.org/locations/st_paul_eastside_ymca/health_fitness/

Community Resources for Hmong Teens/Adolescents

- Saint Paul Parks and Recreation Fee Assistance Program: <https://www.stpaul.gov/departments/parks-recreation/recreation-centers/programs/fee-assistance-program>
- Saint Paul Parks and Recreation Teen Centers: <https://www.stpaul.gov/departments/parks-recreation/recreation-centers/programs/teen-centers>
- Saint Paul Urban Tennis Program (Junior Scholarship): <http://stpaulurbantennis.org/sput-scholarship-policy.php>
- Saint Paul Parks and Recreation "Rec Check": <https://www.stpaul.gov/departments/parks-recreation/recreation-centers/programs/rec-check>
- Minneapolis Parks and Recreation Fee Assistance Program: https://www.minneapolisparcs.org/activities_events/recreation_fee_assistance/
- Minneapolis Parks and Recreation Centers: https://www.minneapolisparcs.org/parks_destinations/recreation_centers/
- Minneapolis Parks and Recreation Teen Programs: https://www.minneapolisparcs.org/activities_events/youth_programs/teen_programs/
- Minneapolis Parks and Recreation Camps: https://www.minneapolisparcs.org/activities_events/youth_programs/camps/

Community Resources for Hmong Children

- Minneapolis Parks and Recreation School Age Child Care: https://www.minneapolisparcs.org/activities_events/youth_programs/school-age_childcare/
- Eastside YMCA Summer Programs: http://www.ymcatwincities.org/child_care_preschool/summer_programs/

References

American College of Obstetricians and Gynecologists, Committee on Obstetrical Practice. Weight gain during pregnancy: Committee Opinion #548. 2015. [Internet] [cited 2015 Oct 11]. Available from: <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Weight-Gain-During-Pregnancy>.

Arcan C, Larson N, Bauer K, Berge J, Story M, Neumark-Sztainer D. Dietary and weight-related behaviors and body mass index among Hispanic, Hmong, Somali, and White adolescents. *Journal of the Academy of Nutrition and Dietetics*. 2014;114(3): 375-383.

Arcan C, Neumark-Sztainer D, Hannan P, van den Berg P, Story M, Larson N. Parental eating behaviours, home food environment and adolescent intakes of fruits, vegetables and dairy foods: Longitudinal findings from Project EAT. *Public Health Nutrition*. 2007 Nov; 10(11):1257-65.

Berge JM, MacLehose RF, Loth KA, Eisenberg ME, Fulkerson JA, Neumark-Sztainer D. Parent-adolescent conversations about eating, physical activity and weight: prevalence across sociodemographic characteristics and associations with adolescent weight and weight-related behaviors. *Journal of Behavioral Medicine*. 2015 Feb; 38(1):122-35.

Berge JM, Wall W, Larson N, Loth KA, Neumark-Sztainer D. Family functioning: Associations with weight status, eating behaviors, and physical activity in adolescents. *Journal of Adolescent Health*. 2012; 52(3):351-357.

Berlin E, Fowkes WA. A teaching framework for cross-cultural health care. *Western Journal of Medicine*. 1983; 139:934-938.

Blue Cross and Blue Shield of Minnesota, ClearWay Minnesota, Asian Pacific Tobacco-Free Coalition of Minnesota, Southeast Asian Refugee Community Home (DREGAN). Tobacco use in Minnesota: A quantitative survey of Cambodian, Hmong, Lao and Vietnamese Community Members. 2009 November. [cited 2015 Oct 22] Available from: <http://clearwaymn.org/tobacco-use-in-minnesota-a-quantitative-survey-of-cambodian-hmong-lao-and-vietnamese-community-members-2010>

Bodenheimer T, Lorig K, Holman H, Grumbach K. Patient self-management of chronic disease in primary care. *Journal of the American Medical Association*. 2002 Nov 20;288(19):2469-2475.

Burgess D, Fue S, Joseph A, Hatsukami D, Solomon J, van Ryn M. Understanding smoking cessation among Hmong smokers. *Journal of Health Care for the Poor and Underserved*. 2008 May; 19(2):442-451.

Burgess DJ, Mock J, Schillo BA, Saul JE, Phan T, Chhith Y, et al. Culture, acculturation and smoking use in Hmong, Khmer, Laotians, and Vietnamese communities in Minnesota. *BMC Public Health*. 2014 [cited 2015 Nov 2];14:791. Available from: <http://www.biomedcentral.com/1471-2458/14/791>

Carter S, Goto K, Schuldberg J, Wolff C. Perceived barriers to recommended diet and physical activity patterns among ethnically diverse middle school students. *California Journal of Health Promotion*. 2007; 5(4): 21-31.

Cha D. Hmong American concepts of health, New York and London: Routledge, 2003.

Chang PG, Maher MA. Anthropometrics, dietary habits, and feelings about health among Wisconsin Hmong-Americans. *UW-L Journal of Undergraduate Research*. 2005;VIII: 1-6.

- Chen Q, Goto K, Wolff C, Zhao Y. Relationships between children's exposure to ethnic produce and their dietary behaviors. *Journal of Immigrant and Minority Health* Apr 2015;17(2): 383-388. Epub May 2014.
- Constantine ML, Rockwood TH, Schillo BA, Alexci N, Foldes SS, Phan T, et al. Exploring the relationship between acculturation and smoking behavior within four Southeast Asian Communities of Minnesota. *Nicotine Tobacco Research*. 2010 May;12(7): 715-723.
- Cooper RG. Resource scarcity and the Hmong response: patterns of settlement and economy in transition. Singapore: Singapore University Press, 1984.
- Culhane-Pera KA. Reflections on 'Crossing borders in birthing practices': Hmong in one village in Northern Thailand and Hmong in Saint Paul, Minnesota. *Hmong Studies Journal*. 2014 [cited 2015 Nov 2]; 15(2):1-8. Available online: <http://hmongstudies.org/Culhane-Pera.Reflections.HSJ15.2.pdf>.
- Culhane-Pera KA, Cha D, Kunstadter P. Hmong in Laos and the United States. In: Ember CR and Ember E., eds. *Encyclopedia of medical anthropology: health and illness in the world's cultures*. New York (NY), 2004:729-743.
- Culhane-Pera KA, Her C, Her B. "We are out of balance here": a Hmong cultural model of diabetes. *Journal of Immigrant and Minority Health*. 2007 Jul; 9(3):179-90.
- Culhane-Pera KA, Moua MK, DeFor T, Desai J. Cardiovascular disease risks in Hmong refugees from Wat Tham Krabok, Thailand. *Journal of Immigrant and Minority Health*. 2009 Oct; 11(5):372-79.
- Culhane-Pera KA, Naftali ED, Jacobson C, Xiong ZB. Cultural feeding practices and child-raising philosophy contribute to iron-deficiency anemia in refugee Hmong children. *Ethnicity and Disease*. 2002; 12(2): 199-205.
- Culhane-Pera KA, Sriphetcharawut S, Thawsirichuchai R, Yangyeunkun W, Kunstadter P. Crossing borders in birthing practices: A Hmong village in Northern Thailand (1987-2013). *Hmong Studies Journal* 2014 [cited 2015 Nov 3]; 15(2):1-21. Available from: <http://hmongstudies.org/Culhane-Pera.Reflections.HSJ15.2.pdf>.
- Culhane-Pera KA & Xiong P. Hmong culture: Tradition and change. *Healing by heart: Clinical and ethical case stories of Hmong families and Western providers*. Nashville, TN: Vanderbilt University Press, 2003;11-68.
- Eisenberg ME, Larson NI, Berge JM, Thul C, Neumark-Sztainer D. The home physical activity environment and adolescent BMI, physical activity and TV viewing: Disparities across a diverse sample. *Journal of Racial and Ethnic Health Disparities*. 2014 Dec; 1;1(4):326-336.
- Fu S, Burgess D, van Ryn M, Hatsukami D, Solomon J, Joseph A. Views on smoking cessation methods in ethnic minority communities: A qualitative investigation. *Preventative Medicine*. 2007 Mar; 44(3):235-40.
- Glasgow RE, Davis CL, Funnell MM, Beck A. Implementing practical interventions to support chronic illness self-management. *Joint Commission Journal on Quality and Safety*. 2003; 29(11):564-574.
- Harrison GG, Kagawa-Singer M, Foerster SB, Lee H, Pham Kim L, Nguyen TU, et al. Seizing the moment: California's opportunity to prevent nutrition-related health disparities in low-income Asian American population. *Cancer*. 2005 Dec 15;104(12 Suppl):2962-2968.
- Her C, Mundt M. Risk Prevalence for type 2 diabetes mellitus in adult Hmong in Wisconsin: a pilot study. *Wisconsin Medical Journal*. 2005 Jul;104(5):70-7.

Appendix E: References

- Horta B, Victora C. Long-term effects of breastfeeding: A systematic review. Geneva: WHO Press, 2013 [cited 2015 Oct 11]. Available from: http://apps.who.int/iris/bitstream/10665/79198/1/9789241505307_eng.pdf?ua=1
- Ikeda J and Allhoff M. Parent and child sharing food tasks. 1998. [cited 2016 Jan 11]. Available from: <https://snaped.fns.usda.gov/materials/parents-and-children-sharing-food-tasks>.
- Institute for Clinical Systems Improvement (ICSI). ICSI shared decision-making model. 2012 [cited 2015 Nov 3]. Available from: https://www.icsi.org/_asset/0vs54w/What-is-Shared-Decision-Making-042412.pdf
- Kim LP, Harrison GG, Kagawa-Singer M. Perceptions of diet and physical activity among California Hmong adults and youths. *Preventing Chronic Disease: Public Health Research, Practice and Policy*. 2007 Oct; 4(4): 1-12.
- Kottke T, Baechler C, Canterbury M, Danner C, Erickson K, Hayes R, Marshall M, O'Connor P, Sanford M, Schloenleber M, Shimotsu S, Straub R, Wilkinson J. Institute for Clinical Systems Improvement. Healthy lifestyles. May 2013. Available from: https://www.icsi.org/_asset/4qjdnr/HealthyLifestyles.pdf
- Kunstadter P, Chapman EC, Sabhasri S, eds. *Farmers in the forest: Economic development and marginal agriculture in Northern Thailand*. University Press of Hawaii for the East-West Center: Honolulu. 1978.
- Kunstadter P, Lennington Kunstadter S, Podhisita D, Leepreecha P. Demographic variables in fetal and child mortality: Hmong in Thailand. *Social Science & Medicine*. 1993;36(9):1109-1120.
- Marvel MK, Epstrin RM, Flowers K, Beckman HB. Soliciting the patient's agenda: have we improved? *Journal of the American Medical Association*. 1999 Jan;281(3):283-7.
- Miller, W, Rollnick, S. *Motivational interviewing: Helping people change*. 3rd ed New York: Guilford Press, 2013.
- Motivational Interviewing Network of Trainers. [cited 2015 Oct 31]. Available from: http://www.motivationalinterviewing.org/about_mint.
- Mulasi-Pokhriyal U, Smith C. Investigating health and diabetes perceptions among Hmong American children, 9-18 years of age. *Journal of Immigrant and Minority Health*. 2011 Jun; 13(3):470-7.
- Nafali ED, Thao MH. A culturally informed public health response to pediatric anemia in the Hmong community. In Culhane-Pera KA et al eds. *Healing by Heart: Clinical and Ethical Case Stories of Hmong Families and Western Providers*. Tennessee: Vanderbilt University Press, 2003.
- Naik AD, Palmer N, Petersen NJ, Street RL Jr, Rao R, Suarez-Almazor M, et al. Comparative effectiveness of goal setting in diabetes mellitus group clinics: randomized clinical trial. *Archives of Internal Medicine*. 2011 Mar 14;171(5)453-9.
- Nguyen AL, Seal DW. Cross-cultural comparison of successful aging definitions between Chinese and Hmong elders in the United States. *Journal of Cross Cultural Gerontology*. 2014; 29(2):153-171.
- Perez MA, Thao C. Understanding Barriers to Prevention of ntshav qab zib/nsthaav qaab zib: A Hmong perspective. *Hmong Studies Journal*. 2010;10:1-23.
- Prochaska J, DiClemente C. Stages and processes of self-change in smoking: toward an integrative model of change. *Journal of Consulting and Clinical Psychology*. 1983;5:390-395.

- Rice PL. Nyo dua hli – 30 days confinement: Traditions and changed childbirth belief practices among Hmong women in Australia. *Midwifery*. 2000;16:22-34.
- Rollnick S, Butler CC, Kinnersley P, Gregory J, Mash B. Motivational Interviewing. *British Medical Journal*. 2010 Apr; 340.
- Rooney BL, Choudhary R, Bliss. Social determinants of smoking among Hmong Americans in Wisconsin. *Medical Journal of Wisconsin*. 2009 Dec;108(9):439-446.
- Rosengren DB. Building motivational interviewing skills: A practitioner workbook. Guilford Press, NY, 2009.
- Shaw VR. Assessing nutrition and physical activity behaviors in Hmong adolescents, and planning to address barriers. 2010. [cited 2015 Nov 3]. Available from: <http://pophealth.wisc.edu/PopHealth/files/file/MPH%20Symposia/Vonda%20Shaw.pdf>.
- Smith C, Franzen-Castle L. Dietary acculturation and body composition predict American Hmong children's blood pressure. *American Journal of Human Biology*. 2012;24:666-674.
- Solberg L, Parker ED, Foldes SS, Walker PF. Disparities in tobacco cessation medication orders and fills in special populations. *Nicotine and Tobacco Research*. 2010;12(2):144-151
- Stang J, Kong A, Story M, Eisenberg ME, Neumark-Sztainer D. Food and weight-related patterns and behaviors of Hmong adolescents. *Journal of the American Dietetic Association*. 2007 Jun;107(6):936-41.
- Sun WY, Dosch M, Gilmore G, Pemberton W, Scarseth T. Effects of a Tai Chi Chuan program on Hmong American older adults. *Gerontology*. 1996; 22(2):161-167.
- Thao X. Hmong perception of illness and traditional ways of healing. In: Hendricks G, Downing BT, Deinard AS, eds. *The Hmong in transition*. New York: Center for Migration Studies of New York, and Southeast Asian Refugee Studies at University of Minnesota. 1986:365-78.
- United States Census Bureau. Selected population profile in the United States. 2013 American community survey 1-year estimates. [cited 2015 Nov 3]. Available from: <http://www.hmongstudiesjournal.org/uploads/4/5/8/7/4587788/2013acs1yeareestimatehmongaloneorinanycombinationmn.pdf>.
- United States Department of Agriculture (USDA). Special Supplemental Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages; final Rule. *Federal Register*. 2014 Mar [cited 2015 Oct 11]; 79(42): 12274-12300. Available from: http://www.fns.usda.gov/sites/default/files/03-04-14_WIC-Food-Packages-Final-Rule.pdf.
- United States Department of Agriculture and United States Department of Health and Human Services. *Dietary Guidelines for Americans, 2010*. [cited 2015 Oct 11] 7th Ed, Washington DC: US Government Printing Office, December 2010. Available from: <http://health.gov/paguidelines/pdf/paguide.pdf>.
- United States Department of Health and Human Services. *2008 Physical Activity Guidelines for Americans*. 2008. [cited 2015 Oct 11] Available from: <http://health.gov/paguidelines/pdf/paguide.pdf>.
- Van Duyn MA, McCrae T, Wingrove BK, Henderson KM, Boyd JK, Kagawa-Singer M, et al. Adapting evidence-based strategies to increase physical activity among African Americans, Hispanics, Hmong, and Native Hawaiians: A social marketing approach. *Preventing Chronic Disease: Public Health Research, Practice and Policy*. 2007 Oct;4(4):1-11.

Appendix E: References

- Vang P. The Healthy Plate: A social marketing campaign for the Hmong community [capstone]. Madison (WI): Univ. of Wisconsin-Madison School of Medicine and Public Health, Hmong Health Council of South Central Wisconsin, 2013. [cited 2015 Nov 3] Available from: <http://pophealth.wisc.edu/PopHealth/files/Paj%20Ntaub%20Vang.pdf>.
- Voorhees J, Goto K, Wolff C. Overweight, hypertension, and fruit and vegetable consumption among Hmong and white middle school students. *Journal of Immigrant and Minority Health*. 2014; 16:273-279.
- Vue W, Wolff C, Goto K. Hmong food helps us remember who we are: perspectives of food and culture and health among Hmong women with young children. *Journal of Nutrition Education Behavior*. May-Jun 2011; 43(3):199-204.
- World Health Organization. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet*. 2004; 363(9403): 157-63. Erratum in *Lancet*. 2004; 363(9412):902.
- World Health Organization. Draft final report of the Commission on Ending Childhood Obesity. Geneva (Switzerland); 2015 [cited 2015 Nov 3]. Available from: <http://www.who.int/end-childhood-obesity/commission-ending-childhood-obesity-draft-final-report-en.pdf>.
- World Health Organization (WHO) expert consultation. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *The Lancet* 2004 [cited 2015 Nov 3]; 363:157-163. Available from: http://www.who.int/nutrition/publications/bmi_asia_strategies.pdf
- World Health Organization (WHO). Global recommendations on physical activity for health. Geneva: WHO Press. 2010. [cited 2015 Nov 3]. Available from: http://apps.who.int/iris/bitstream/10665/44399/1/9789241599979_eng.pdf
- World Health Organization (WHO). Global Physical Activity Questionnaire (GPAQ) Analysis Guide. Geneva (Switzerland): World Health Organization; 2002. [cited 2015 Nov 3]. Available from: http://www.who.int/chp/steps/resources/GPAQ_Analysis_Guide.pdf.
- World Health Organization (WHO). Global Targets 2025: Breastfeeding. 2015. [cited 2015 Oct 11]. Available from: http://www.who.int/nutrition/global-target-2025/infographic_breastfeeding.pdf?ua=1
- Xiong ZB, Peng, S Newell J, Watkins E, Bui H, Daoheuang M, Touy R, Yang TT. Statewide Tobacco Education and Engagement Project (STEEP): History, Evaluation, and Engagement Strategies. St Paul MN: Lao Family Community of Minnesota, Inc. 2011. [Cited 2015 Oct 31]. Available from: <http://www.cehd.umn.edu/fsos/projects/steep/pdf/steepreport.pdf>.
- Yang D. *Hmong at the Turning Point*. Minneapolis, MN: WorldBridge, 1993.
- Zimmerman GL, Olsen CG, Bosworth MF. A 'stages of change' approach to helping patients change behavior. *American Family Physician*. 2000 Mar 1; 61(5):1409-1416.

