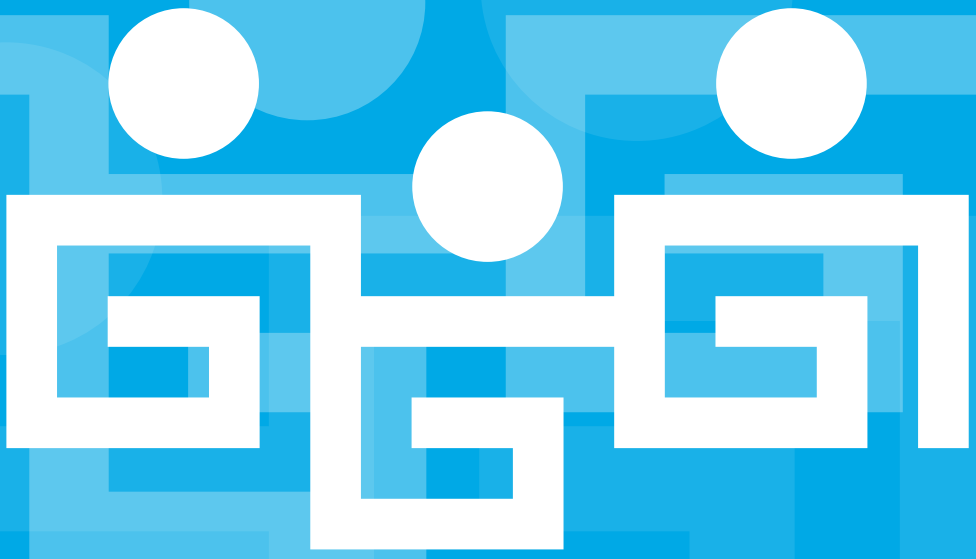
KOREAN NEEDS ASSESSMENT OF THE BAY AREA 2014-2015



Korean Community Center of the East Bay

HEALTH RESEARCH FOR Action
UC Berkeley

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Executive Summary

Koreans are the fifth-largest group among Asian Americans nationwide and in California, with a total U.S. population of about 1.7 million, and more than 500,000 in California (U.S. Census Bureau, 2010). They also make up the sixth-largest Asian population in the San Francisco Bay Area, with nearly 90,000 people. Compared with the overall population, Koreans have unique socio-demographic characteristics and health and social needs. Despite this presence, very few needs assessments have been conducted with this population. The most recent one in the San Francisco Bay Area was conducted more than 10 years ago, and only in Alameda and Santa Clara counties (Lee, Kazinets, & Moskowitz, 2006).

This study is a collaboration between the Korean Community Center of the East Bay (KCCEB) and the Health Research for Action (HRA) center at UC Berkeley, to assess the health and social needs of the Korean community in the Bay Area (Alameda, Contra Costa, San Francisco, Santa Clara, and San Mateo counties), in order to determine the best intervention strategies and programs to improve the overall health of Korean Americans.

Our sample population was primarily first-generation Korean Americans who have lived in the United States more than 15 years; however, a majority of them have limited English Proficiency (85%). This adds unique value to inform the design of programs and policies, as it reflects issues of a vulnerable population that are beneficiaries of government and privately-funded programs. While the group has relatively high education (79% have 12 years or greater education), there are low levels of employer-sponsored health insurance (33%) and relatively high levels of Medi-Cal eligibility (18%). In addition, despite high levels of citizenship status (64%), our sample population was largely unaware of their health and civil rights as a US citizen – only a quarter of those eligible were registered to vote, and only half reported being familiar with patients' rights under the Patient Protection and Affordable Care Act (ACA).

This comprehensive report highlights priority issues identified by the study: 1) Limited English Proficiency (LEP) and Health Literacy, 2) High Levels of Serious Psychological Distress and Low Mental Health Service Utilization, 3) Direct and Secondhand Smoke Exposure, 4) Barriers and Opportunities to Citizenship and Civic Engagement, 5) Intimate Partner Violence (IPV), 6) Cardiovascular Risk Factors and Unhealthy Lifestyles, and 7) Deeper Disparity among Women and Elderly.

The results from our survey revealed that Bay Area Koreans are faced with significant health disparities. Bay Area Koreans had substantially higher rates of fair to poor health (45%) than the state average (19%). A number of self-reported chronic condition rates were worse for Bay Area Koreans than California Koreans in California Health Interview Survey included higher prevalence of diabetes, hypertension, and heart disease. Rates of smoking for men (16%) were more than five times higher than Bay Area Korean women (3%), and demonstrated a critical need to address smoking issues among Korean men as well as second-hand smoke exposure for Koren women. Rates of individuals who have never had certain

cancer screenings were also high, with a lack of preventive screenings for all the cancers we asked about (cervical, breast and colorectal). Bay Area Koreans also have higher serious psychological distress (SPD) (18%) and functional impairment rates than California Koreans (5%) and other racial groups in California. In addition, we found that Bay Area Koreans (19%) are more likely to state they were victims of IPV than the state average (16%).

Despite these prominent health issues, Bay Area Koreans have low health care utilization. Language barriers may have contributed to this situation, as more than a third of our participants have difficulty communicating with their physicians due to language, and nearly 80% preferred a doctor who can speak Korean. Bay Area Koreans also used alternative sources to health care, as many get health information and health care from sources such as the Internet, friends or relatives. Improved health literacy will help Koreans fully benefit from their existing health plans or through the Affordable Care Act.

Some of these issues are shared with Koreans in southern California, as demonstrated through our study and the 2007 Orange County Study by Korean Community Services. However, some regional characteristics and differences in Northern California have implications for intervention and prevention strategies. For example, while 86% of southern California's Korean population resides in Los Angeles and Orange counties (62% and 24%, respectively), Koreans in Northern California are spread across 5 counties (Alameda 25%, Contra Costa 13%, San Francisco 14%, San Mateo 9%, and Santa Clara 39%), and these more dispersed Bay Area Korean communities that have varying characteristics in terms of history of immigration, assimilation, culture, and economic status. There is less inter-county mobility in daily lives between these Northern California counties. As Northern California doesn't have a single county with a dense Korean population center, it is extremely challenging to realize a centralized service location for health access located within a single county that nonetheless services Koreans across 5 counties. Such geographical spread also makes Koreans less visible, and creates challenges for mobilizing and implementing effective place-based strategies. The Korean Community Center of the East Bay is based in Oakland, the county seat of Alameda County, and has been the only agency serving Koreans across the 5 counties, providing social and health services, immigration integration services, including the needs of undocumented population, and domestic violence services since 1977. Our experience in service, education, advocacy, and community resource development with unique regional challenges has also positioned us to try creative and innovative strategies. Some of these strategies are presented in our recommendations, and below are some highlights:

- Lack of Korean language healthcare providers is one of the largest barriers to healthcare access therefore, Covered CA and other health plans should expand provider networks to include bilingual Korean physicians and other healthcare professionals.

Executive Summary

- Federal, state, and local governments need to create meaningful public-private partnerships that take advantage of the assets of the Korean-serving community-based organizations (CBO) in designing culturally and linguistically appropriate materials and delivering culturally and linguistically appropriate services;
- Expand collaboration beyond traditional Western models of healthcare, and partner with holistic and alternative systems of healthcare (e.g., acupuncture, traditional Asian medicine) in conjunction with primary care; also expand coverage to include traditional healing practices and other alternative healthcare services;
- Create federal and state funding streams to support building of a community health workers (CHW) network beyond clinical settings, based on an empowerment model to improve health literacy;
- Increase efficacy of Prevention and Early Intervention (PEI) funding by 1) employing culturally-relevant innovative strategies that engage in attitude change via participatory process and experiential learning; 2) diversifying investment in community-based organizations and other relevant entities, beyond traditional mental health service providers;
- Achieve Tobacco-Related Health Equity Among Priority API Populations by: 1) institutionalizing health equity by investing in the collection of disaggregated data to examine unique ethnic communities like Korean Americans; and 2) funding priority populations to implement evidence-based, culturally and linguistically relevant intervention and prevention strategies;
- Invest in culturally and linguistically appropriate, comprehensive civic engagement tracking programs.

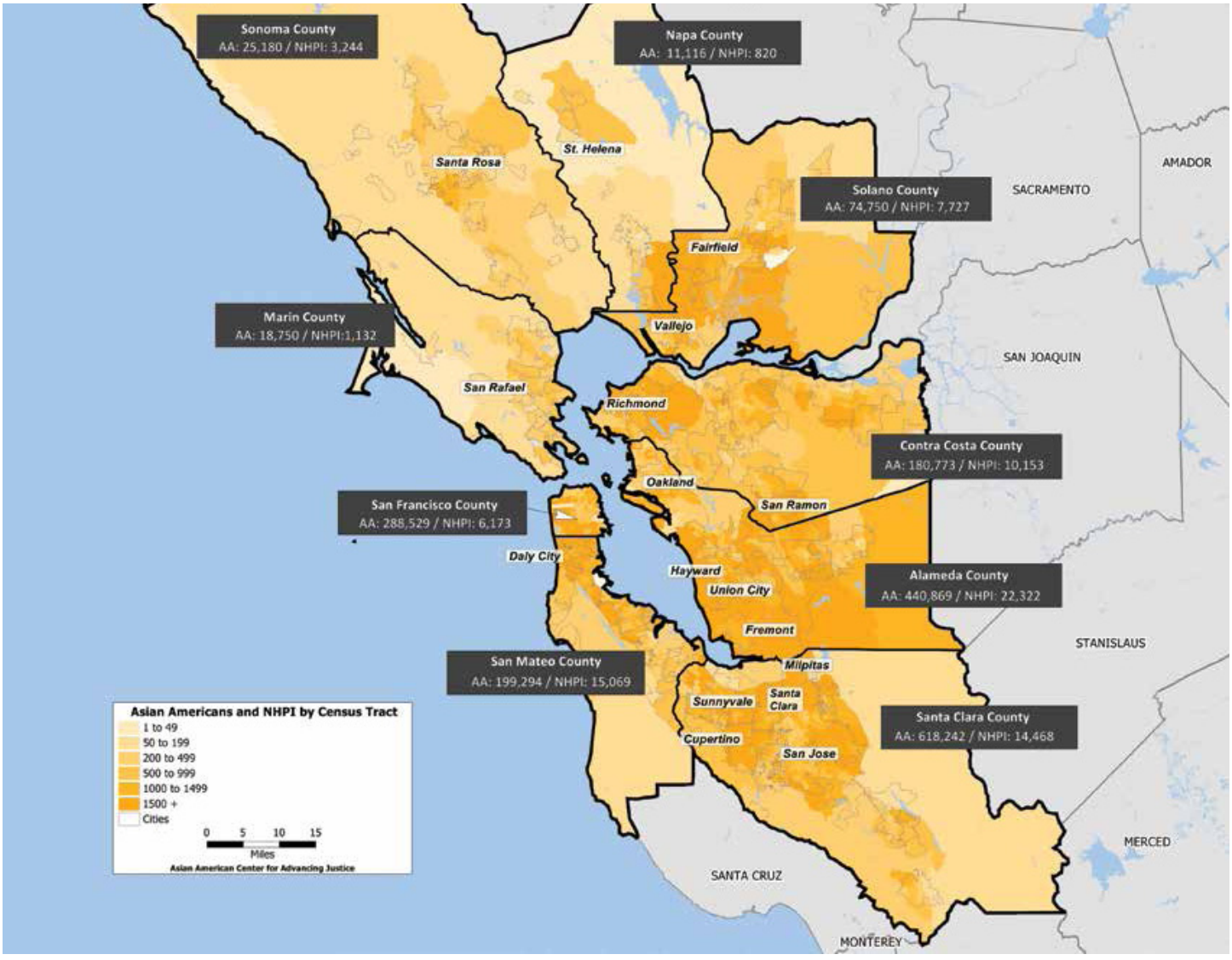
It is our hope that the information presented in this report will guide strategic planning, direct policy and advocacy efforts, and promote robust partnerships and innovative strategies, incorporating unique regional challenges and opportunities, to better meet the needs of Korean communities in the Bay Area.

We would like to thank all the team members who spent countless hours with dedication to improving the lives of Koreans in the Bay Area, Advisory Council members who generously dedicated their expertise and time, and community-based agencies who participated in the community validation process.

June Lee
Executive Director
Korean Community Center of the East Bay

Part 1. Main Needs Assessment Module
INTRODUCTION AND BACKGROUND

The first wave of Korean immigration to the United States started in 1902 and continued until 1905. Those first immigrants were farmers and laborers who came to Hawaiian sugar plantations to work. The second wave arrived between 1906 and 1945 and was made up of war orphans, students, and spouses of American GIs (Yoon, 2012). However, a majority of Koreans currently living in America arrived later, emigrating for better economic and educational opportunities after the United States abolished the use of quotas by national origin through the Immigration and Nationality Act of 1965 (Kim, 1981). Consequently, many Korean immigrants in the United States are first-generation immigrants, born in Korea, who still identify more as Koreans in America than Korean Americans (Jo & Doorenbos, 2009). Since 93% of our main survey participants responded that they were born in Korea, the report primarily uses *Koreans* to refer to the population, rather than *Korean Americans*.



Part 1. Main Needs Assessment Module

INTRODUCTION AND BACKGROUND

Asian Americans (AA) made up the fastest growing racial group in the United States from 2000 to 2010, with Koreans increasing by 39% (Asian Pacific American Legal Center & Asian American Justice Center, 2011).

Koreans are the fifth largest group among Asian Americans nationwide, with a population of about 1.7 million, as well as in California, with a population of more than 500,000. They also make up the sixth largest Asian population in the San Francisco Bay Area, with nearly 90,000 people (U.S. Census Bureau, 2010).

Compared with the overall population, Koreans have unique socio-demographic characteristics. Data combining the American Community Survey (ACS) data from 2011 to 2013 show that the percentage of Korean Americans (KA) in California who are foreign-born was twice that of non-Hispanic Whites; more than 50% of Koreans were first-generation immigrants. Thirteen percent of Koreans in California were seniors (age 65 years or over). About 84% of Koreans in California reported speaking a language other than English at home. In addition, nearly half of Koreans surveyed had limited English proficiency (LEP) (U.S. Census Bureau, 2013). In California, the median household income was substantially lower for Koreans ($55,000) than for non-Hispanic Whites ($62,000) (U.S. Census Bureau, 2013). For our local Korean population, we also sought to identify the needs of this target population of LEP, low-income Korean adults.

Despite concerns about health and health care needs in the San Francisco Bay Area's Korean community, very few needs assessments have been conducted with this population. The most recent one was conducted more than 10 years ago, and only in Alameda and Santa Clara counties (Lee, Kazinets, & Moskowitz, 2006). By defining a clear, shared goal, we have mobilized the San Francisco Bay Area Korean community to define the key health disparities they face and strengthen the ability of the community infrastructure to improve the health of the Korean community.

Population

by Ethnic Group, Bay Area 2010

Ethnic Group	Number
Chinese (except Taiwanese)	630,467
Filipino	457,857
Indian	264,533
Vietnamese	205,766
Japanese	109,879
Korean	86,497
Taiwanese	34,095
Native Hawaiian	19,385
Cambodian	16,024
Pakistani	15,368
Samoan	14,770
Laotian	14,288
Thai	12,388
Tongan	12,083
Guamanian or Chamorro	11,249
Fijian	10,153
Burmese	8,778
Indonesian	8,119
Nepalese	3,277
Sri Lankan	2,280
Malaysian	2,095
Bangladeshi	1,980
Hmong	1,523
Bhutanese	410
Marshallese	99

Source: U.S. Census Bureau, 2010 Census SF1 Tables QT-P8 and QT-P9.

Bay Area Koreans have some shared issues with Koreans in southern California, as demonstrated through our study and the 2008 Orange County Study by Korean Community Services. However, some regional characteristics and differences have implications for intervention and prevention strategies. For example, while 86% of southern California's

Korean population resides in Los Angeles and Orange counties (62% and 24%, respectively), Koreans in northern California are spread around 5 counties (Alameda 25%, Contra Costa 13%, San Francisco 14%, San Mateo 9%, and Santa Clara 39%), that have different characteristics in terms of their history of immigration, assimilation, culture, and economic status. There is less inter-county mobility in daily lives between these northern counties. As northern California doesn't have a single county with a dense Korean population center, it is extremely challenging to realize a centralized service location for health access, such as a Korean-speaking hospital unit, for example, despite the role of limited English proficiency as one of the largest barriers for health access. Such geographical spread also makes Koreans less visible, and creates challenges to mobilize and implement effective place-based strategies. The Korean Community Center of the East Bay is based in Oakland, the county seat of Alameda county, and has been the only agency serving Koreans from 5 counties in over 50 zip codes, providing social and health services, immigration integration services (including the needs of undocumented populations and domestic violence victims), and education, advocacy and community-based resource development since 1977. Our direct experience with our regional challenges has also positioned us to try creative and innovative strategies. Some of these strategies are presented in our recommendations.

Below are some overarching issues among Koreans in California found in previous studies. In this report, we demonstrate how our findings confirm and identify new issues among Koreans in the Bay Area, especially among immigrant populations that need assistance in accessing federally funded and privately offered programs and activities in the health care and diverse social support systems.

Limited English Proficiency (LEP)

Many Koreans in California have limited English proficiency (LEP); language barriers pose challenges to health care access and health status. Individuals with LEP are defined as those "who are unable to communicate effectively in English because their primary language is not English and they have not developed fluency in the English language." A recent California Health Interview Survey (CHIS) data showed that Koreans have a high rate of LEP (76%) compared to other major Asian subgroups and Latinos (Vietnamese 86%, Chinese 68%, Japanese 51%, Filipino 39%, South Asians 35% and Latino 72%). Such a high prevalence of LEP is of concern, as research showed that individuals with both LEP and low health literacy have high rates of poor health status (Sentell & Braun, 2012). Another systematic review reported that parental LEP was associated with worse health care access and quality for children with special health care needs (Eneriz-Wiemer, Sanders, Barr & Mendoza, 2014). These results suggest that LEP may affect not only the individual's health but also the health of their families.

Part 1. Main Needs Assessment Module
INTRODUCTION AND BACKGROUND

Health Access and Literacy

Koreans are among the least likely to be insured of any racial/ethnic group in California: 47% of Koreans are uninsured all or part of the year; California's overall rate was 27% in 2012 (California Health Interview Survey, 2011-2012). Koreans also have the lowest rate of employer-sponsored health insurance (34%), compared with other Asian racial groups, such as Chinese (59%), Japanese (56%), Filipino (65%), and Vietnamese (41%), and in comparison to non-Hispanic Whites (55%) (California Health Interview Survey, 2011-2012). Research shows that "foreign-born, non-English-speaking immigrants, those with a lower level of education, and the elderly are disproportionately affected by low health literacy" (Nielsen-Bohlman, Panzer, & Kindig, 2004). Several studies have also identified language and cultural factors related to low health literacy, perceived discrimination, and misinformation about eligibility as reasons for not having health insurance or for inadequate health care utilization (Asian & Pacific Islander American Health Forum, 2015; Lee, Ayers & Kronenfeld, 2009). A study of Koreans found that those who had difficulty with English had issues understanding and using health information (Kim, Kim, Choi, Song, & Han, 2015).

Cancer

In addition to the above-mentioned health care disparities such as less access to health insurance and health services, other health disparities in areas such as cancer are prominent among Koreans and other Asian Americans (AA) across the U.S. (Gomez et al., 2013). Previous studies from California show AA to be the only racial group for which cancer is the leading cause of death (26%), and Koreans have the highest rate of deaths from cancer (32%) (California Department of Public Health, 2015). Lung and bronchus cancer were responsible for the greatest number of cancer-related deaths among Koreans in California, followed by colorectal cancer (California Department of Public Health, 2008).

Since 1990, Asian Americans in the U.S. have experienced a continuous increase in their incidence of breast cancer, whereas the incidence of breast cancer declined for non-Hispanic Whites over the same period. Korean women experienced the highest annual percentage increase (4.7%) among all AA groups from 1990 to 2008. Koreans also had the highest colorectal cancer rates, higher than or comparable to that of non-Hispanic Whites. Korean men in particular had the highest age-adjusted colorectal cancer rates (58.2 per 100,000) among all AA groups from 2004 to 2008, higher than the incidence among non-Hispanic White men (54.0 per 100,000). Over the same period, the colorectal cancer incidence among Korean women (40.9 per 100,000) was similar to the incidence among non-Hispanic White women (40.6 per 100,000) (Gomez et al., 2013). Overall, in comparing cancer rates between Korean and non-Hispanic White groups, the Korean group had

rates of breast, colorectal, and liver cancer greater than or comparable to the non-Hispanic Whites across sex, age, and cancer types.

Mental Health

Mental health is another major underexplored area of study for Koreans. The prevalence of depression among Koreans in the United States is high, with studies reporting rates from 39% in Los Angeles to 24% in New York (Lee, Moon, & Knight, 2004; Mui & Kang, 2006). In California, Korean adults (5%) reported the highest rates of serious psychological distress among AA adults, with Korean seniors reporting four and a half times the rate of serious psychological distress (9%) compared with the California state average (2%). (Tseng et al., 2010) This rate is higher than that of all other racial/ethnic groups except American Indian/Alaska Native seniors. These findings suggest mental health is a serious issue among Koreans, particularly for Korean seniors.

One study looking at mental health care utilization found that health insurance status was one of the factors that enabled hospitalizations among Korean elders (Jang, Kim, & Chiriboga, 2005). Personal beliefs influenced by culture and acculturation were also associated with service utilization, as older adults with shorter residence in the U.S. had negative perceptions of mental health services (Jang, Kim, Hansen, & Chiriboga, 2007). These data are concerning, given the percentage of the elderly who are first-generation immigrants and who may need but not be accessing mental health services.

Tobacco

Smoking and secondhand smoke (SHS) are important health issues among Koreans in the U.S. A study found that a third of Korean American men who participated in CHIS 2001 and 2003 were smokers, while less than 10 percent of Korean American women were smokers (An, Cochran, Mays & McCarthy, 2008). Recent data show that Korean Americans were one of the highest risk populations for smoking (17%); and Korean males (23%) along with Vietnamese males have the highest smoking rates among Asians in California (California Department of Public Health, 2015a; California Health Interview Survey, 2011). Data also show that Korean females have high rates of exposure to secondhand smoking. A study analyzing the CHIS data revealed that nonsmoking Korean Americans had the highest home SHS exposure prevalence (16.5%) of all populations, almost 5 times higher than for non-Hispanic Whites (Tsoh et al., 2015).

Part 1. Main Needs Assessment Module

METHOD

Sample

The Korean health needs assessment study (KoNA Bay Area) sample was obtained through convenience sampling, using Korean community lists and community sites for recruitment of participants. Data collection for the main needs assessment survey module was completed before the mental health survey module's data collection began.

The in-person surveys for the main needs assessment survey module were conducted at Korean churches that KCCEB visited for Affordable Care Act (ACA) education outreach events, at KCCEB's office, small business associations, and at other Korean community centers throughout the San Francisco Bay Area. The same survey instrument was used for conducting telephone interviews among individuals sampled from two contact lists from KCCEB. One list contained contacts of people who had attended ACA outreach sessions; the other list held contacts for clients served in the past at KCCEB. Each contact was called and asked to participate in the telephone survey. If no one answered on the first call, we tried the number again at least three times.

The second list included a disproportionate number of older individuals compared with the first list. To avoid skewing our data toward older adults, we called every 10th person on the second list. Self-administered versions of the main survey module were completed by choice or at times when trained interviewers were unavailable. The survey was mailed to those who requested it (for example, an individual might refuse a telephone interview but agree to fill out a survey). An online survey for the main survey module was emailed to additional contacts provided by KCCEB.
A total of 342 people participated in the main survey module: 178 completed the survey by self-administration, 78 with an interviewer (via telephone or in-person), and 86 used the online tool. The main needs assessment was conducted between July 2014 and February 2015.

For the mental health and intimate partner violence (MH/IPV) survey module, we conducted surveys with individuals who consented to participate from our main survey participants, current and past KCCEB clients, and a general supporter group. For in-person interviews, individuals were asked if they were interested in participating in the survey in advance. For telephone interviews, we used a list of phone numbers for individuals who were registered at KCCEB. This provided a list-driven convenience sample for data collection. A total of 111 people participated in the MH/IPV survey module.

Instrument

The study used two survey instruments: the main survey module, which was focused on general social, health, and health care characteristics; and the second, which focused on mental health and intimate partner violence (MH/IPV). We created the survey instruments using questions from the California Health Interview Surveys (CHIS) from 2009–2010 and 2011-2012, the Korean Community Needs Assessment from the Health and Quality of Life Survey conducted in Orange County in 2008, items from the Short Form 12 (SF-12) survey, and items designed by the HRA team specifically for this project. The SF-12 is a reliable,

validated questionnaire that measures the mental and physical health of an individual through 12 questions (Ware, Kosinski, & Keller, 1996).

The main survey module had 39 questions covering demographic characteristics, health insurance, health status and behavior, health care access and usage, health communication, and cancer screening. The main survey included interviewer-administered (in-person or by telephone) and self-administered approaches (in person at an ACA site visit, or by mail), and later online, using Qualtrics survey software. The MH/IPV survey module was administered by interviewers, either in-person or by telephone. For this module, trained staff and students recorded participant responses online using Qualtrics. Both the main survey module and the MH/IPV module were available and conducted in either Korean or English.

Survey Administration

Four bilingual (English and Korean) staff members from KCCEB and six bilingual UC Berkeley undergraduate students were trained in human subject research and survey administration methods. Only these trained individuals administered the surveys. In addition, interviewers who administered the MH/IPV survey module received additional training on mental health and domestic violence before administering the MH/IPV survey.

Statistical Analysis

We merged in-person, telephone, mail, and online surveys using Microsoft Excel. To examine the characteristics of the sample, we computed frequencies and calculated percentages of all survey items. All open-ended items were coded deductively, where needed.

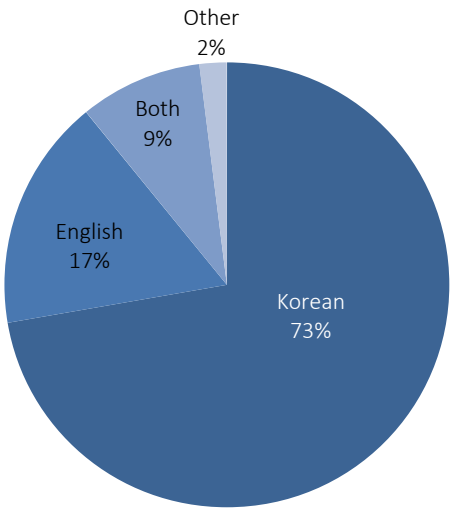
For self-rated health, smoking, and physical activity items, we stratified by sex because prior research suggested that smoking rates differ by sex among Asian Americans (with men more likely to smoke than are women) (Caraballo, Yee, Gfroerer, & Mirza, 2008). We examined heavy and light-to-moderate smoking. Heavy smoking was defined as ≥20 cigarettes per day, whereas light-to-moderate was <20 cigarettes per day (Husten, 2009; Mucha, Stephenson, Morandi, & Dirani, 2006; Szklo & Coutinho, 2009). We also calculated the percentages of heavy drinking (≥5 drinks on the same occasion on 5 or more days of the past 30 days) (National Institute on Alcohol Abuse and Alcoholism, 2015). We also examined any differences in physical activity by sex.
Similarly, for self-reported diabetes, high blood

pressure and heart disease, we calculated both crude and age-adjusted prevalence rates using 2000 U.S. Census data as our standard population (U.S. Census Bureau, 2000). For cancer-screening items, we stratified by age to examine whether women met the guideline for receiving a Pap smear and a mammogram consistent with the current recommendations for screenings in their age group. We used STATA 12.0 to perform all statistical analyses (StataCorp LP, College Station, Texas).

Demographics

The results showed that the majority of the main survey participants were born in Korea (93%); only 7% were born in the United States (6%) or another country (1%). A high percentage of participants had lived in the United States for more than 15 years (73%), and almost two-thirds of the participants were U.S. citizens (64%). The primary languages spoken at home for survey participants included Korean (73%), followed by English (17%), and both Korean and English (9%). Most participants (85%) in our sample reported limited English proficiency (LEP).

Figure 1. Languages Spoken at Home



Household income was defined as a binary measure (less or more than $50,000 per year). That showed that 56.3% reported a household income of ≤$50,000, and 44% reported >$50,000 annual income. The results show that many of the survey participants are employed for salary or wages (28%) or are self-employed (23%).

Table 1. Demographics

	Valid %
Sex (n=341)	
Male	40
Female	60
Language in which survey was conducted (n=342)	
Korean	83
English	17
Age (n=342, Mean and SD)	15
Age (n and percentages)	
< 50 years	43
≥ 50 years	57
Country of Birth (n=341)	
Korea	93
U.S	6
Other	1
Years living in the US (n=339, Mean and SD)	11
< 15 years	27
≥ 15 years	73
Language spoken at home (n=342, respondents can choose more than one option**)**	
Korean	73
English	17
Both	9
Other	2
Limited English Proficiency (Well, not well, not well at all, n=337)	85
Citizenship status (US Citizen, n=339)	64
Green card holders (n=122)	80
Household income (n=300)	
Poverty Level (Medi-Cal, n=293)	18
≤ $50,000	56
> $50,000	44
Equal to $20K or less	26
$20,001-$30,000	9
$30,001-$40,000	10
$40,001-$50,000	11
$50,001-$60,000	9
$60,001-$70,000	5
$70,001 or more	30
Education (n=338)	
< 12 years	5.6
12 years	15.7
> 12 years	78.7

Equal percentages of participants are retired or homemakers (14% each), whereas 9% of participants are currently out of work. For those who answered "Other," their jobs included cleaning, babysitting, dance teacher, Korean school teacher, and part-time jobs. When looking at students' employment status, more than half the student participants did not currently work (55%).

When we asked all employed participants about health benefits offered through their jobs, less than half of them answered that they receive such benefits from their jobs (45%). About a quarter (25%) of all participants received government assistance of some type.

Most participants in our survey were highly educated, with 79% having received post-secondary education (more than 12 years of education), 16% having 12 years of education, and 6% having fewer than 12 years of education.

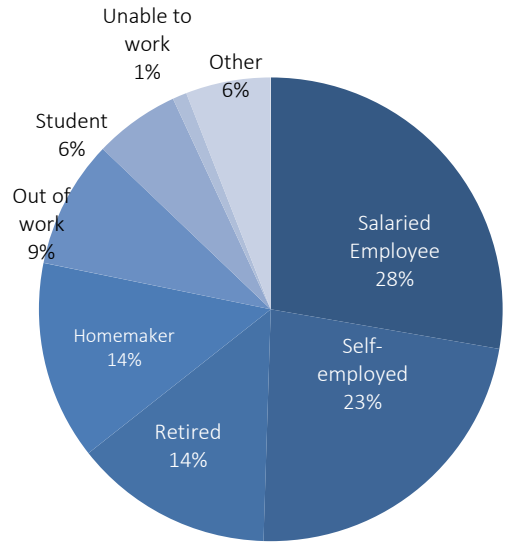
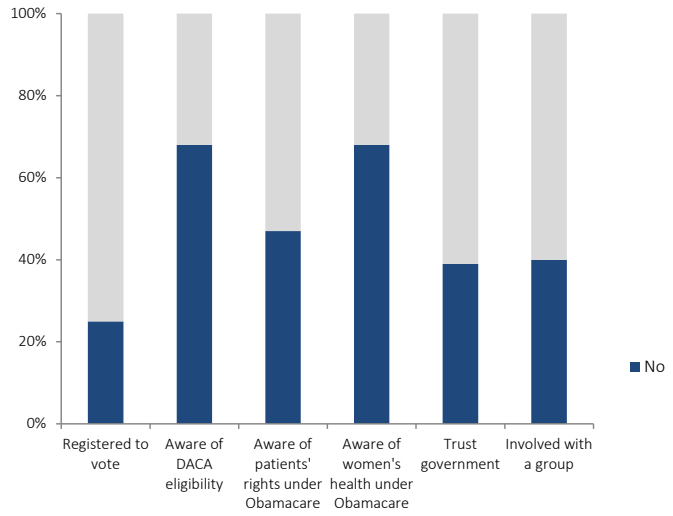


Figure 2. Employment

Figure 3. Civic Engagement



Civic Engagement

In terms of civic engagement, of the survey participants who were U.S. citizens, about a quarter (25%) were not registered to vote. More than two-thirds of the total participants (68%) were not aware of Deferred Action for Childhood Arrivals (DACA) eligibility and not aware of the women's health provisions under the ACA (68%). Awareness of patients' rights under the ACA was also low, with almost half of the participants (47%) reporting a lack of familiarity. Two-fifths of participants (40%) answered that they do not trust the government always, most, or some of the time.

With regard to barriers that Korean immigrants face in becoming U.S. citizens, about half the participants indicated poor English language skills and lack of classes for English as a second language as the top barrier to citizenship they faced (51%). Lack of education and unfamiliarity with the U.S. political system was the next major barrier (36%), followed by unemployment and job issues (20%), lack of time and access to alternative childcare (15%), strong ties to home country (15%), and lack of transportation (5%). The participants who answered "Other" (14%) mentioned racism, cost, property in Korea, and inability to have dual citizenship as barriers to becoming U.S. citizens.

Table 2. Citizenship

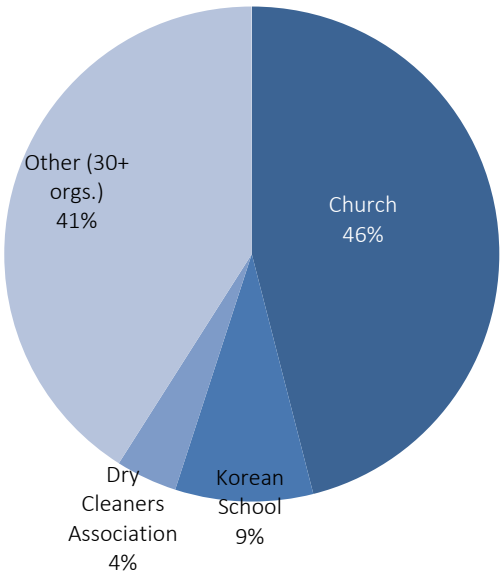
Barriers to Becoming a US citizen (n=339)	**Valid %**
Lack of English language classes / citizenship classes Language barrier	51
Lack of education / unfamiliar with political system	36
Unemployment / jobs	20
Lack of time / childcare	15
Strong ties to home country	15
Lack of transportation	5
Other (e.g., racism, cost, property in Korea, dual citizenship not allowed, planning to return to Korea later, unsatisfying qualification)	14
Benefits of U.S. Citizenship (n=341)	
Voting rights	58
Traveling abroad without need for visas or restrictions of length of stay	49
Access to government programs and assistance	41
Access to government jobs	30
Holding elective office	23
No benefits	4
Other (e.g., retirement benefit, education, financial aid, employment, citizen rights & protection, convenience, military issue, safety, social mobility)	12

Regarding the advantages of U.S. citizenship, more than half the participants chose voting rights as the number one benefit (58%). Traveling abroad without the need for visas or restrictions on length of stay was the second most popular benefit (49%), followed by access to government programs and assistance (41%), access to government jobs (30%), and holding elective

office (23%). Participants who answered "Other" (12%) mentioned retirement benefits, access to an education opportunity, financial aid, an employment opportunity, and protection of citizens. Only 4% of the participants answered that having U.S. citizenship was not beneficial.

When participants were asked about involvement with groups or organizations, almost half answered that they were involved in a church, followed by Korean school (9%), and dry cleaners associations (4%). The remaining 41% of the participants listed names of various Korean-related and non-Korean-related groups.

Figure 4. Community Involvement



Health Insurance

About 16% of participants reported not having any health insurance. They reported multiple types of insurance. Of those who had health insurance (84%), most obtained it through their employer (33%), followed by Medicare (20%), and Medi-Cal (18%). The rest obtained insurance through school (7%), other government plans such as Healthy Families (3%), another government program (10%), or a nongovernment plan (6%). Only about 10% of those who had health insurance directly purchased their own health plan.

When uninsured participants were asked about the main reason for their lack of insurance, 70% answered that they could not afford to buy it. Eligibility (or lack of eligibility) was another reason participants mentioned (17%). Eligibility issues included working status, change of employer, loss of job, and citizenship or immigration status. In addition, 11 out of 63 participants (18%) who answered this question refused to give a reason, which may imply that insurance is a sensitive issue among those who do not have it.

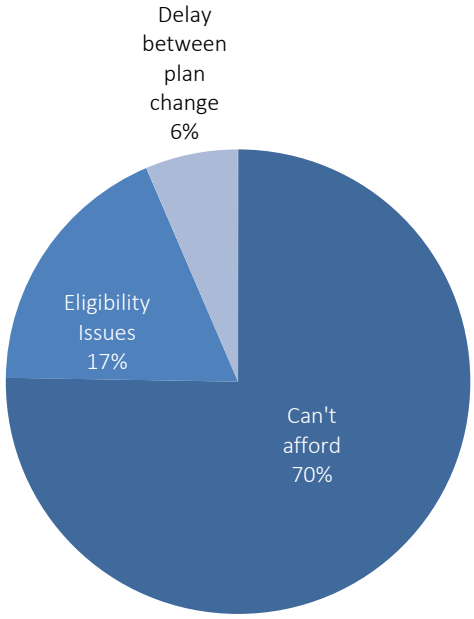
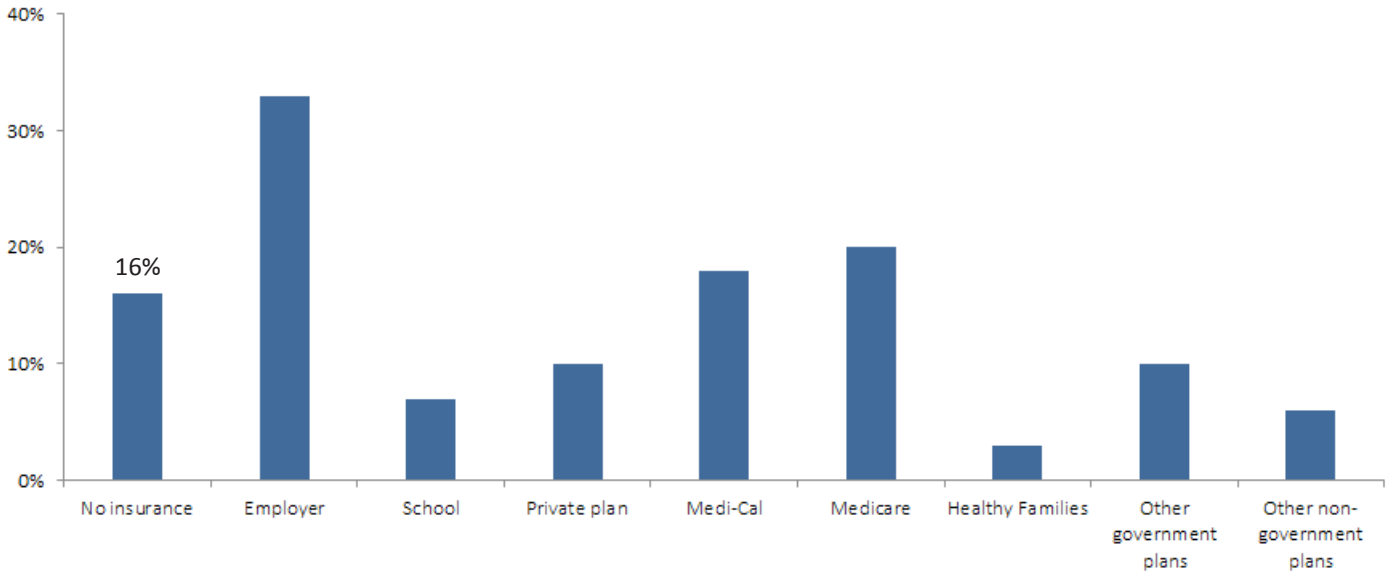


Figure 6. Reasons Uninsured

Figure 5. Health Insurance



The majority of participants reporting insurance have private health insurance plans, such as Kaiser (32%), Anthem Blue Cross (18%), and Blue Shield (7%). In addition, 6% of the participants reported that their insurance plan is "ObamaCare." This ambiguous response may mean that they shopped on the Covered California health insurance website but may not be aware that the health insurance exchange includes government subsidies for many people. Many participants did not list the name of the product they purchased online. This could be due to the exchange's only going into effect as of 2014. Other plans mentioned included Dongbu, an insurance plan from Korea.

Table A. Health Plan

Name of Main Health Plan (n=205)	Valid %
Kaiser	32
Anthem Blue Cross	18
Medicare & Medi-Cal	9
Medicare	3
Medi-Cal (including Alameda Alliance)	6
Blue Shield	7
ObamaCare	6
United Health Care	4
HMO	4
Aetna	2
AARP	2
PPO	2
Christian Mutual Med-Aid	2
CIGNA	2
School insurance (e.g., SHIP, UC Davis Health plan)	2
Health Net	1
VA	1
Other (e.g., CMM, Contra Costa Health Plan, Dongbu, EPO, GGH, Health PAC, Liberty / SF Health Plan, Post Office Union, Public CA, Valley Care)	5
Unidentified / Don't know	6

Health Conditions and Health Behaviors

For self-rated health, a strong predictor of an individual's mortality and morbidity (Idler & Angel, 1990; Idler & Benyamini, 1997), 37% of the participants perceived their health as being fair or poor. When we stratified this measure by sex, we found that more women (43%) perceived their health as fair or poor than did men (29%). Eighteen percent of all respondents reported having diabetes. Most of these participants reported type 2 diabetes (47%), followed by diabetes during pregnancy (21%), and type 1 (17%). When we adjusted for age using the 2000 U.S. Census data, the age-adjusted prevalence of diabetes was 14%.

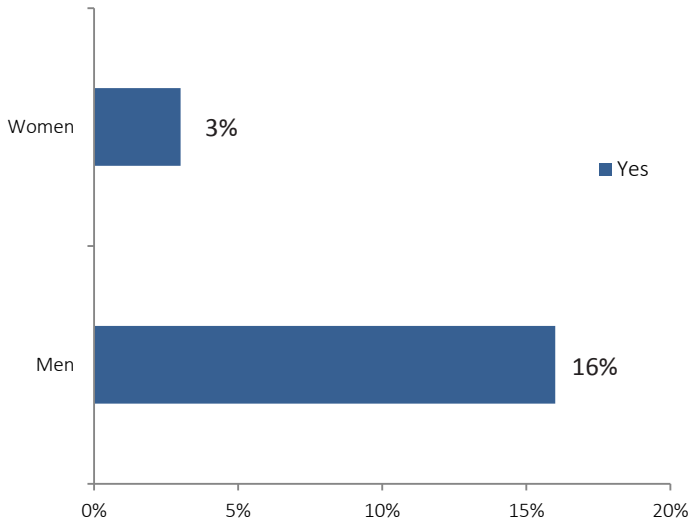
Table 3. Health Status

	Valid %
Self-rated health (fair/poor) **(n=333)**	37
Male (fair/poor) (n=133)	29
Female (fair/poor) (n=199)	43
Diabetes (**yes, n=323**)	18
Age-adjusted Diabetes (yes, n=323)	14
Of those who have diabetes…	
Type 1 diagnosis	26
Type 2 diagnosis	69
Diabetes during pregnancy **(n=144)**	8
Other type	5
High Blood Pressure (yes, n=331)	31
Age-adjusted High Blood Pressure (yes, n=331)	25
Taking medication (**yes, of n=101 with hypertension**)	76
Heart disease (yes, n=331)	8
Age-adjusted Heart Disease (yes, n=331)	7

Almost one-third of the participants (31%) reported having high blood pressure. As with diabetes, when we adjusted for age the prevalence of high blood pressure decreased to 25%. Of those with high blood pressure, more than two-thirds (68%) took medication for their condition. The prevalence of self-reported heart disease was 8% in our population. After adjusting for age using 2000 U.S. Census data, the prevalence was 7%.

Of the total number of respondents, 16% of Korean men smoke whereas for Korean women, the smoking rate was only 3%. Those who reported smoking, smoked an average of 23.7 days in a month and an average of 9 cigarettes per day. Eleven percent of smokers (n=3) were heavy smokers (≥20 cigarettes per day), and 2% of smokers smoked inside their homes each week. Among all respondents, 99% were aware of the consequences of secondhand smoking, but only 33% had been informed about smoking and/or secondhand smoking by a health care provider.

Figure 7. Smoking Across Both Sexes



In regard to alcohol consumption, a little less than half of participants (48%) had had one or more alcoholic drinks in the past month; the average was 5.9 days in a month and an average of 2.4 drinks per occasion. About 10% of drinkers were heavy drinkers (≥5 drinks on the same occasion on 5 or more days in the past 30 days).

Table B. Alcohol Consumption

	Valid %
Had Alcoholic Drink in the past month (yes, n=331)	48
# of drinks in a month (of those who drink, **n=151**, Mean and SD)	7
# of drinks per occasion (**n=167**, Mean and SD)	3
Heard about alcoholic drink from a health care provider **(yes, n=306)**	20
Heavy drinkers **(n=103)**	9

For physical activity, only 14% met the CDC recommendations for physical activity (after excluding two extreme values). Twelve percent of those who were 18–64 years old and 18% of those who were 65 or older met the CDC recommendations (150 minutes of moderate exercise per week). Overall, those who reported walking walked an average of three times per week, at an average of 53 minutes per walk and a median of 40 minutes per walk. Participants 18–64 years reported walking 3.5 times, compared to those 65 years or older, who walked on average 3.7 times per week. Those in the 18–64 age group averaged 52 minutes per walk, and those in the 65 and older group averaged 61 minutes per walk.

Table C. Physical Exercise

Physical Activity (n=331)	**Valid %**
Walk at least 10 min (**yes, n=331**)	80
Age 18 – 64 years old (yes**, n=254**)	78
Age 65 years old or more (yes, **n=77**)	90
Of those who walk…	
# of times walked in a week (**n=226**, Mean and SD)	2
Age 21 – 64 years old (**n= 166**, Mean and SD)	2
Age more than 65 years old (**n=60**, Mean and SD)	2
Minutes of each walk (**n=277, Mean and SD**)	50
Age 21 – 64 years old (**n= 211**, Mean and SD)	47
Age more than 65 years old (**n=66**, Mean and SD)	50
Met the CDC guidelines (150 minutes per week) (yes, n= 277)	14
Age 18 – 64 years old (**n=211**, Mean and SD)	12
Age more than 65 years old (**n=66**, Mean and SD)	18
Food Security (n=86)	
Food insecurity (Often true/Sometimes True, **n=74**)	16
Balanced Meal (Often true/Sometimes True, **n=75**)	23

Health Care Utilization

One-third of participants (33%) responded that they did not have a usual place to go for health care service. The average number of doctor visits in the past year was 2.3. Almost one-tenth of participants (9%) had visited the emergency department in the past year. Almost a third of the participants (31%) experienced delays in care.

Figure 8. Health Care Utilization

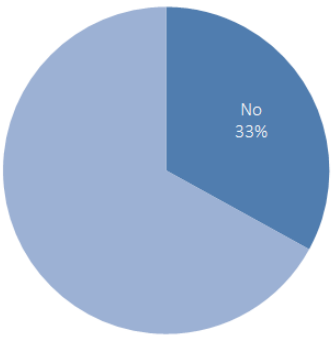


Figure 8a. Have a usual place to go for healthcare

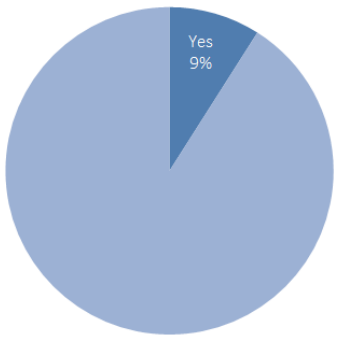


Figure 8c. Visited emergency care last year

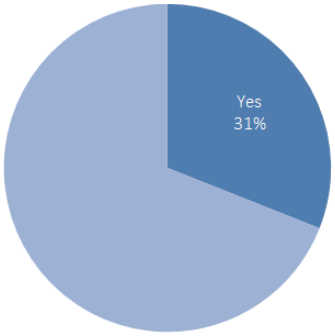
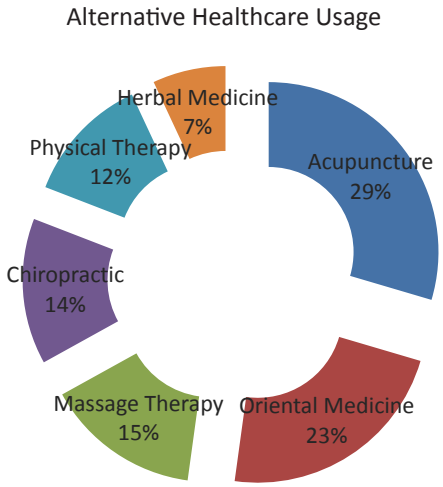
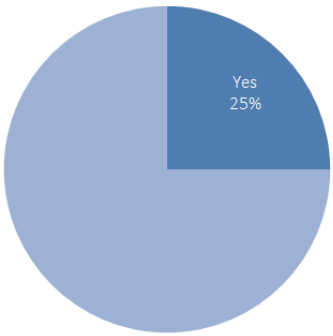


Figure 8d. Delayed care



Alternative health care was utilized by one-fourth of the participants, who had received health care from someone other than a physician or nurse. When participants were asked about types of alternative health care services they had received, acupuncture was the number one service reported (30%), followed by oriental medicine doctor (23%), massage therapy (15%), chiropractic (14%), physical therapy (12%), herbal medicine (7%), and mental health counseling (4%). Twenty-four out of 116 (21%) participants selected "Other," even though the health care service they mentioned was related to the Western medical care.

Figure 8b. Received care other than physician or nurse



When participants who did not seek help were asked about their main reasons for delaying or not getting care, inconvenient office hours and lack of time were the common reasons (32%). Cost or lack of insurance was the next most common reason (31%), followed by language or cultural differences (9%), and lack of transportation (7%). Participants who answered "Other" reported that they were apprehensive about the outcome of their evaluation. Some also noted that they were either "lazy" or did not perceive a need for care.

Table D. Reasons for Delaying Care

Main Reason of Delaying or Not Getting the Care (n=105)	Valid %
Inconvenient office hours / no time	32
Cost or lack of insurance	31
Language / cultural difference	9
Lack of transportation	7
Other (e.g., scared to see the result, did not think that I needed to go to hospital, lazy)	21

Korean Physician Preferences

More than three-quarters of participants (78%) said they preferred a Korean-speaking doctor. When given the scenario of having to pay out of pocket to receive care from a Korean doctor, almost half the participants (46%) responded that they would still prefer to receive care from a Korean doctor. When given a scenario in which choosing care from a Korean doctor would prevent them from enrolling in a health plan, some of which mandate a list of doctors, 30% of participants said they would still choose to obtain care from a Korean doctor. This high rate could be explained by the fact that a third of our participants (33%) reported difficulty communicating due to a language barrier. In addition, of those who had English language difficulties, the vast majority (87%) reported that they needed help to understand the doctor.

Table 6. Korean Physician Preferences

	Valid %
Have a doctor that speaks Korean (**yes, n=324**)	53
Of those who have doctors who speak Korean…	
Korean doctor is competent (**yes, n=174**)	83
Prefer a doctor who speaks Korean (**yes, n=321**)	78
Of those who prefer doctors who speak Korean:	
Prefer to pay out of pocket for a Korean Doctor (**yes, n=253**)	46
Prefer to receive care from a Korean Doctor even if it would prevent you from enrolling in a health plan (**yes, n=245**)	30
Difficulty communicating due to language (**yes, n=312**)	33
Of those who had difficulty communicating:	
Needed help to understand doctors (**yes, n=104**)	87

Health Communication

In terms of places where Koreans usually get most of their health information, responses indicated that the Internet was the number one source (51%), followed by friends or relatives (29%), family doctor or doctor's office (27%), newspaper (26%), hospital (25%), television (22%), insurance company (5%), and public library (1%). When asked about preferred places to get health information, half of the survey participants ranked their family doctor or doctor's office as their number one choice (51%), followed by the Internet (39%), hospital (35%), newspaper (20%), television (16%), friends or relatives (13%), insurance company (9%), and public library (3%). (Respondents could choose more than one option).

Figure 9. Health Communication

Figure 9a. Usual Sources for health information

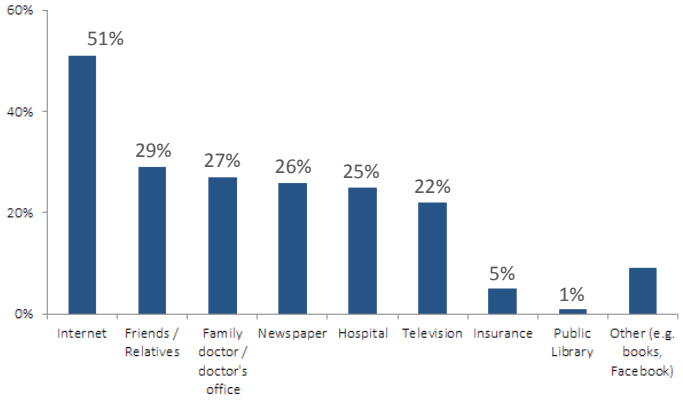
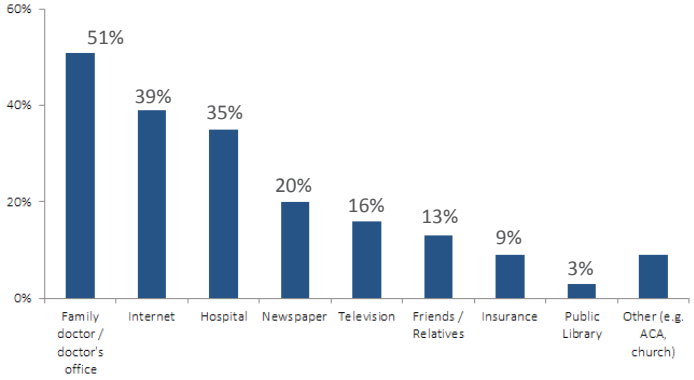


Figure 9b. Preferred sources for Health information



Cancer Screening

Almost half the participants (47%) reported never receiving colorectal cancer screening. Among those aged 50 years or older, 24% reported never having received such screening. Of those who had been screened, more than two-fifths had received a colonoscopy (42%) or a fecal occult blood test (41%). More than one-quarter of participants (26%) were not very familiar or not at all familiar with the benefits of colorectal cancer screening.

When participants who were 50 or older and who had not had either colorectal cancer screening test were asked about the most important reason, half (50%) of the respondents answered that they had no reason, had never thought about the test, or had not heard about either test from their doctor. No time to get the test, laziness, and cost or an insurance issue were the next most common reasons (13% each), followed by no health problem (11%).

Among Korean women participants over age 21, 30% had never received a Pap smear. In addition, nearly one in five female participants who are 40 or over (18%) in our survey had never received a mammogram. We also examined whether women had had a breast exam by a doctor, and almost three-fifths of female participants (58%) replied that they did not get this examination. In addition, one in five female participants (20%) were not very familiar or not at all familiar with benefits of Pap smears, while more than one in eight female participants (13%) was not very familiar or not at all familiar with the benefits of mammography. When we asked female participants who had not had a Pap smear about the most important reason they hadn't, half of respondents did not know the test was needed (50%). Another reason given was that they had not had any problems (15%), followed by cost or an insurance issue (11%). When we asked female participants who had not had a mammogram within the past two years about the most important reason for their not having done so, about one-fourth reported cost as a reason (25%). No health problem (17%) and laziness (15%) were other common reasons, followed by no reason (13%), and no recommendation about a mammogram received from a doctor (8%).

Table 7. Cancer Screening

	Valid %
Colorectal cancer screening (overall no, n=316)	47
Colorectal cancer screening **(≥ 50 older, n=186)**	24
Of those who received colorectal cancer screening	
Colonoscopy (yes, **n=316**)	42
Fecal or blood test (yes, **n=316**)	41
Familiar with benefits of colorectal cancer screening (Not too familiar/ Not at all familiar, **n=316**)	26
Female Respondents only	
Received Pap smear (no, **n=185**)	30
More than 21 years old (no, n=185)	30
Received Mammogram (no, **n=190**)	27
More than 40 years old (no, n=153)	18
Doctor examination of lumps (no, **n=189**)	58
Familiar with benefits of Mammogram (Not too familiar/ Not at all familiar, **n=187**)	13
Familiar with benefits of Pap Smear (Not too familiar/ Not at all familiar, **n=185**)	20
No reason / never thought about it	21
Too expensive / no insurance / cost	19
Haven't had any problems	15
Put if off / laziness	12
Too young	11
Doctor didn't tell me I needed it	8
Didn't know I needed this type of test	1
Too painful, unpleasant, embarrassing	1
Other (e.g., did not want to get it, didn't have time, doubts about the safety & effectiveness, no interest, planning to have x-ray, too busy)	12
Most Important Reason for Not Having Pap Smear Test (n=46)	
Did not know that it is needed	50
Haven't had any problems	15
Cost / insurance	11
Other (e.g., no interest, had a limited time to get the screening in Korea during the time of stay there, too scared, no time)	9
Most Important Reason for Not Having Sigmoidoscopy or Colonoscopy (n=172, including all ages)	
No reason / never thought about it / doctors didn't tell me I needed it	52
Haven't had any problems	15
Cost / no insurance	8
No time / laziness	8
Too young	7
Don't know	1
Other (e.g., blood stool test result was normal, did not want to go to hospital)	2
Most Important Reason for Not Having Sigmoidoscopy or Colonoscopy Among the Group of People Who Are 50 or Older (n=62)	
No reason / never thought about it / doctors didn't tell me I needed it	50
No time / laziness	13
Cost / no insurance	13
Haven't had any problems	11
Don't know	2
Other (e.g., blood stool test result was normal, did not want to go to hospital)	5

Part 2. Mental Health (MH) and Intimate Partner Violence (IPV) Module

Introduction

Due to the high rates of psychological distress seen among Korean Americans in California, particularly in Korean seniors (Tseng, et al. 2010), KCCEB and HRA conducted an additional survey using a second module designed to assess mental health and intimate partner violence (MH/IPV) issues among Koreans in the Bay Area. The sampling frame was also a convenience sample but was not the same as for the main survey module and was later in time. We used convenience sampling to recruit a total of 111 Korean American participants for this second survey module on MH/IPV.

Methods

From March to September 2015, we conducted another survey using a MH/IPV survey module for individuals who came to KCCEB for social services, such as immigration legal services and health care enrollment services. In addition, we conducted these surveys at general community outreach and education events.

Trained research assistants from HRA and KCCEB staff administered the survey in-person or by telephone, recording participants' answers in Qualtrics online survey software. To examine the characteristics of the sample, we examined the frequencies and calculated the percentages of all survey items. For secondhand smoking items, we stratified by sex, as women may be disproportionately exposed, given the higher rate of smoking among men.

For serious psychological distress, we used questions from the Kessler-6 (K6) scale. The survey questions inquired about the frequency of distress (all the time, most of the time, sometimes, little, or none) from six psychological symptoms: nervousness, hopelessness, restlessness or fidgetiness, depression, feeling(s) of everything being an effort, and worthlessness. Then we used the K6 scaling and the work of Forman-Hoffman to create: (1) "a two-category measure of serious psychological distress (SPD) as defined by a K6 score of 13 or greater, and (2) a four-category measure of no, low, moderate, or high [risk of] psychological distress based on scores of 0, 1 to 5, 6 to 10, and 11 to 24, respectively" (Forman-Hoffman et al., 2014, pg 1).

Part 2. MH and IPV Module

MH / IPV NEEDS ASSESSMENT RESULTS

Demographics

The results show that 69% of the sampled survey population was female and 31% was male. An overwhelming majority of the sample reported speaking Korean at home (97%) and said they had limited English proficiency (90%). Almost two-thirds (62%) were U.S. citizens, whereas 34% were green card holders. More than two-thirds (69%) had household incomes of less than $50,000 per year, including 35% with household incomes of ≤$20,000 per year.

Table 8. Health Status and Health Behaviors

	Valid %
Health insurance status (**yes, n=110**)	83
Self-rated health (**poor/fair, n=110**)	45
Food insecure (**often true, n=108**)	7
Inability to afford balanced meals (**often true, n=108**)	12
Secondhand Smoking (**n=110,** *respondents can choose more than one option*)	
Not exposed	35
Outdoor	38
Work (outdoor)	20
Other person's home or car	15
Restaurant	15
Home	9
Work (indoor)	9
Other	9
Casino	4
Car	3
Complete control to avoid tobacco smoke (**n=105**)	
All the time	29
Most or fair amount of time	21
About half of the time	10
Less than half of the time	8
Rarely/Never	32

Over one-sixth (17%) of the sample did not have health insurance coverage. In this sub-sample, the participants had low self-rated health status: 45% of the population rated their health poor or fair. In addition, 7% of the participants reported being food insecure, and 12% reported inability to afford balanced meals in their daily lives. Almost two-thirds (65%) of this sample reported being exposed to secondhand smoke in their daily lives.

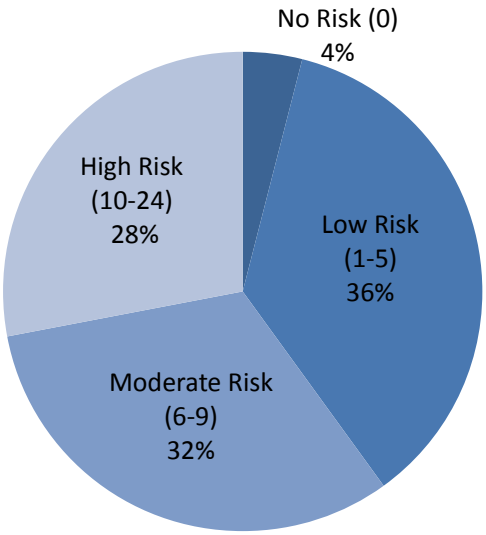
Table E. Demographic Characteristics (MH / IPV Survey Sample)

	Valid %
Sex (n=111)	
Male	31
Female	69
Language in which survey was conducted (n=111)	
Korean	91
English	9
Age (n=111, Mean and SD)	14
Age (n and percentages)	
< 50 years	31
≥ 50 years	69
Country of Birth (n=109)	
Korea	98
U.S	2
Years living in the US (n=74, Mean and SD)	12
< 15 years	28
≥ 15 years	72
Language spoken at home (**n=109,** *respondents can choose more than one option*)	
Korean	22
English	97
Limited English Proficiency (Well/Not well/Not well at all, **n=110)**	90
Citizenship status (US Citizen, n=111)	62
Green card holders **(n=42)**	90
Household income (n=103)	
≤ $50,000	69
> $50,000	31
Equal to $20K or less	35
$20,001-$30,000	10
$30,001-$40,000	13
$40,001-$50,000	12
$50,001-$60,000	11
$60,001-$70,000	3
$70,001 or more	18
Education (n=110)	
< 12 years	6
12 years	23
> 12 years	71
Married (yes, n=110)	73

Serious Psychological Distress (SPD) Measured by Kessler Scale

The mean population score was 7 out of 24 total on the Kessler (K6) scale. Thirteen percent of the survey participants reported Serious Psychological Distress (SPD), twenty eight percent were at high risk of developing SPD (scores of 10–24), while 32% were at moderate risk (6–9), 36% at low risk (1–5), and only 4% had no risk at all (score of 0).

Figure 10. High levels of Psychological Distress



When the results were broken down by sex, the women were three times more likely to experience SPD than Korean men. Nine percent of the women were measured as having SPD, compared with only 3% of the men. Moreover, 25% of Korean women were categorized as at high risk, compared with only 3% of the men. However, these results do not mean that Korean men are exempt from the risk of developing SPD. In fact, 53% of the men in the sample were at moderate risk of developing SPD, compared with 38% of the women. On the other hand, only 3% of the women and 6% of the men reported levels of distress that confer no risk for SPD. These results indicate that a significant percentage of Bay Area Korean Americans respondents are experiencing notable levels of psychological distress and are at risk of developing SPD.

Table 9. Serious Psychological Distress

Kessler-6 Scale	**Valid %**
Kessler Scale (Mean and SD, out of 24, **n=106**)	5
Serious Psychological Distress (> 13, **n=106**)*	9
Nervous **(n=111)**	
All	4
Most	18
Some	45
Little	22
None	12
Hopeless **(n=110)**	
All	3
Most	9
Some	22
Little	29
None	37
Restless or fidgety **(n=111)**	
All	4
Most	13
Some	31
Little	29
None	24
Depressed **(n=110)**	
All	0
Most	7
Some	17
Little	29
None	49
Everything was an effort **(n=109)**	
All	4
Most	14
Some	30
Little	14
None	39
Worthlessness **(n=109)**	
All	1
Most	4
Some	9
Little	24
None	62

Past-Year Functional Impairment Due to Emotional Distress

Survey respondents were asked to recall the one month in the past 12 when they were emotionally at the worst and to assess how severely the emotional distress interfered with different tasks in their everyday lives (a lot, some, or not at all). Forty-five percent of the participants reported that emotional distress had severely or moderately interfered with performance at work over the past 12 months. Moreover, for this population, emotional distress also severely or moderately interfered with relationships with family and friends (50%), social life (48%), and household chores (42%).

Table 10. Functional Impairment due to Emotional Distress in Past year among Adults with Serious Psychological Distress

	Valid %
Emotions interfere performance at work **(n=103)**	
Severe	13
Moderate	32
None	55
Emotions interfere household chores **(n=109)**	
Severe	7
Moderate	35
None	56
Emotions interfere social life **(n=107)**	
Severe	7
Moderate	41
None	52
Emotions interfere relationships with family and friends **(n=108)**	
Severe	11
Moderate	39
None	50

When survey results were broken down by sex, the women reported having been more severely or moderately affected by emotional distress compared to the men. At the same time, both women and men were adversely affected by emotional distress. Fifty-five percent of Korean women and 40% of Korean men reported severe or moderate functional impairment in family relationships and friendships due to emotional distress; 52% of the women and 30% of the men reported impairment in household chores. Forty-nine percent of the women and 34% of the men reported interference at work, and 52% of the women and 38% of the men experienced impairment in their social lives.

Cognitive Impairment: Confusion or Memory Loss

Forty percent of respondents reported confusion or memory loss had recently begun happening more frequently or was getting worse. Confusion or memory loss was more common among those aged 65 years or older (55%) than those younger than 65 (36%). Four percent of those experiencing confusion or memory loss reported that they usually gave up on household chores due to confusion or memory loss, while 29% sometimes did. Two percent reported that memory loss usually interfered with work, whereas 13% reported it sometimes did. Furthermore, among the population who experienced confusion or memory loss, safety was the biggest concern for needing assistance (31%), followed by personal activities (20%), household activities (13%), and transportation (4%). However, despite the high numbers of those experiencing confusion or memory loss, only 4% of those affected had discussed these changes with their health care professionals.

Table F. Cognitive Impairment

	Valid %
Confusion or Memory Loss **(yes, n=108)**	40
Gave up household chores due to confusion or memory loss **(n=45)**	
Always	0
Usually	4
Sometimes	29
Rarely	26
Never	46
Need the most assistance due to confusion or memory loss **(n=45)**	
Safety	31
Don't know	31
Personal activities	20
Household activities	13
Transportation	4
Frequency that memory loss interfered with work **(n=45)**	
Always	0
Usually	2
Sometimes	13
Rarely	29
Never	56
Health care professionals discussed changes in memory loss **(yes, n=45)**	4
Health care professionals said Alzheimer's or dementia **(yes, n=3)**	0

Table G. Social Context to Psychological Distress

	Valid %
Stressed out about rent/mortgage **(n=107)**	
Always	9
Usually	14
Sometimes	31
Rarely	8
Never	37
Worried about buying nutritious meal **(n=109)**	
Always	1
Usually	6
Sometimes	11
Rarely	19
Never	63

Social Context

The mental health survey module also inquired about the social context of emotional stress among Korean Americans in the Bay Area. The two social context questions asked about paying rent or mortgage and nutritious meals. Twenty-five percent of the population answered that they were always or usually stressed out about paying their rent or mortgage, and 31% of the population were sometimes worried. Seven percent of the population reported that they were always or usually worried or stressed about having enough money to buy nutritious food, and 11% were sometimes worried about this.

Mental Health Illness and Stigma

The respondents were asked to explain their level of agreement with existing mental health stigmas using a Likert scale: strongly agree, agree slightly, neither agree or disagree, disagree slightly, or disagree strongly. For the statement, "Treatment can help people live normal lives," 80% of the population either strongly or slightly agreed with the statement, whereas 4% strongly or slightly disagreed. For the statement, "People are sympathetic to people with mental illness," 51% strongly or slightly agreed, whereas 33% strongly or slightly disagreed.

Figure 11. Mental Illness and Stigma

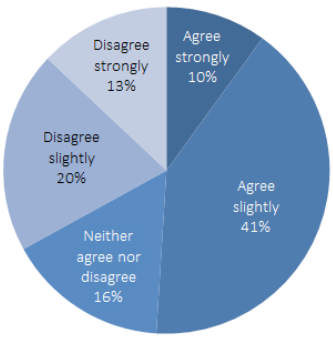


Figure 11a. People are sympathetic to people with mental illnesses

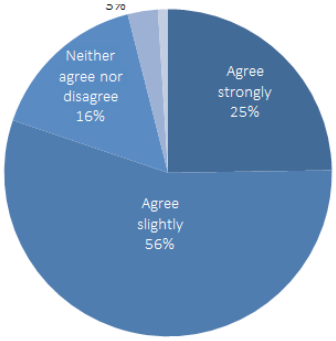


Figure 11b. Treatment can help people live normal lives

Emotional Support and Life Satisfaction

Thirty-one percent of the respondents reported that they rarely or never had social and emotional support available. On the other hand, 25% of respondents answered that social and emotional support was always available in their lives. In terms of satisfaction with life, 88% of respondents reported that they were satisfied or very satisfied with their lives, whereas 12% responded they were dissatisfied or very dissatisfied with their lives.

Mental Health Care Access and Utilization

Only 8% of respondents reported that they saw a primary care physician for mental health problems, and just 1% saw another professional such as a counselor or social worker. Nine percent of respondents reported having felt they might need to see a professional due to problems with mental health, emotions, nerves, or use of alcohol or drugs within the past 12 months. However, only one respondent had actually sought such help from a professional, for a mental health-emotional problem.

The biggest reason given for not seeking help for mental health, emotional, nervous, or alcohol/drug usage problems was concern about the cost of the treatment (47%). Only 25% of the respondents had or knew that they had insurance coverage for mental health care, while a majority of the respondents (52%) did not know or refused to answer. Nonetheless, concerns about someone finding out about their problems (34%) or feeling uncomfortable talking with a professional (30%), were also prevalent reasons given for not seeking out care for mental health problems. Furthermore, a sizable percentage of those who did not seek care said that they had difficulty scheduling appointments with mental health care providers (25%).

Table 11. Mental Health (MH) Care Access and Utilization

	Valid %
Needed to see a professional due to MH problems **(yes, n=108)**	9
Insurance for MH problems **(yes, n=109)**	25
Refused	52
Sought help for mental, alcohol or drug problems **(yes, n=10)**	10
Mental-emotional problem **(yes, n=1)**	100
Saw primary care physician for MH problems **(yes, n=76)**	8
Saw other professionals for MH problems **(yes, n=75)**	1
Reasons for not seeking help	
Concerns on the cost of the treatment (**yes, n=109**)	47
Don't know/ Refused	14
Did not feel comfortable talking with a professional (**yes, n=108**)	30
Don't know/ Refused	12
Concerns on someone finding out about MH problems (**yes, n=108**)	34
Don't know/ Refused	12
Had a difficult time scheduling (**yes, n=108**)	25
Don't know/Refused	25

Prevalence of Intimate Partner Violence

Nineteen percent of the respondents reported being in or having been in a relationship that resulted in feelings of fear. However, only 1% of the respondents reported that they were victims of domestic violence.

For example, when asked if a current or past intimate partner had acted in a certain way towards them, 19% reported experiencing verbal, physical, and/or sexual violence (19%). Next, when asked if a past or current intimate partner ever hit, slapped, pushed, kicked, and/or physically hurt the respondents, 13% reported experiencing these acts. Nine percent experienced an unwanted

sexual act in an intimate partnership, and 2% had been threatened by a partner with a gun, knife, or other weapons. Also, 2% reported that an intimate partner had held their passport against their will or threatened them with deportation or other immigration-related threats.

Table I. Prevalence of Domestic Violence and IPV

Domestic Violence	**Valid %**
Relationship that resulted in feelings of fear **(yes, n=108)**	19
Victims of domestic violence **(yes, n=105)**	1
Intimate Partner Violence	
Verbal, physical, sexually violent manner **(yes, n=108)**	19
Physical attack **(yes, n=109)**	13
Unwanted sexual act **(yes, n=106)**	9
Gun, knife or weapon **(yes, n=108)**	2
Passport against will/ Deportation **(yes, n=108)**	2
Talk about this **(yes, n=45)**	29
Maybe good to talk to: **(n=45,** *respondents can choose more than one option***)**	
Family	37
Friends	40
Clergy	46
Health care providers	62
Community	13
Other	60
Professionals	20

Among the respondents who had experienced these acts of IPV, only 29% reported having discussed this violence with others (third parties). When asked who might be good to talk with when violence happens in an intimate partnership, the respondents answered a health care provider of some type (62%), clergy (46%), friend (40%), family member (37%), other professional (20%), and community organization (13%) (multiple answers were permitted).

Secondhand Smoke Exposure by Sex

Secondhand smoking is an important issue among Korean Americans in the Bay Area. Sixty-five percent of the survey population reported experiencing secondhand smoking in various places, such as outdoors (38%), at an outdoor workplace (20%), in another person's home or car (15%), in a restaurant (15%), at home (9%), and in an indoor workplace (9%).

More men (80%) reported exposure to secondhand smoking than women (56%). The most prevalent place reported by both women (42%) and men (35%) was outdoors (not including an outdoor workplace or restaurant). Among the female respondents, 56% reported secondhand smoke exposure, and 71% of those who were exposed reported not having complete control to avoid it. This group included the 32% of the female respondents who reported never or rarely having any control over secondhand smoke exposure. These findings underscore the need to empower Korean women to be assertive in avoiding secondhand smoke exposure.

Table 12. Secondhand Smoking by Sex

	Male	**Female**
Secondhand Smoking (n=110, ***respondents can choose more than one option***)	%	%
Not exposed	20	44
Home	8	10
Car	3	3
Work (indoor)	6	11
Work (outdoor)	27	18
Other person's home or car	8	18
Outdoor	35	42
Restaurant	15	15
Casino	3	4
Other	15	7
	Male	**Female**
Complete control to avoid tobacco smoke **(n=105)**		%
All the time	29	29
Most or fair amount of time	21	21
About half of the time	12	10
Less than half of the time	6	9
Rarely/Never	32	32

Part 3. Discussion

In this section, we present the results of our KoNA Bay Area survey and try to illuminate what is actually happening in the local community based on such findings. We also compare our findings with California Health Interview Survey (CHIS) 2011-2012 data, in order to see how this local Korean population in the survey differs in characteristics from Koreans in California's population-based CHIS. Our survey participants reflect voices of immigrant Korean communities, such as individuals with Limited English Proficiency that may be systematically excluded from opportunities to achieve better health without proper intervention. It is our aim that discussions in this report will support federal, state and local governments' capacity to plan for programs to achieve health equity among severely under- and inappropriately served populations.

Table 13. Comparison of KoNA Bay Area data with CHIS Data

	Bay Area Korean	CHIS Korean	CHIS All Asian	CHIS Entire CA
General Demographics				
Average Age	52.4			
Age (≥50), %	57.0	47.7	36.4	42.0
Male, %	40.0	32.9	46.3	48.6
Education Level (12 yrs), %	78.7	71.1	76.4	62.9
Income Level (>$50,000), %	44.0	45.0	57.1	50.1
LEP (Limited English Proficiency; Well, not well, not well at all), %	85.0 (80.0%)†	77.0	62.0	63.0
CHIS (2011-2012; age 21-85)				
Health Status: Insurance				
Overall (Uninsured), %	16.0	34.0	14.0	18.0
Employer Insurance, %	33.0	34.0	58.0	47.0
Medi-Cal, %	18.0	15.0	11.0	13.0
CHIS (2011 – 2012; age 21-85)				
Health Status: Self-Rated Health				
Fair/Poor Health, %	45.0	29.0	18.0	19.0
CHIS (2011 – 2012; age 21-85)				
Health Status: Current Smokers				
Overall (YES), %	9.0	13.0	10.0	14.0
Male (YES), %	16.0	26.9	17.6	17.1
CHIS (2011 – 2012; age 21-85)				
Health Status: Number of Cigarettes Per Day (Among Current Smokers)				
Average # per day	9.0	N/A	N/A	N/A
2-5 per day, %	N/A	19.0	25.0	21.0
6-10 per day, %	N/A	54.0	49.0	41.0
11-19 per day, %	N/A	5.0	11.0	15.0
20 or more per day, %	N/A	21.0	14.0	21.0
CHIS (2011 – 2012; age 21-85)				
Health Care Utilization: Delay in Care				
Overall (YES), %	31.0	7.0	10.0	15.0
CHIS (2011 – 2012; age 21-85)				
Health Care Utilization: Visit to Emergency Care				
Overall (YES), %	9.0	6.0	11.7	17.9
CHIS (2011 – 2012; age 21-85)				
Cancer Screening: Pap Smear (21 years and older)				
21 years and older (NEVER), %	30.0	18.0	14.0	5.0
CHIS (2011 – 2012; age 21-85)				
Cancer Screening: Mammography				
Overall (NEVER), %	27.0	27.0	27.0	23.0
40 years and older (NEVER), %	18.7	34.6	11.9	7.4
CHIS (2007; age 21-85)				
Cancer Screening: CRC Screening				
Overall (NO), %	47.0	30.0	26.0	22.0
50 years and older, %	24.0	31.0	26.3	22.1
CHIS (2009; age 21-85)				

Part 3. Discussion

Chronic Conditions: Self-reported diabetes				
Overall (YES), $	18.0 (14.0) †	11.0	7.0	9.0
Type I, %	26.0	10.0	11.0	14.0
Type II, %	69.0	83.0	87.0	83.0
During Pregnancy, %	8.0	4.0	7.0	6.0
Chronic Conditions: Self-reported hypertension				
Overall (YES), %	31.0 (25.0) †	26.0	22.0	28.0
If hypertensive, on medication (YES), %	76.0	65.0	83.0	70.0
Cardiovascular Risk Factors				
Heart Disease, %	8.0 (7.0) †	2.6	4.4	6.4
Smoking, %	9.0	12.9	9.9	13.8
Second-Hand Smoking, %	65.0	50.0	6.7 [1]	5.8 [1]
Physical Activity, %	80.0	37.3	35.4	33.3
High Cholesterol, %	N/A	N/A	25.0	22.1
Diet [2], %	N/A	20.0	27.8	27.2
Mental Health Care: Needed help for emotional/mental health problems or use of alcohol/drug				
Overall (YES), %	9.0	12.0	9.0	16.0
Mental Health Care: Sought help for self-reported mental/emotional and/or alcohol-drug issue(s)				
Overall (YES), %	10.0	30 [3]	43.0	57.0
Mental Health Care: Saw healthcare provider for emotional / mental and/or alcohol-drug issues in past year				
Overall (YES), %	8.0	6.0	5.0	12.0
CHIS 2011 – 2012; age 21-85				
Intimate Partner Violence: Ever experienced violence [4] by an intimate partner since age 18				
Overall (YES), %	19.0	6.0	6.0	16.0
CHIS 2009; age 21-85				
Functional Impairment due to Emotional Distress among Adults with Serious Psychological Distress: Work				
Severe, %	13	7	3	4
Moderate, %	32	6	67	7
None, %	55	88	90	89
Functional Impairment due to Emotional Distress among Adults with Serious Psychological Distress: Household Chores				
Severe, %	7	4	3	6
Moderate, %	35	9	7	7
None, %	56	86	90	87
Functional Impairment due to Emotional Distress among Adults with Serious Psychological Distress: Social Life				
Severe, %	7	6	5	7
Moderate, %	41	10	6	7
None, %	52	84	89	86
Functional Impairment due to Emotional Distress among Adults with Serious Psychological Distress: Family				
Severe, %	11	7	5	6
Moderate, %	39	8	6	8
None, %	50	85	89	86
CHIS 2011-2012; age 21-85				

[1]Second-hand smoking exposure at home only

[2]Fruit and vegetable intake

[3]Statistically Unstable (CHIS 2011 – 2012)

[4]In our questionnaire, we defined violence as verbal, physical or sexual; CHIS defines violence as physical or sexual

†Age-adjusted using the Census 2000 data

Part 3. Discussion

While our data have limitations in generalizability to the larger Korean population due to convenience sampling, it is effective in demonstrating geographically specific data for a single Asian American sub-population in a way the current CHIS data do not. The local needs assessment is thus complementary to data obtained from CHIS. We compare our data to CHIS 2011-2012 (wherever possible) here to highlight differences seen between the populations captured by the KoNA Bay Area and CHIS.

LEP and Health Literacy

Bay Area Koreans show a very high rate of limited English proficiency. LEP is reported to be one of two key risk factors that affect health-related quality of life among six Asian ethnic groups: Chinese, Filipino, Japanese, Korean, Vietnamese, and South Asian (Gee & Ponce, 2010). In our Bay Area survey, eighty-five percent (85%) of Korean participants reported LEP, which is higher than the 76% LEP rate for the California Korean population reported by the 2011–2012 CHIS. A majority of our survey participants was an immigrant population born in Korea, and our rate is consistent with the state data on high LEP rate among Koreans. This indicates the importance of exploring the language service capacity gaps and communication preferences to support Koreans in accessing, understanding and making appropriate health decisions.

A majority of Bay Area Koreans has difficulty understanding communications by their physicians. A third of our participants (33%) reported difficulty in communicating with their health care provider due to language barriers. Of that group, 87% reported that they needed help to understand the doctor, 78% said they would prefer to have a doctor who speaks Korean, and 46% would prefer to see a Korean doctor even if they had to pay more for health care. Clearly, a provider network with Korean-speaking physicians and other ancillary providers would be important to improve health care access and quality care in this population.

Many Bay Area Koreans have trouble navigating the health care system and are unfamiliar with patients' health rights as well as the other benefits that their medical insurance offers. Although language is one obvious obstacle, the complexity of the U.S. health care system, in contrast to Korea's single-payer system, is another very likely cause. Like many Americans, Korean Americans face challenges with evaluating various health plans, choosing primary care providers, and utilizing services within a provider network. The fact that a huge portion of the community does not have a usual source of care (28%) despite having health insurance indicates a limited understanding of the health system; in combination with LEP, this puts Koreans at a higher risk for poor health outcomes. Less than half of survey participants (46%) reported being familiar with the patients' rights assured by the Affordable Care Act (ACA), and 77% said they were unfamiliar with its provisions specific to women's health. Clearly, designing health information materials about patient rights and health care benefits as well as generating health promotion efforts that are culturally appropriate to the Korean community

Part 3. Discussion

are vital in addressing their current challenges in navigating the complex American healthcare system.

Koreans do not have a usual source of care, they experience delays in seeking medical care, and they do not often utilize preventive services such as cancer screening. Cancer is the leading cause of death (32%) for Koreans, yet one-third of Bay Area Korean participants (33%) responded that they do not have a usual place to go for healthcare. Even among those who have insurance, 28% reported that they do not have a usual place for care when they are sick. Almost one-tenth of participants (9%) visited the emergency department in the past year, and a third of the participants (31%) experienced delayed care. 30% of female participants responded that they never received a Pap smear, and 24% of participants who were above age 50 had reported that they had not received colorectal cancer screening. To better understand these low cancer screening rates, we tested the association between LEP and familiarity with each of the two cancer screenings and found a significant negative association between LEP and familiarity with the Pap smear ($p = 0.010$). This result implies that Korean women living in the Bay Area may not have received a Pap smear because of unfamiliarity with its benefits due to language barriers. A comprehensive community assessment of barriers and facilitators to cancer screenings for Koreans is needed to understand the gaps and provide recommendations on effective strategies and messages to increase the awareness about the value of cancer screenings in the Korean community.

Considering the high LEP rate and low rate of health literacy, understanding how Koreans get their health information is critical - Bay Area Koreans obtain health information from sources other than their physicians and seek alternative health care services. When asked about their sources of health information, about half of the participants mentioned the doctor's office (25%) and/or hospital (27%); many responded that they rely on Internet (51%), friends and relatives (29%), newspaper (26%), and television (22%), among other sources. One fourth of the Korean participants are getting healthcare from someone other than a physician or nurse. When asked about types of alternative healthcare services they have received, acupuncture was the number one alternative healthcare service (30%), followed by eastern medicine doctor (23%), massage therapy (15%), chiropractic (14%), physical therapy (12%), herbal medicine (7%), and mental health counseling (4%). Getting vital health information out to Koreans requires a multi-pronged approach that includes support from a variety of community information sources such as family/friends, newspaper, television, and traditional Korean medical providers together with Western health care sources such as a primary care physician or another clinical staff.

Improving health literacy requires multifaceted solutions outside the clinical setting. Given how LEP affects health literacy, addressing physician-patient language barriers is critical. However, many current approaches to this issue are based on a clinical model that views poor literacy as a risk factor that needs to be managed when providing care. This type of intervention alone is

not sufficient as it fails to address the importance of social determinants of health. Community-based empowerment models view health literacy as an asset that needs to be developed. Health education and communication improve one's ability to effectively navigate the health care system, actively participate in making health care decisions, and choose healthier behaviors, thus gaining greater control over everyday events in their lives (Nutbeam, 2000). As a result of improved health literacy, individuals will be able to develop necessary skills to engage in health-enhancing actions including using services to promote better health, enabling confident interactions with health care providers, having the ability to navigate the health care system effectively, and influencing others to make healthy decisions.

Mental Health

Bay Area Koreans have unusually high Serious Psychological Distress (SPD) and rates of Functional Impairment Related to SPD. Our study shows significantly high levels of SPD, and functional impairment among Bay Area Koreans. Thirteen percent of the survey participants reported SPD, and 28% were at high risk of developing SPD. Forty-five percent of the participants reported that emotional distress has severely or moderately interfered with performance at work, 50% reported such interference in relationships with family and friends, 48% with social life, and 42% with household chores over the past 12 months.

Factors related to immigration and minority status may contribute to higher SPD and Functional Impairment. An insight into such high prevalence rates can be found in a widely held perspective in the sociology of minority mental health, the ***stress process paradigm*** (Moritsugu & Sue, 1983; Vega & Rumbaut, 1991). Immigrants experience unusually high stress caused by uprooting processes such as adjustment to a new language, sense of isolation and marginality, homesickness, social discrimination, financial hardships, etc. ***(Social Stressor)***. They also experience erosion of self-esteem and sense of mastery due to changes in role identity and structure in the family and society, leading to defense mechanisms that are not typically functional or socially acceptable in their new setting ***(Psychological Resources)***.

In spite of high SPD and functional impairment, Koreans do not seek help for mental health issues due to values maintained by traditional cultural norms. In spite of the high rates of SPD and functional impairment, the awareness for the need to seek help and the utilization of services are extremely low. Only 9% of the respondents with functional impairment related to SPD reported they might need to see a healthcare professioonal. Among those who felt that they needed help, only 10% actually sought help from other sources and only 1 respondent sought help from a healthcare professional - regardless of the self-reported need to see a professional for their mental health problems. A good framework for such lack of recognition can be found in ***cognitive barriers*** as defined by Rogler, Malgady, and Rodriguez (Rogler, Malgady & Rodriguez, 1989). ***Koreans***

Part 3. Discussion

consider behaviors as signs of mental illness only if they are upsetting to the social group. Such signs include psychotic, dangerous or disruptive behaviors (Moon & Tashima, 1982), but do not entail typical personal problems or general emotional distress (Tracey, Leong, & Glidden, 1985). Pang's study on ***Hwabyung*** provides an interesting example of the tendency to somatize psychological symptoms among Koreans (Pang, 1990). Because of Korean culture's esteem of restraint, suppression of verbal aggression, and avoidance of confrontation, Hwabyung is a uniquely Korean culture-bound syndrome in which suppressed emotions reflecting anger, disappointment, sadness, misery, hostility, grudges, and unfulfilled dreams of expectations manifest themselves physically. Symptoms include chronic indigestion, poor appetite, constipation, heart palpitations, pains in knees or legs, cold hands or feet, vomiting blood, altered sensory perception, nightmares, decreased urine output, and hypothyroidism. While Korean culture imposes "inappropriateness" or stigmas on expressing psychological symptoms in Western clinical terms such as mental illness or psychological distress, Hwabyung allows Koreans to approach their mental health issues through a model congruent to their own cultural context that links emotional and bodily distresses.

Cost, Stigma, Lack of Awareness and Trust about available Resources, and different values associated with Western psychotherapy and psychiatric treatment are barriers to service utilization. Reasons for not seeking help among people who recognize emotional and functional impairment issues and are willing to seek help include: 1) concerns about the cost of the treatment (47%), 2) stigma such as public knowledge of their problems (34%), and 3) feeling uncomfortable talking with a professional about these problems (30%). Furthermore, a sizable percent of those who did not seek care said that they had difficulty scheduling appointments with mental health care providers (25%).

For those who do seek help, mental health treatments need to be culturally responsive. Even when they seek services, premature termination occurs at a much higher rate than in non-minority clients, which is an outcome with varied (and sometimes obscure) determinants. For instance, the cultural orientation (and potential bias) of the therapist may affect their clinical judgment, leading to misunderstanding and/or mismanagement of the patient; this could include the inappropriate use of diagnostic and personality tests, misattribution of symptom expression, constraints on communication due to mismatched language capacities, and the natural variability in expression of psychological disorders, due to complex, interacting cultural and environmental contextual factors, which can vary over time. Traditionally, Koreans seek help for Hwabyung (somatic cultural-bound expression of mental health symptoms) from oriental medicine as it links emotional and bodily distresses in a model congruent to their cultural context. Collective values that are traditionally held by Asian Americans (Triandis, 1988), oppose the values associated with Western psychotherapy (Leong, Wagner, & Tata, 1995). Many studies supported the effectiveness of ethnic-specific mental health services (ESS) however, most studies used proxy

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variables of cultural match (language, ethnicity, etc.), without employing more direct tests of the culturally appropriateness of services to illuminate what elements of the services lead to enhanced outcomes when can then be implemented outside of ESS facilities.

Culturally Effective Engagement to improve Service Utilization is equally important as Culturally Responsive Services. We conducted a thorough literature review and examined current behavioral health care models for Asian American Native Hawaiian Pacific Islander (AANHPI) population prior to conducting this research. We were struck by the lack of population-specific data, culturally relevant mental health services, and culturally inappropriate and sporadic community engagement, such as efforts to find Koreans in a Chinatown library. In the process, the Korean community is not offered care that they deserve, with no evidence of what constitutes adequate care, and spotty, uncoordinated and fragmented services provided in the 5 Bay Area counties. Our study demonstrated the need for an approach that holistically looks at the impact of diverse factors including immigration-related social stressors, empowerment to strengthen psychological resources to overcome socioeconomic and role changes, building social support in the community, understanding barriers coming from cultural differences as well as impact of employment, housing, education, poverty, neighborhood safety, and other social determinants of health. In addition, culturally competent care should start from the target population's behavioral patterns and be delivered in a less stigmatizing environment that requires creating innovative coordination between existing and new resources. Our survey tells us that Bay Area Koreans often get healthcare from someone other than a physician: acupuncture (30%), oriental medicine doctor (23%), massage therapy (15%), chiropractic (14%), physical therapy (12%), herbal medicine (7%), and mental health counseling (4%). Our survey also shows that more than half of Koreans form networks through Korean faith institutions, and gain health information through the internet (51%), friends and relatives (29%), primary care physician's offices (27%), ethnic newspapers (26%), and television (22%).

Direct and Secondhand Smoke Exposure

Korean men are a very high priority population for tobacco use, and disparities between men and women in terms of smoking rates pose serious secondhand smoke issues for non-smoking Korean women. Our San Francisco Bay Area needs assessment shows a smoking prevalence among Korean males and a similar disparity between sexes that is consistent with CHIS data - men smoke at over 3 times the rate of women. Our study population reported an overall smoking rate of 9%, compared to 12.9% for Koreans surveyed in CHIS 2011. However, San Francisco Bay Area male smoking rate (16%) was significantly higher than that of women (3%).

Non smokers feel they have no control over secondhand and third-hand smoke exposure. It also demonstrates a need for community empowerment in negotiating smoke-free environments. Among 71 female Korean

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respondents, 57% reported that they have been exposed to tobacco smoke , 71% reported not having complete control of secondhand smoke avoidance, including 32% of the female respondents reporting they "never/rarely" have any control over SHS exposure. Findings from our survey underscore the need for interventions for smoke-free environments, including for the non-smoking Korean population, and empowering women to speak up for smoke-free homes. Our findings indicate third-hand smoke exposure also exists, as participants report exposure to cigarettes in various locations outdoors and report not having any control over their exposure.

Bay Area Koreans have higher SPD and Associated Functional Impairment Rates than California Koreans and all racial groups in California. High SPD is known to be associated with high smoking rate. Our study shows significantly higher levels of Serious Psychological Distress (SPD), and functional impairment among Bay Area Koreans who smoke. Thirteen percent of the survey participants reported SPD, 28% are at high risk of developing SPD. Forty-five percent of the participants reported that emotional distress has severely or moderately interfered with performance at work, 50% reported such interference in relationships with family and friends, 48% with social life, and 42% with household chores over the past 12 months. This is consistent with reports from California Tobacco Control Program (CDPH, 2008) that groups with extremely high smoking rates include those who report serious psychological distress such as Korean males.

Population-based, culturally and linguistically-specific interventions and prevention are urgently needed and should be based on evidence. With an increasing demand to enhance outcomes of tobacco intervention and prevention programs, as highlighted by the 2015 Master Plan of the Tobacco Education and Research Oversight Committee (TEROC), there has been increasing recognition of needed partnerships between research and community-based agencies since 2000. Such Community-based Participatory Research (CBPR) partnerships enable combining evidence-based strategies with population-based, culturally and linguistically-specific interventions and prevention for the state's diverse population, directly advancing TEROC's objective of reducing tobacco-related health disparities. Given 20% of tobacco funding should be allocated for prevention efforts at a county level, counties should consciously utilize this allocation by supporting evidence-based practices and innovative new programs that have the potential to promote better outcomes, especially for populations disproportionately affected by tobacco-related health disparity.

Quit attempts and utilization of Smoker's Helpline could be a mid-term outcome to target for cessation. However, uniquely for Asians, Helpline calls are often made by others, such as friends and family members. Quitting smoking successfully is a major challenge for smokers. In spite of the steady increase in cessation treatment and nicotine replacement therapy, 75% of those making a quit attempt used no assistance (California Department of Public Health, 2008). Quit attempts are highly related to success in quitting.

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Past studies found that ex-smokers recalled an average of 4.7 lifetime quit attempts to achieve successful cessation (CDPH, 2008). Clinical trials consistently demonstrate that Helpline counseling approximately doubles the odds of successful long-term quitting (Zhu et al., 1996; Zhu et al., 2012). However, 35% of calls on the Asian lines are made by friends or family members, rather than the smokers themselves; specifically for callers to the Korean language line, 27% of the calls were made by friends of family members (Zhu et al., 2010). This is an additional barrier to address as the Helpline is more effective when called by individuals who smoke, but also shows importance of working with family and friends.

Family-based, and empowerment-based intervention is a promising evidence-based approach in API populations. Intervention studies with pregnant women providing them education and skills and empowerment to reduce SHS exposure from their smoking husbands have had initial success in SHS exposure reduction without evidence of long-term efficacy (Loke et al., 2005, Lee AH, 2008, Chi et al., 2014, Chan et al., 2013). Interventions targeting children failed to show that any one type of intervention was more effective than others in reducing SHS exposure (Baxi et al., 2014). Family-based interventions that utilize Lay Health Worker outreach to involve both smokers and their families supported the family-based approach in promoting smoking cessation in Asian American communities (Tsoh et al., 2015).

Policy Implications. Thus far, increasing the price of tobacco products is one of the most effective in reducing tobacco use, and along with legislative smoking bans, remain most effective in reducing SHS exposure in the U.S. (Callinan et al., 2010). Increasing the tobacco tax by $1.00 would prevent an estimated 35,000 current adult smokers and over 56,000 youth from a smoking related death. Without the tax increase, smoking attributable deaths in the state are projected to rise. Since Proposition 99 was passed in 1988, local health agencies, coalitions, education departments, research, civic and medical institutions, and community-based agencies in California have worked together in an effort to save lives from the public health threat posed by Tobacco using four pillars - policy, treatment, research and prevention. In 2015, five bills were proposed (SB 591 to raise the tobacco tax by $2 per pack, SB 151 to help keep tobacco out of the hands of youth by raising the minimum age for sales to 21, SB 140 to regulate e-cigarettes, AB 768 to ban tobacco products in the state's ballparks and AB 1396 to expand access to healthcare for low-income Californians). Two of the proposed laws — SB 140 and SB 151 — were discussed by the Senate Health Committee the day of the announcement. Both were approved and will now head to the Senate Appropriations Committee for further consideration.

Limitations and need for further research:

The current needs assessment report was focused on health needs assessment among Korean American adults (age 18 and over) in Bay Area counties. Accordingly, it did not explore youth engagement in interventions and prevention of tobacco use or media influences on youth by the Tobacco Industry, which warrants further

investigation, especially with the threat of new products such as e-cigarettes (King et al., 2015). As we enter a new age in healthcare with the advent of the Patient Protection and Affordable Care Act, reducing tobacco use and preventing initiation of tobacco use will be even more critical in order to control rising healthcare costs.

Cardiovascular Disease Risk Factors

The results from our study indicated that Bay Area Koreans had a higher rate of self-reported cardiovascular disease (7.0%) than did Korean adults in California (2.6%), Asian adults in California (4.4%), and adults overall in California (6.4%) (CHIS, 2011). Some common risk factors for cardiovascular diseases are high blood pressure, diabetes, smoking, physical activity, cholesterol, and diet, so we address these risks below where possible.

Koreans in the Bay Area are at elevated risk for hypertension. Hypertension, or high blood pressure, is a risk factor for both heart disease and stroke, especially for Korean American adults. The percent of deaths among individuals with hypertension is higher for every Asian American adult population, compared with non-Hispanic White adults (Jose et al., 2014). In 2011, a quarter of Korean American adults (24.7%) had high blood pressure (CHIS, 2011). Given the high rate of hypertension, it is important to study prevention and treatment methods to control hypertension in Korean Americans (Jose et al., 2014). Regarding the rate of hypertension, our study showed a high rate of self-reported hypertension from Koreans in the SF Bay Area (31%). This rate was substantially higher than the rate reported by Korean adults in California (24.7%), Asian adults in California (20.6%), and the overall population of California (27.3%) (CHIS, 2011).

Koreans in the Bay Area showed higher levels of Type II Diabetes than other Asian subgroups in California. Another risk factor for cardiovascular disease is type II diabetes mellitus, the form of diabetes that is most common among adults. Diabetes appears as the 4th most common cause of death in U.S. mortality lists and is strongly linked to risk for heart disease. The complications from diabetes are often related to damage to the heart and blood vessels as diabetes progresses (International Diabetes Federation, 2001). In comparison to non-Hispanic White adults, the risk of diabetes mellitus was 18% higher in Asian Americans (American Heart Association, 2013), but varies by sub-population. Out of all Asian ethnic sub-groups, the rate of diabetes in elderly Korean American men was higher than reported for any other ethnic group, including Black and Hispanic populations (Kim et al., 2001). Our study showed that 18% of Koreans in the Bay Area self-reported having diabetes (of any type). This was substantially higher in comparison to Koreans in California (10.6%), Asians in California (7.0%), and the overall population of California (8.4%) (CHIS, 2011).

Koreans are at greater risk of cardiovascular disease due to high rates of first-hand smoking and second-hand smoke exposure. Additionally, for Korean American men, the smoking rates are high, and contribute to both heart disease

and cancer (Palaniappan et al., 2010). Smoking is perhaps the most significant risk factor for cardiovascular diseases, and smoking cessation reduces the risk for both heart disease and stroke. Both men and women in the Korean group had higher rates of smoking and lower quit rates than seen in other Asian American sub-groups (An et al., 2008). Among non-smokers, exposure to second-hand smoke has been increasing (Kim et al., 2014). In a study that examined the second-hand smoke exposure of Korean Americans living in California, 50% were exposed to second-hand smoke at baseline. A follow-up two years later showed that the percentage of those who had been exposed to second-hand smoking had increased to 60.4%. The exposure to second-hand smoke was found to be associated with acculturation, employment, and being surrounded by those who smoked (Kim et al., 2014). A study conducted by Malek showed that women were more likely to be exposed to second-hand smoke than men (Malek et al., 2015). Our study population reported an overall smoking rate of 9%, compared to 12.9% for Koreans surveyed in CHIS 2011. However, San Francisco Bay Area male smoking rate (16%) was significantly higher than that of women (3%).

Physical activity levels are low. Health behaviors such as low rates of physical activity also have an association with heart disease. Especially among Asian Americans, physical inactivity is a significant risk factor, as 11.8% reported not engaging in any physical activity and only 30.5% engaged in regular physical activity (CHIS, 2011). Furthermore, a study conducted in 2011 showed that only 16.7% of Asian adults met the 2008 federal physical activity guidelines (American Heart Association, 2013) of 150 minutes/week of moderate physical activity. Another study found that women, younger age groups, less acculturated individuals, married males, and people with lower education level engage in less physical activity (Hofstetter et al., 2008).

Results from our survey for physical activity levels showed that only 14% met the CDC guideline for physical activity, walking at least 150 minutes in a week. However, 26.4% of Koreans in the California CHIS reported walking or exercising at least 30 minutes, 5 times/week which was slightly higher than all Asian groups in California (23.9%), and the overall population of California (26.2%) (CHIS, 2011).

Level of blood cholesterol is also a risk factor for cardiovascular disease. The rate of high total cholesterol among Asian American adults was 10.3% with the rate of low high-density lipoprotein (HDL, or "good cholesterol") of 14.3% (Aoki et al., 2014). In addition, foreign-born Asian adults had twice the rate of low high-density lipoprotein (15.4%) than did U.S.-born Asian adults (7.7%) (Aoki et al., 2014). A similar comparison between men and women showed that the rate of low HDL in Asian men (24.5%) was approximately five times higher than that of Asian women (5.1%) (Aoki et al., 2014). Given that the rate of low HDL differs significantly across place of birth and gender, studies suggest that these factors may be involved in determining the level of HDL cholesterol. Although we did not study cholesterol levels in our survey, results from the CHIS 2011 indicate that a quarter of the Asian American population in

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California reports high total cholesterol levels. This rate is slightly greater than the rate observed for the overall population of California (CHIS, 2011). More information is needed on levels of different types of cholesterol among Korean Americans.

Koreans in California eat fewer vegetables than Koreans in Korea, and have higher levels of obesity, which may increase with a new BMI standard for Asians. Another significant health behavior that is associated with heart disease is dietary intake. We did not collect dietary intake information in the Bay Area needs assessment. However, data from CHIS 2011-2012 show that Korean adults in California had a much lower fruit and vegetable dietary intake (20.0%) than all other Asian sub-groups in California (27.8%), and less than the overall population in California (27.2%) (CHIS, 2011). Another study that compared dietary intake and health-related behaviors of Korean American women born in U.S. and Korea showed that U.S.-born women consumed fewer vegetables and fruit than those women born in Korea (Park et al., 2005). In addition, fat intake was higher in U.S.-born women than in Korea-born women (Park et al., 2005). Also, the percentage of those who were overweight or obese was much higher in U.S.-born Korean American women (31.4%) than in Korea-born women (9.4%) (Park et al., 2005). These findings suggest that changes in living conditions and acculturation of Korean immigrants may affect dietary intakes in ways that may negatively impact their risk of heart diseases, a phenomenon seen for other populations migrating to the US (Marmot & Syme, 1976). This deserves additional study in California's Korean community.

Women's Health

Bay Area Korean women were less likely to receive cancer screening than Korean women in California and all women in California. Our study found that the Pap smear screening rate in the local group was substantially lower than the state average. 30% of participants in this sample reported never receiving a Pap smear compared with only 5% of all Californians and 18% of Korean women in California reporting never having received a Pap smear (CHIS, 2001-2009). Breast cancer screening rate in our sample was also lower than the state average; among those 40 years or more who are recommended to receive mammograms (American Cancer Society, 2015), 18% in our Korean sample never received a mammogram, but rates for never received mammogram in this age group was 7% for the California overall state average (CHIS, 2011). Furthermore, almost 60% of women in our sample replied that they never had a doctor examine their breasts for lumps, compared with only 23% of all Californian women and 48% of Korean American women in California having reported never having received this screening (CHIS, 2001-2009).

Bay Area Korean women are at risk of second-hand smoke exposure, and feel no control over this exposure. Our Bay Area needs assessment shows smoking prevalence among Korean males is higher than among women. The disparity between male and female is consistent with CHIS data - men smoke at over 3 times the rate of women. Among 71 female Korean respondents in our survey, 57% reported SHS exposure and 71% reported not having complete

control of SHS avoidance, including 32% of the female respondents reporting they "never/rarely" have any control over SHS exposure. Findings underscore the need for interventions for smoke-free environments, including for the non-smoking Korean population, and empowering women to speak up for smoke-free homes.

Bay Area Korean women have significantly lower self-rated health than do "All California" Koreans and other minority groups. In our sample, nearly 40% of the participants perceived themselves as having fair/poor health. This percentage is higher than CHIS Korean (27%), other Asian American groups (Chinese: 16%; Filipino: 10%) and the state average (15%) (CHIS, 2001-2009). When stratified by sex, more women (43%) perceived their health as fair/poor than men (29%). This trend is similar to CHIS's Korean sample in that more women (26%) perceived their health as fair/poor than did men (12%), but in our sample, the percentage of participants who regarded their health as unhealthy was significantly higher. Findings from this study confirm results from other studies of SRH among minority groups.

Having a language barrier and larger share of burden from immigration widens the health disparity gap for Korean women. Immigrant women face a large burden of health disparities (Alba, 2005; Echeverria et al., 2006; Tillman, 2009). In the process of acculturation, Korean immigrant women are faced with compounded risk factors in all areas of life, including family, work, and society at large (Lee et al., 2012). Their struggles to integrate family and work roles were shown to impact quality of life and put them at greater risk for depression (Kim et al., 1994). In abusive relationships, immigrant women are more vulnerable to violence through their partners' abuse of legal status and culture (Raj et al., 2002). There is a lack of services that can simultaneously address cultural issues and language barriers, and this narrows the range of assistance that women may perceive as fitting for their needs.

Critical call for gender-sensitive and culturally specific programming. With the higher likelihood that Korean women will not receive adequate information from health facilities or physicians due to language and cultural barriers, the matter of increased health information access will require an awareness of trusted sources within the local community, as well as a means by which to understand women's current understanding of various health issues. A call for greater gender equity in health and the need for gender-specific health care programs have been put forth for some time now. Rather than aiming to standardize health outcomes for two different groups, the purpose of promoting gender equity is to "ensure that the two groups have equal access to those resources which they need to realize their potential for health" (Doyal, 2000). Gender/sex disparities and differences in health and health care are well-documented generally. At the same time, the issue of minority women's health and health care disparities is a more complex topic from the general concept of women's health, if only for the fact that the perception and context of "women's health" across cultures are varied; for example, socioeconomic factors create diverging views of medical practices as empowering or stigmatizing (Kumanyika et al., 2001). It follows, then, that

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the challenges of promoting health equity and health care access within the Korean American community are unique.

Intimate Partner Violence

High Intimate Partner Violence Prevalence among Bay Area Koreans. Nineteen percent of our survey respondents reported being or having been in a relationship that resulted in feelings of fear. The percentage of respondents who indicated that they have been in such relationships was significantly higher for women than for men (22% vs. 9%).The most prevalent form of IPV experienced was verbal, physical, and/or sexual violence (19%), followed by physical attack (13%), such as hitting, slapping, pushing, kicking, and/or physically hurting the victim. Nine percent experienced an unwanted sexual act in an intimate partnership, and 2% had been threatened by a gun, knife or another weapon. Also, 2% reported that an intimate partner had held their passport against their will or threatened them about deportation or other immigration concerns.

People who experienced violence from their partners do not identify themselves as victims of violence, and they experience multiple barriers in help-seeking. In spite of high prevalence of IPV, only 1% of the respondents in the Bay Area survey identified themselves as victims of domestic violence. Among the respondents who answered they had experienced these acts of IPV, only 29% of the respondents reported that they have spoken with others about the violence in their relationship. When asked who might be good to talk with when violence occurs in an intimate partnership, the respondents answered: health care provider of some type (62%), clergy (46%), friend (40%), family member (37%), other professional (20%), and community organization (13%). The answers were not mutually exclusive. Korean women are often confronted with difficulties associated with dual oppression, being conferred inferior status in terms of both race and gender. Korean culture imposes sanctions that devalue women, and misogynistic role obligations stemming from Confucian social philosophies. The cultural expectation to embody deference, accept suffering, and emphasize personal sacrifice is magnified for Korean women. If Korean women are subject to heightened role expectations favoring sacrifice and stoicism, this may be associated with a gender-ethnicity interaction that more strongly interferes with help-seeking.

Church can play an important role in creating a supportive community environment. There are hundreds of Korean faith institutions in the Bay Area, and more than half of Bay Area Koreans are associated with one or more of them. Our study confirmed the importance of local faith institutions as spaces where people connect, share information, and provide resources. Faith institutions, in particular, shape opinions and attitudes about mundane matters of daily life and more significant issues touching the lives of immigrants – where to send children to school; how to negotiate challenges of cultural divides among the generations; and, for those courageous enough to tell, what to do about abuse and violence. Thus the faith institution could as easily be an environment that excuses, tolerates, or even

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promotes violence against women and children. Under such unsupportive environment, it would be hard for women experiencing violence look towards their faith community for help. Situations can be complicated as the church provides ministry to those perpetrating the violence as well as those experiencing the violence. If these community spaces could be places that no longer tolerated violence, then survivors of violence could find comfort, support and safety to nurture gender equity and healthy and respectful relationships, allowing the community to achieve a greater goal – the prevention of violence.

Trusted and Private Networks through Community Health Workers are Less Stigmatizing and More Accessible. Our survey showed Family and Friends as the largest resource with whom people exposed to violence can confide, as they are socially-isolated. Women may fear further isolation if they become visible by seeking help contacting IPV service organization directly. This is in line with our helpline experience in the last 15 years, that a majority of IPV reporting was initially made by proxy, and it often took months to years for a survivor to come forward, seeking help and taking actions. To address this issue, establishing a field of trained Community Health Workers, consisting of community members that can be friends and family of potential victims is critical.

Lack of Culturally Appropriate Programs/ Sustainability. Even though our study was Korean population focused, we have anecdotally witnessed a high prevalence of IPV in other Asian populations in the last 15 years, as KCCEB has one of very few culturally appropriate IPV programs in the Bay Area, providing service to other Asian populations. In spite of high prevalence, there are only a handful of programs providing adequate services to Asian populations in the Bay Area, KCCEB being the only Korean program north of Los Angeles. In spite of the fact that a large portion of victims choose not to go to shelter, a majority of local funding goes to shelter-based agencies, through formula funding mechanisms, rendering case management services that lack a shelter ineligible for local and regional funding. This poses sustainability challenges for non-shelter based programs.

IPV Practices tend to follow specific schools of thought, however, IPV is a complex problem that requires collaboration across sectors and philosophies. There are many competing theories about the causes of violence; one researcher identified thirteen major theoretical approaches, each with their own multiple sub-theories (Wortley, 2008). Under the shared goal of ending IPV, there are different types of programs with varying degrees of efficacy. The theoretical framework behind these programs can be broadly categorized as feminist/socio cultural, social learning theory-based intergenerational transmission, and psychological. ***Duluth model*** sees the primary cause of domestic violence as patriarchal ideology and societal sanctioning of men's power and control over women (Pence & Paymar, 1993). ***Intergenerational model*** posits that observing violence in one's family of origin creates ideas and norms about how, when, and toward whom aggression is appropriate. Early studies found a high frequency of violence in the families of

origin of domestically violent men (Gayford, 1975; Rosenbaum & O'Leary, 1981; Roy, 1977; Straus, Gelles, & Steinmetz, 1980). ***Psychological theories*** of DV perpetration examine individual factors. Dutton (2006) summarized these as personality disorders, neurobiological factors, disordered or insecure attachment, developmental psychopathology, cognitive distortions, and posttraumatic symptoms. A majority of culturally appropriate programs uses shelter–advocacy approaches, working with victims of domestic violence, rooted in strong feminist traditions, driving from the Duluth model. The model calls for mandatory arrest when there are bruises or other evidence of physical abuse, and court mandated Duluth Domestic Abuse Intervention Program's 26-week men's group sessions on power and control. Despite being the most widely used approach for treating domestic violence in the last 30 years, the body of research on the Duluth Model is mixed at best, showing minimal effect on DV recidivism (Miller, Drake, & Nafziger, 2013). However, advocacy interventions for victims of IPV result in increased feelings of safety and support and some short-term reductions in violence (Stover, Meadows, Kaufman, 2008).

Some risk factors to be examined. Factors for perpetration include: financial stress, witnessing IPV as a child, childhood physical abuse, childhood sexual abuse, parent-child boundary violations (e.g., seductive behaviors, peer-like relationship, or child as parental caretaker), poor monitoring in late childhood (male perpetration only), negative emotionality (e.g., anxiety, anger, hostility), conduct disorder, antisocial behavior (males), suicide attempts (men), suicide attempt history, alcohol and drug use, hostile attributions, generation of aggressive responses, and positive evaluation of aggressive responses. Social isolation has been studied in a limited scope as a risk factor for perpetration and victimization, and correspondingly some research suggests that quality of friendship and social support are protective factors against perpetration and victimization of IPV. Couple conflict and satisfaction, for all types of unions, has also found to be a strong proximal risk factor for IPV. (Moore, Stratford, Caal, Hanson, Hickman, Temkin, Schmitz, Thompson, Horton, & Shaw, 2015).

Citizenship and Civic Engagement

Over 14,000 Korean immigrants are eligible for U.S. Citizenship in the Bay Area, which is 13% of total Bay Area Asian immigrants eligible for U.S. Citizenship. Santa Clara County has the largest number of Korean immigrants eligible (6,559) to naturalize, followed by Alameda County (2,756), San Francisco (1,476), Contra Costa (1,263), and San Mateo (1,038). It is crucial to lower the barriers to naturalization by disseminating information on practical benefits of naturalization, as well as where Koreans could receive assistance in the process.

Language and unfamiliarity with the U.S. political system are the largest barriers. With regard to barriers that Korean immigrants face in becoming U.S. citizens, more than half of the participants in the survey indicated a lack of access to English as a second language and citizenship classes (51%), indicating language

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barrier as the top barrier to citizenship. Lack of education and unfamiliarity with the U.S. political system was the second major barrier (36%) to becoming U.S. Citizen, followed by unemployment and job issues (20%), lack of time and access to alternative childcare (15%), strong ties to home country (15%), and lack of transportation (5%). The participants who answered "Other" mentioned racism, cost, property in Korea, and inability to have dual citizenship as barriers to becoming U.S. citizens.

Language barrier is the most notable challenge to obtaining U.S. Citizenship among Korean immigrants. Koreans that have limited English skills tend to wait to become eligible for the language exemption in naturalization, by waiting until they become 50 years old and 20 years from becoming a legal permanent resident. Considering naturalized immigrants have better economic outcomes than their non-citizen counterparts, the fact that many working-age immigrants wait long years to become naturalized mainly due to the language barrier is a huge disadvantage that needs be resolved. Furthermore, English proficiency is important for immigrants' social integration and their economic assimilation (Kim, 2003). From the perspective of intergenerational mobility, as immigrants fare better, their economic success will impact future generations, by investing more in their children to lay the groundwork for their socioeconomic success in the future.

Improving English language proficiency will have multiple effects. Not only will it help the immigrants become naturalized much sooner, but it will enable them to become more assimilated and economically productive. In United States, currently 19.2 million working-age people (ages between 16 and 64), are considered LEP; at the same time, virtually all of the growth in the U.S. labor force over the next four decades is projected to come from immigrants and their children (Wilson, 2014). As the future growth in the U.S. labor force depends strongly on the immigrant families, it is clear that immigrants' economic success will have a significant positive effect on U.S. economy. This reveals the critical need to invest in increasing English proficiency for immigrants and their families with LEP, so they could become naturalized earlier and provide a greater contribution to the American economy moving forward.

Bay Area Koreans generally consider voting as a benefit of U.S. Citizenship, but are largely unaware of their civil rights and health and social benefits as a U.S. Citizen. In terms of civic engagement, about a quarter (25%) of the Korean survey participants who identified themselves as U.S. Citizens were not registered to vote. More than two-thirds of the total participants were not aware of Deferred Action for Childhood Arrivals (DACA) eligibility (68%) and not aware of the women's health provisions under the ACA (68%). Awareness of patients' rights under the ACA was also low, with almost half of the participants (47%) reporting a lack of familiarity. Two-fifths of participants (40%) answered that they do not trust the government always, most, or some of the time. Regarding the advantages of U.S. citizenship, more than half of the participants chose voting rights as the number one benefit (58%), followed by traveling abroad without the need for visas

or restrictions on length of stay (49%), access to government programs and assistance (41%), access to government jobs (30%), and holding elective office (23%). Participants who answered "Other" (12%) mentioned retirement benefits, access to an education opportunity, financial aid, an employment opportunity, and protection of citizens.

Korean churches can play an important role in community engagement. When participants were asked about involvement with groups or organizations, almost half (46%) answered that they were involved in a church, followed by Korean school (9%), and dry cleaners associations (4%). The remaining participants mentioned various Korean-related and non-Korean-related community groups. Faith-based institutions, in particular, shape opinions and attitudes about mundane matters of daily life and more significant issues touching the lives of Korean immigrants: where to send children to school, how to negotiate challenges of cultural divides among the generations, and how civic engagement can help them individually and collectively. Korean churches should be key partners in any programs serving Korean immigrants.

Koreans have a sizable undocumented population. There are about 230,000 undocumented Koreans living in United States (out of a total of 11.2 million undocumented immigrants nationally), which makes them one of the three largest Asian undocumented immigrant populations in the country, and also the seventh largest undocumented immigrant population nationwide (Baker and Rytina, 2013). Within Alameda, Contra Costa, San Francisco, Santa Clara, and San Mateo counties, there are approximately about 419,000 undocumented immigrants, and around 43,000, or more than 10% of them are eligible for DACA (Migration Policy Institute, 2015). Given that San Francisco-Oakland-Fremont area and San Jose-Sunnyvale-Santa Clara are two of the top ten Metropolitan Areas with the highest concentrations of Korean immigrants (Zong and Batalova, 2014), it is reasonable to assume that a significant number of undocumented Koreans live in these areas. According to a report in the Korea Times, nearly a third of the estimated 600 students at University of California, Berkeley, with either indeterminate or undocumented immigration status, are from Korea (Schurmann, 2011). It is noteworthy that despite the significant number of undocumented individuals in the Korean population, the community itself seems to have a low awareness of the issue. Within our survey participants, 68% of them showed unfamiliarity with DACA, even though a number of undocumented populations can benefit from it. Undocumented Koreans are very difficult to reach, with challenges in identifying them, and their reluctance to come forward due to stigma and fear of exposure. Hence it is crucial to raise the overall awareness and sense of acceptance within the general community, so these undocumented and underserved individuals can feel safe to seek help.

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Strengths

Our needs assessment surveys capture geographically specific information in the local counties that is helpful to local agencies in terms of design of programs and policies. It also was able to draw in a vulnerable population of older adults with limited English proficiency and higher reported chronic conditions. In this way it complements the population-based CHIS data which California luckily has but which cannot be used to give geographic samples for small populations. We were also able to mobilize the community in voicing their needs as we conducted interviews during the period of unprecedented community outreach for Affordable Care Act enrollments. Nevertheless, the data presented here are not meant to be generalized to an overall population.

Limitations

Our needs assessment surveys used convenience sampling. Accordingly, it is important to juxtapose these local data against the statewide sample in California Health Interview Survey (CHIS), a statewide random-digit dial telephone survey with data every two years that includes sub-samples of Korean Americans and weights that allow for generalizability to the larger Korean population. While acknowledging the limitations of convenience sampling, we drew comparisons with CHIS data in order to see how our sample is different from the CHIS Korean sample. It is not possible to generalize to a larger population using data from convenience samples but we can describe characteristics of the individuals who participated in the local needs assessment survey. Accordingly, we have local data to help inform our recommendations below.

Part 4. Recommendations

Health Literacy

- Lack of Korean language physicians and other healthcare providers is one of the largest barriers to healthcare access. Therefore, Covered CA should expand provider networks to include bilingual Korean healthcare professionals;
- Federal, state and local governments need to create meaningful public-private partnerships that value Korean-serving community-based organizational (CBO) partnerships. This includes contracting with Korean CBOs who can provide expertise in initial planning and development of culturally and linguistically appropriate health educational materials and ensuring proper translation from English into Korean and other languages, rather than relying on the current ad hoc system of using third party translation agencies and then requesting pro bono post-translation validation from CBOs;
- Expand collaboration beyond traditional Western health care and partner with alternative systems of healthcare (e.g., acupuncture, traditional Asian medicine) in conjunction with primary care; also expand coverage to include alternative healthcare services;
- Create federal and state funding streams to support building of a community health workers (CHW) network beyond clinical setting, based on the empowerment model to improve health literacy. CHWs are fundamentally different from support staff who provide assistance to healthcare professionals in a clinical setting. As CHWs are most effective in facilitating self-directed change, investing in them will lead to community capacity development and empowerment of Korean patients to successfully navigate the American healthcare system;
- Since Internet/smartphones are the primary source of health information for Koreans, explore easy-to-use Korean apps that provide accurate and reliable health information and instructions for accessing and utilizing the healthcare system;
- A comprehensive community assessment of barriers and facilitators to cancer screenings for Koreans is needed to understand the gaps and provide recommendations on effective strategies and messages to increase the awareness about the value of cancer screenings in the Korean community. cancer screening in the Korean community.

Mental Health

Increase Mental Health Service Utilization and decrease Stigma by:

- Diversifying access points or “front doors” beyond community behavioral health clinics. “Front doors” should be patient/consumer defined, friendly and non-stigmatizing; Consider integrating a holistic approach to care based on cultural definitions of health and pathology – including traditional healing practices that do not separate the mind, body and spirit;
- Increasing efficacy of Prevention and Early Intervention (PEI) funding by 1) employing

culturally relevant innovative strategies that engage in attitude change via participatory process and experiential learning;
2) diversifying investment to community-based organizations and other relevant entities beyond traditional mental health service providers; Hiring in-language staff and conducting traditional outreach is current approach by most service providers, that is a simple solution to a complex problem and insufficient strategy; Diversification and investment is likely to include:

Community Based Organizations that have track record for successful community engagement with wide reach

- for different sectors, and in changing
- behaviors and attitude

Faith-based organizations
Community Health Workers: support building of a community health workers (CHW) network beyond clinical setting, based on the empowerment model to improve service utilization. CHW is fundamentally different from support staff that provides assistance to healthcare professional in clinical setting. They are most effective in facilitating self-directed change leading to community capacity development and empowering Korean to successfully take ownership in recognizing issues and developing willingness to seek care non-threatening way.

- Providing systems for collaboration between traditional mental health service providers and innovative engagement agencies; no innovation and real collaboration happens when service providers are in comfort zone to continue their old practices with sustained funding;
- Modifying eligibility requirements to include cultural manifestations of symptoms to meet medical necessity;
- Considering high internet usage by Koreans including low income and some elderly, consider utilization of technology for dissemination of mental health information among Koreans; consider piloting tele-health models for behavioral health care to address the lack of Korean-speaking mental health professionals and privacy related to stigma; such technology enables culturally and linguistically competent clinicians the ability to extend their reach into isolated communities; Use mobile health technologies such as text messaging or apps to support those with mental health needs.

Increase efficacy of funding decision by:

- Reducing disparities by collecting disaggregated data to accurately capture the mental health and service needs of various AANHPI communities including Korean community, by supporting culturally appropriate outcome measurements, and by providing continuous resources to validate culturally appropriate programs.

Part 4. Recommendations

Tobacco

Achieve Tobacco-Related Health Equity Among Priority API Populations by:

- Institutionalizing health equity by investing in collection of disaggregated data to look at unique ethnic communities like Korean Americans;
- Empowerment-based approaches are important in reducing tobacco disparities and should focus particularly on building the capacity of marginalized communities to engage more in policy, systems and environmental approaches to tobacco control (Tong and Lew 2013);
- Regulating secondhand smoke as a toxic air contaminant. Adopt additional policies to minimize the health impacts of second-hand smoke exposure and other environmental toxins;
- Funding priority populations to implement evidence-based, culturally and linguistically relevant intervention and prevention strategies; Currently there's no funding to support smoke free environment through culturally relevant intervention and prevention programs in the Bay Area Korean community, while there are promising evidence-based, culturally and linguistically relevant intervention and prevention strategies, such as family and social network-based, utilizing Community Health Workers;
- Investing in priority populations' advocacy and leadership efforts; maintaining robust local partnerships between tobacco control experts with cultural and linguistic competence, researchers, grassroots organizations, advocates and policy experts that support effective program implementation;
- Integrating social norm change and population-based approaches and interventions in tobacco control program efforts and design;
- Acting locally to protect residents from tobacco-related harms without waiting for state and federal legislative and regulatory processes;
- Supporting initiatives that encourage all healthcare professionals to use every patient encounter to screen for tobacco use and encourage tobacco cessation;
- Monitoring e-cigarette use in the Korean community, particularly among youth, but also among former and current smokers; working with culturally competent CBOs and advocacy organizations for smoke-free policies advocating for: 1) preventing under age use/ setting an age to be allowed to purchase e-cigs, 2) extending smoke-free zones to include e-cigarettes; and 3) expanding school-related policies;
- Increasing adoption and enforcement of local policies that regulate the sale, distribution, and marketing of tobacco products, investing in community activity to work with merchants, store owners and/or grocery associations to support and comply with regulations on not selling tobacco products (e.g. to minors).

Part 4. Recommendations

Cardiovascular Disease Risk Factors

Risk for heart disease and stroke can be reduced. A broad range of investments need to be made in Korean American communities, including building capacity for cardiovascular risk reduction in community organizations located in our Bay area communities.

- Increase adoption and enforcement of local policies that tax sweetened products such as sweetened sugar beverages, and regulate the sale, distribution, and marketing of sweetened sugar products, investing in community activity to work with merchants, store owners and/or grocery associations to support healthier food product options;
- Tobacco smoking cessation and second hand smoke reduction is critical. Identify and support effective and culturally-appropriate tobacco control strategies and programs to maximize the impact among Korean populations with high tobacco use rates and minimize exposure to second-hand smoke;
- Conduct culturally-specific community-based interventions to promote healthy lifestyles, including community-wide campaigns, social support interventions, school-based physical activity programs, and environmental and policy approaches such as safe neighborhoods for walking, which seems to be popular;
- Develop and train community health workers as front-line public health workers who serve as a bridge between communities and healthcare systems to prevent cardiovascular diseases and promote healthy living; community health workers can also be trained as health coaches for conditions such as hypertension and diabetes to increase adherence;
- Promote effective interactions between healthcare and community interventions via CBOs with direct contact and trusted networks in our Korean community; faith-based interventions have had success in other communities and should be examined as one venue for interventions (smoking cessation, empowerment around second-hand smoke reduction, measurement of blood pressure, potentially other screenings);
- More research in Korean Americans is needed in areas such as blood pressure control, cholesterol epidemiology, and prevention in youth (physical activity, tobacco resistance, healthy diets).

Women's Health

Achieve Health Equity among Korean American women by:

- Investing in community and capacity building in operationalizing culturally competent and gender sensitive programs; use evidence to guide decision-making, and evidence-based data to model best practices for educating and empowering Korean women;
- Identifying and supporting effective and culturally appropriate women's empowerment programs and practices to lower women's exposure to second-hand smoke, to increase cancer screening rates, and to improve self-

rated health status of Korean women;
- Integrating social norm change and population-based approaches and interventions in program efforts and design; diversify and innovate community engagement strategies to create supportive community environments;
- Reducing disparities by collecting disaggregated data to accurately capture the needs of minority women populations, by supporting culturally appropriate gender specific outcome measurements, and by providing continuous resources to validate culturally appropriate programs;
- Investing in creating opportunities for participation in diverse workforce development including Community Health Workers, capitalizing on the inherent roles and talent of minority women in their culture as a caretaker; providing leadership development and technical assistance;
- Ensuring API women in the community are represented at decision-making processes locally;
- Incorporating health equity, language access, cultural competency and women/gender sensitivity standards in all public and private healthcare practices and personnel policy.

Intimate Partner Violence

- Support research to identify direct variables of culturally sensitive services that reduce IPV risk factors; Research suggests that culturally sensitive services targeting at-risk families and children can mitigate the effects of intimate partner violence and reduce risk factors of violence perpetration (Wortham, 2014). There is a gap, however, in available, especially well-evaluated, culturally-tailored services;
- Assess the effectiveness of proven and promising programs for diverse cultural groups; track outcomes for longer time periods; and assess the implications of combining programs for individuals or within a community;
- Support Community Engagement and Education through faith-based networks; develop more community-based education programs, utilizing frameworks from evidence-based effective models;
- Create less stigmatizing and safe environment to increase help seeking by developing trusted networks via Community Health Workers, and by increasing front door access through social and health service centers;
- Promote collaboration between shelter-advocacy practices and more effective perpetrator programs that may reduce recidivism;
- Interventions targeting children and adolescents should continue to be developed and rigorously evaluated, particularly those that are culturally-tailored (there is a substantial gap in dating violence and healthy

relationship interventions for LGBT youth);
- Promote collaborative interventions and preventions across education, health, justice and community sectors, working at the level of individuals, the family, schools, and communities;
- Establish local task groups to develop and evaluate best practices to ensure culturally sensitive care for this vulnerable population of abused women;
- Collect disaggregated API data wherever possible;
- Ensure adequate linguistic access for IPV victims or survivors through collaboration with culturally specific services;
- Consider developing and offering community programs, e.g., healthy relationship workshops to build the foundation for non-violent relationships.

Citizenship and Civic Engagement

Low naturalization rates have important implications in political integration, because the greatest barriers to immigrants' political participation, especially in elections, are gaining citizenship and registering to vote after becoming a citizen. Improving the efficacy of the naturalization program requires greater investments in culturally and linguistically competent and comprehensive civic engagement track programs:

- Integrate naturalization services with direct civic education and outreach to the Korean immigrant community regarding procedures and benefits of becoming naturalized, with focus in the areas that are culturally relevant and applicable to them;
- Support more Korean-serving community-based organizations to become legitimate immigrant legal resources to provide accurate information on naturalization process and provide language classes that assist even limited English Proficient Koreans to become U.S. Citizens;
- Track newly-naturalized Korean U.S. Citizens to raise their political awareness by having practical workshops that support Korean community members to become informed voters through education on how to register to vote, GOTV (Get Out the Vote) events, and voting parties; tailor these workshops to different local groups, age groups, and target audiences;
- Collaborate with local faith-based organizations to hold naturalization and political education workshops, as well as the

voting parties. The outreach efforts should target various groups within a congregation using different communication strategies for each group: youth group, young adult group, senior group, etc. They are at different levels of political awareness and are incentivized by different factors to civically engage.

The most common barriers preventing Asian American Dreamers (including Koreans) from applying to DACA are no different than those with other eligible youth. However, the prevailing stigma against undocumented immigrants in Asian American communities has been particularly difficult to overcome. Community leaders, ethnic media reporters, and Dreamers emphasize that undocumented Asian American immigrants face a greater level of shame in their communities, because undocumented immigration issues are not widely discussed, nor are they covered by ethnic media. Many adults are reluctant to have their children come forward to seek deferred status, fearing that it could bring shame to the family and heighten the risk of deportation to other family members. To promote success of Asian Americans including Koreans to be aware of and apply to DACA, funders should prioritize community education and outreach by:

- Investing in organizations with strong connections to the target Korean and other Asian American populations and ethnic enclaves, including individuals living in the informal economy ready to coordinate grassroots education and outreach activities, and capable of shaping and influencing community views on undocumented immigrants and immigration reform;
- Working with educators, parent associations, and school boards at high schools and community colleges; developing faith leaders as validators of the DACA/immigrant service program; and building partnerships with consulate offices of Korean and other select Asian countries;
- Supporting creative multi-media strategies, combining ethnic media for much larger audience of potential beneficiaries, their family members, and broader Asian American communities who are digitally connected, with consistent and compelling messages. Engage additional partners for effective social media strategies;
- Engaging the undocumented Korean and other Asian immigrants and empowering them to raise their voice within the community, to advocate for their rights at the policy level, and to become leaders, activists, and supporters. Dreamers and their families are impactful messengers for immigration reform, immigrant integration, and immigrant rights, and they would benefit from projects designed to build their organizing skills;
- Increasing research on the undocumented population: encourage partnership with researchers to better understand the Korean and other Asian undocumented immigrant groups. This type of information could help create a richer population profile, identify needs, and improve outreach tactics and services.

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