



PROJECT REPORT

*Identifying **AAPI Health**
Priorities in North Carolina*

Proposed to Blue Cross NC Foundation

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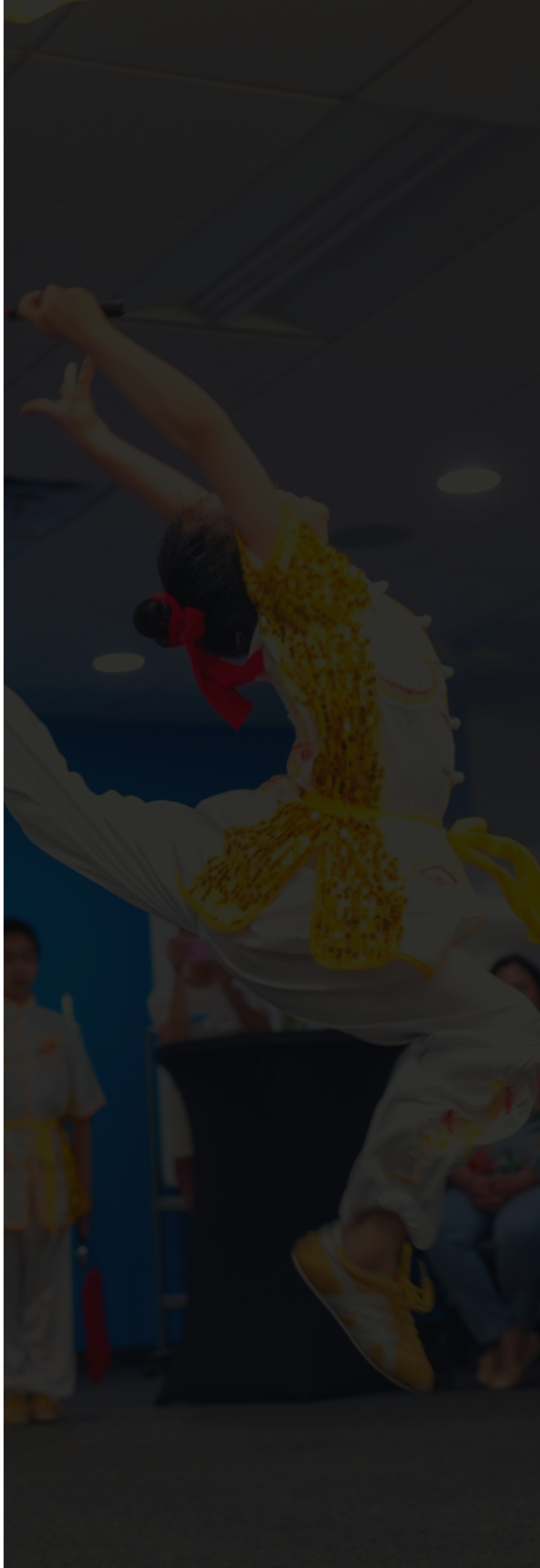
Explores the six research aims and the approaches used to better understand AAPI health priorities and lived experiences.

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SECTION 1

PROJECT OVERVIEW

FINDING A NEED & FILLING IT



► INTRODUCTION

Asian American and Pacific Islander (AAPI) communities are among North Carolina's fastest-growing populations. However, state health data rarely allow individual ethnic groups to be examined, which masks disparities among diverse AAPI groups. This study aimed to identify health priorities and barriers to care among Chinese, Karen refugee, and other AAPI communities.

► METHODS

This community-engaged, mixed-methods study was conducted with a coalition of 13 community organizations. We first analyzed data from three national datasets to understand AAPI health trends and data gaps. Second, we held four listening sessions (n=48) and four focus groups (n=44) to understand health challenges and actionable strategies. Third, we interviewed Karen refugee parents (n=12) and youth aged 18–25 (n=11) to explore stress and mental health help-seeking, using qualitative descriptive and thematic analysis. Fourth, a multilingual cross-sectional survey was completed by 402 adults (Chinese n=222, Karen n=114, other AAPI n=66). Both interview and survey studies were approved by the UNC-Chapel Hill IRB. Lastly, we produced a video amplifying Karen refugee experiences.

► FINDINGS

Secondary data lacked sufficient samples for subgroup analysis. Karen respondents were least likely to have a regular provider (55.3% vs. 83.3% Chinese, 89.4% other AAPI) or insurance (63.2% vs. 87.8%, 97.0%). Uninsured respondents had 3.55 times the odds of difficulty obtaining care, and cost was the most common barrier. Perceived stress differed by subgroup ($p=.002$) but not after adjustment; age, gender, income, and education were associated with stress. Qualitative themes included mental health stigma, language barriers, trauma, and parent-child disconnect. Family, trusted community organizations, and resilience were key strengths.



CONCLUSION

Aggregated data conceal substantial disparities, particularly among Karen refugees. By partnering with community organizations, health disparity research can generate new insights to guide service delivery and policymaking, prioritizing language-concordant, culturally responsive care and community mental health education in AAPI communities and beyond.

TASK/ACTIVITY	YEAR 1				YEAR 2			
Quarter	1	2	3	4	1	2	3	4
IRB Application								
Build REDCap Database								
Listening Sessions								
Focus Groups								
Survey								
Individual Interviews								
Video Production								
Sharing Session								
Data Analyses								
Preparation of Reports								



6 RESEARCH AIMS

1. **Secondary Data Analysis:** Demographics, healthcare access, and health behaviors of AAPI populations in NC.
2. **Listening Sessions:** 4 groups (Chinese, Cantonese, Karen; N=48).
3. **Focus Groups:** 4 groups (Karen, Chinese, other Asian communities; N=44).
4. **Individual Interviews:** Semi-structured interviews with Karen parents (n=12) and youth (n=11).
5. **Survey:** Chinese (n=222), Karen refugees (n=114), and other AAPI (n=66).
6. **Video Project:** *Home, Burma.*

SECTION 2

PROJECT METHOD OLOGY



FINDING THE FOUNDATION

Aim 1: Secondary Data Analysis

▶ INTRODUCTION

Secondary data analysis served as the foundation for this project by providing a broad overview of the demographic characteristics, health behaviors, healthcare access, and social determinants of health affecting Asian American and Pacific Islander (AAPI) communities in North Carolina. Before engaging directly with community members, the project team examined existing population-level datasets to better understand the current landscape of AAPI health and identify areas where additional, community-driven research was needed.

Using publicly available data from the American Community Survey (ACS), the U.S. Census, and the Behavioral Risk Factor Surveillance System (BRFSS), researchers examined trends in population growth, socioeconomic characteristics, healthcare access, health behaviors, and overall health status among Asian Americans in North Carolina and compared them with national trends. This analysis established an important baseline while also highlighting significant limitations in existing public health data, particularly the lack of sufficiently large sample sizes to examine differences among individual Asian ethnic groups.



METHODOLOGY

To establish a statewide picture of AAPI health, researchers analyzed secondary data from three primary sources:

- **American Community Survey (ACS)** (2022 five-year and one-year estimates)
- **2020 U.S. Decennial Census**
- **2023 Behavioral Risk Factor Surveillance System (BRFSS)**

These datasets were used to examine demographic characteristics, healthcare access, health behaviors, health status, social determinants of health, and experiences related to race and discrimination. Whenever possible, findings for Asian Americans were compared with the general U.S. population and North Carolina population to identify similarities and differences.

Although these national datasets provide valuable information, analyses were constrained by the relatively small number of Asian American respondents in North Carolina. In many cases, estimates could not be reported because sample sizes were too small, and meaningful analyses by individual Asian ethnic subgroup were not possible. These limitations reinforced the importance of conducting community-based, culturally responsive research to better understand the diverse experiences of AAPI communities across the state.

KEY FINDINGS

1 HEALTHCARE ACCESS

- **Higher insurance coverage:** Asian Americans reported higher rates of private insurance and lower rates of being uninsured than the general U.S. population.
- **Cost was less of a barrier:** Asian Americans were less likely to report that healthcare costs prevented them from receiving needed care.
- **Preventive care gap:** Asian Americans were less likely to receive routine annual checkups, while Asian adults in North Carolina reported lower influenza vaccination rates.
- **Key implication:** Barriers beyond affordability—including language, cultural factors, health literacy, scheduling, and navigating the healthcare system—may affect preventive care.





② SOCIAL DETERMINANTS OF HEALTH

- **Social and emotional challenges:** Asian Americans reported less social and emotional support and higher levels of loneliness than the general U.S. population.
- **Fewer material barriers:** Asian Americans generally reported lower food insecurity and fewer transportation barriers.
- **Key implication:** Health equity requires attention to social connection, emotional well-being, and culturally appropriate support—not only physical health and healthcare access.



③ RACE & LIVED EXPERIENCE

- **Race remains salient:** Nearly half of Asian Americans reported frequently thinking about their race.
- **Experiences of race-based treatment:** While most reported being treated similarly to other racial and ethnic groups, a higher proportion experienced physical symptoms related to race-based treatment.
- **Key implication:** Discrimination and race-related stress may influence health and well-being in ways that traditional healthcare measures do not fully capture.



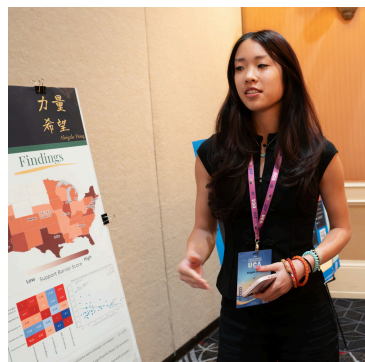
CONCLUSION

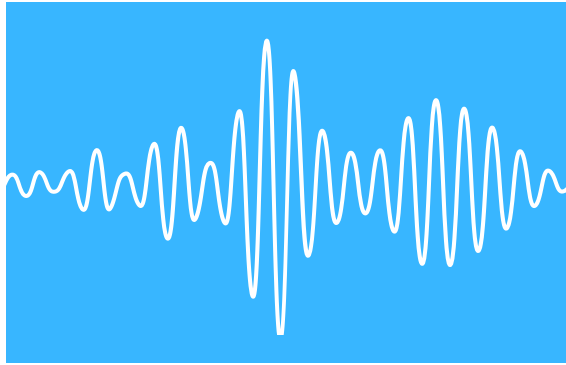
Secondary data analysis provided valuable insight into the health profile of Asian Americans in North Carolina while also revealing significant gaps in available public health data. Existing national and state datasets indicate that Asian Americans generally report favorable health outcomes and high rates of insurance coverage. However, these data also reveal lower utilization of preventive healthcare services, reduced social and emotional support, and experiences of race-related stress that warrant further investigation.

Perhaps most importantly, the analysis demonstrated that currently available datasets do not adequately represent the diversity of AAPI communities. Small sample sizes and the inability to disaggregate findings by ethnicity limit the usefulness of statewide surveillance systems for understanding the unique needs of Chinese, Karen, Filipino, Vietnamese, Korean, and other Asian American populations. These limitations underscored the need for the community-based research conducted throughout the remainder of this project, ensuring that the voices and experiences of individual communities could inform a more complete understanding of health priorities across North Carolina.

Research is **formalized curiosity**. It is poking
and prying **with a purpose**.

Zora Neale Hurston





LEADING WITH VOICES

Aim 2: Listening Sessions

▶ INTRODUCTION

The second research aim focused on engaging community members directly to better understand their health concerns, mental health priorities, and culturally specific barriers to care. Listening sessions provided an early opportunity for community members to openly share their experiences and perspectives and helped inform the project's broader data collection and analysis. The sessions were designed to build trust with participating communities and ensure that the research reflected community-identified needs rather than relying solely on existing health data.

▶ METHODOLOGY

Four community listening sessions were conducted with a total of 48 participants:

- **Chinese community:** 1 session
- **Cantonese-speaking community:** 1 session
- **Karen community:** 2 sessions

The sessions were conducted as a community-engagement activity focused on open discussion and sharing. The project team worked with community partners to create culturally and linguistically appropriate opportunities for participation. The listening-session component was approved by the North Carolina Central University Institutional Review Board (IRB).



KEY FINDINGS



1 MENTAL HEALTH STIGMA

Participants identified stigma surrounding mental health as an important barrier to recognizing concerns, discussing mental health openly, and seeking professional support.

2 COMMUNITY STRENGTHS

Participants also highlighted the strengths within their communities, including existing social networks, cultural connections, trusted community organizations, and the willingness of community members to support one another.



3 CULTURALLY SPECIFIC NEEDS

The discussions reinforced the importance of approaches that account for differences in language, culture, community experiences, and understanding of health and mental health. Participants' perspectives emphasized that effective health resources must be accessible and relevant to the communities they are intended to serve.



CONCLUSION

The listening sessions established an important foundation for the subsequent research activities. Community input helped the project team better understand how AAPI communities describe their own health concerns and barriers to care and reinforced the importance of culturally responsive research.

The sessions also reflected the project's commitment to translating community engagement into actionable information. Findings from community engagement were intended to inform subsequent data collection, support the development of recommendations, and ultimately be shared back with communities through accessible reports, presentations, visual materials, and other forms of dissemination.



NCCU IRB #1201875



DISCUSSIONS THAT DISCOVER

Aim 3: Focus Groups



▶ INTRODUCTION

While secondary data provide valuable information about population-level health trends, they cannot fully capture the experiences, concerns, and priorities of individuals navigating the healthcare system. To better understand these lived experiences, the project conducted a series of community focus groups with Asian American and Pacific Islander (AAPI) community members across North Carolina.

The focus groups provided participants with an opportunity to openly discuss the health challenges affecting their communities, the barriers they encounter when seeking care, and the resources they believe are needed to improve health outcomes. These conversations added important context to the quantitative findings by highlighting cultural perspectives, community strengths, and everyday experiences that are often absent from large public health datasets.

▶ METHODOLOGY

Four focus groups were conducted with project partners and participating community organizations, engaging a total of **44 participants** representing Chinese, Karen, and other Asian American communities in North Carolina.

Focus groups followed a semi-structured discussion format designed to encourage participants to share their experiences in a supportive and culturally responsive environment. Guided discussions explored community perceptions of health, barriers to accessing healthcare services, mental health concerns, and recommendations for improving healthcare access and health education.

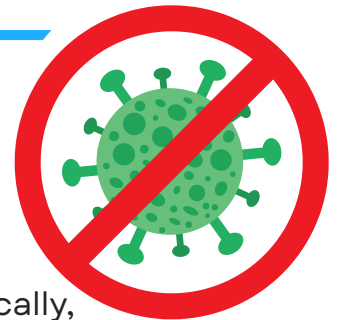
Sessions were facilitated by trained bilingual moderators whenever possible to encourage participation in participants' preferred language and to ensure culturally appropriate communication. Discussions were documented, coded, and analyzed to identify common themes that emerged across communities while also recognizing experiences unique to individual cultural groups.

KEY FINDINGS

1 COMMUNITY HEALTH PRIORITIES

Across all focus groups, participants identified several health concerns that consistently affected their communities. Mental health emerged as one of the most frequently discussed topics, alongside chronic disease prevention, access to primary care, healthy aging, and family well-being.

Participants emphasized that health should be viewed holistically, recognizing the strong connections between physical health, mental health, family relationships, financial stability, and community support. Many described health as extending beyond the absence of disease to include opportunities for social connection, cultural belonging, and overall quality of life.



2 BARRIERS TO HEALTHCARE

Although participants represented diverse cultural backgrounds, many described similar challenges when accessing healthcare services. Frequently discussed barriers included language differences, limited knowledge of available healthcare resources, difficulty navigating complex healthcare systems, transportation challenges, financial concerns, and uncertainty about insurance coverage.

Participants also described cultural stigma surrounding mental health, concerns about seeking professional help, and fear of burdening family members. Several participants noted that healthcare services often lacked culturally responsive communication, making it difficult to fully understand diagnoses, treatment options, or available resources.

③ COMMUNITY STRENGTHS

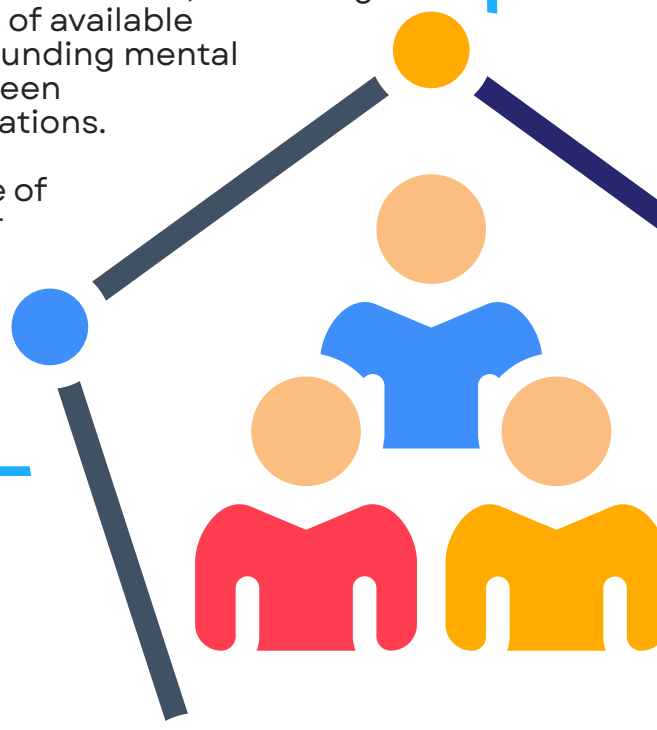
Despite these challenges, participants consistently highlighted the strengths that exist within their communities. Family support, trusted community organizations, faith communities, cultural traditions, and peer networks were described as essential sources of resilience and encouragement.

Many participants expressed a willingness to engage in health education and preventive care when information was delivered by trusted organizations or community leaders who understood their language and cultural background. These strengths demonstrate the important role that community partnerships can play in improving health outcomes and expanding access to culturally responsive services.

④ RECOMMENDATIONS FROM PARTICIPANTS

Participants offered numerous recommendations for improving health and healthcare access within AAPI communities. Common suggestions included expanding bilingual health education materials, increasing interpretation services, improving awareness of available community resources, reducing stigma surrounding mental health, and strengthening partnerships between healthcare providers and community organizations.

Participants also emphasized the importance of collecting more disaggregated data to better understand differences among Asian ethnic groups, noting that the needs of individual communities are often overlooked when all Asian Americans are combined into a single category.



“The **question of identity** is always a difficult one, but especially so for those who are **culturally displaced**, as immigrants are, or those who **grow up in two worlds simultaneously**, as is the case for their children.”

Jhumpa Lahiri



▶ CONCLUSION

The focus groups provided valuable insight into the lived experiences behind the project's quantitative findings. Although participants represented diverse cultural backgrounds, many described similar challenges related to language access, healthcare navigation, culturally appropriate services, and mental health stigma.

At the same time, participants identified significant strengths within their communities, including strong family networks, trusted community organizations, and a willingness to engage in health education when services are culturally and linguistically appropriate.

These findings reinforced the importance of community-centered approaches to public health and demonstrated that improving health outcomes requires more than expanding healthcare services alone. Building trust, strengthening community partnerships, improving language access, and recognizing the diversity within AAPI populations are all essential components of advancing health equity across North Carolina.



UNC Chapel Hill IRB #24-2436

ILLUMINATING LIVED EXPERIENCE

Aim 4: *Individual Interviews*

▶ INTRODUCTION

The fourth research aim used semi-structured individual interviews to better understand the mental health experiences and help-seeking behaviors of Karen refugee parents and youth in North Carolina. The interviews provided an opportunity for community members to describe experiences that may be difficult to capture through surveys or group discussions, including trauma, family relationships, cultural expectations, language barriers, and experiences navigating healthcare.

The study addressed a significant gap in the literature: very little research has examined mental health help-seeking among Karen refugees, particularly from the perspectives of both parents and youth.

▶ METHODOLOGY

Semi-structured interviews were conducted with Karen refugee parents and youth. Youth participants were ages 18–25 and were recruited primarily through the Karen Community Farm at Oaky Grove and its community network. A 13-member community advisory committee, including Karen community leaders, parents, and youth, provided input into the study and interview questions.

Interviews were analyzed thematically to identify common experiences and differences between generations. The qualitative analysis incorporated multiple rounds of coding and review, with a second coder used to strengthen consistency and reliability.

KAREN PARENT DEMOGRAPHIC INFORMATION

PARTICIPANT	AGE	AGES ENTERING REFUGEE CAMP	YEARS IN REFUGEE CAMP	YEARS IN U.S.	EDU*	CHILDREN AGE RANGE (YEARS)
P1	52	17	15	20	3	21-26
P2	44	14	13	17	1	23-27
P3	41	19	12	10	2	10-18
P4	53	27	12	14	1	24-34
P5	39	8	15	16	1	15-22
P6	47	16	10	16	2	16-23
P7	56	9	24	17	2	22-33
P8	44	13	6	13	3	3-19
P9	45	20	15	13	2	7-15
P10	50	25	8	17	1	14-27
P11	50	24	3	19	3	21-26
P12	59	16	22	18	3	23-36
Summary	48 (mean)	17 (mean)	13 (mean)	16 (mean)	All below HS	92%: 18-25

Note: *Edu: 1=no education 2=elementary or junior high; 3=high school

KAREN YOUTH DEMOGRAPHIC INFORMATION

PARTICIPANT	AGE	GENDER	YEARS IN REFUGEE CAMP	YEARS IN U.S.	EDUCATION LEVEL	*PARENT EDU
Y1	24	M	8	16	Bachelor	Both: 1
Y2	23	F	5	18	Bachelor	One: 2 One: 3
Y3	22	M	5	17	Bachelor	Dad: 2 Mom: 3
Y4	18	F	7	11	HS	Both: 3
Y5	18	F	3	15	HS	Both: 1
Y6	22	F	5	17	College	Dad: 4 Mom: 2
Y7	25	F	4	20	College	Both: 3
Y8	19	M	9	7	HS	Dad: 5 Mom: 2
Y9	18	M	4	14	HS	Both: 5
Y10	18	F	6	12	HS	Both: 4
Y11	18	F	3	15	HS	Both: 3
Summary	20.5 (mean)	F: 64%	5.4 (mean)	16 (mean)	College: 45%	College: 13%

Note: *Parent Edu: 1=no education; 2=elementary or junior high; 3=high school; 4=n/a; 5=some college education

PARENT INTERVIEWS

Parent interviews highlighted four major themes:

1. **Refugee camp experiences:** Participants described traumatic experiences associated with conflict, displacement, and life in refugee camps.
2. **Post-resettlement challenges:** Parents described stress related to employment, language barriers, economic pressures, and adapting to life in the United States.
3. **Parent-child disconnect:** Differences in language, education, culture, and expectations contributed to challenges in parent-child communication and relationships.
4. **Resilience:** Despite significant hardships, parents described determination to move forward, support their families, and build new lives in the United States.

Parents also described significant mental health symptoms and barriers to seeking professional support. Lack of linguistically and culturally appropriate care, limited understanding of the healthcare system, language barriers, and misconceptions about mental health were identified as important challenges. Many parents expressed interest in additional mental health education and resources to strengthen parent-child relationships.



YOUTH INTERVIEWS

Youth interviews revealed five major themes:

1. **Memories of refugee camps:** Youth described exposure to traumatic experiences and the lasting impact of growing up amid conflict and displacement.
2. **Identity and expectations:** Participants described navigating multiple identities as Karen, refugees, and Asian Americans while experiencing pressure to succeed and support their families.
3. **Parent-child disconnect:** Differences in cultural expectations, communication, and acculturation sometimes created tension between youth and their parents.
4. **Mental health and help-seeking:** Youth described symptoms of anxiety, depression, stress, and emotional distress, while identifying limited mental health knowledge, stigma, cost, language, and distrust of professionals as barriers to seeking care.
5. **Courage, resilience, and hope:** Despite these challenges, youth demonstrated strong resilience, commitment to their families and communities, and a desire to improve mental health resources for future generations.

"I feel like a lot of the youth are just bottling up the stress, the anxiety, the fears, and the emotions that they are feeling...when things are getting hard I'm not going to ask for help, but rather, I'm going to try to push through it. **Because that's the refugee and immigrant identity, right?"**

(Female, 23 years old)

"PARENTS ARE NOT EDUCATED, SOME OF THE CHILDREN FEEL ASHAMED."

(Male, 52 years old)

"Growing up, I just had to deal with my emotions...**There's a lot of loneliness**...I was filling out paperwork because my mom and dad don't speak English...Trying to go to college—like, no one had done it before me—and **no one was there to pave the way**. It was just me trying to figure it out...it was very stressful."

(Male, 24 years old)

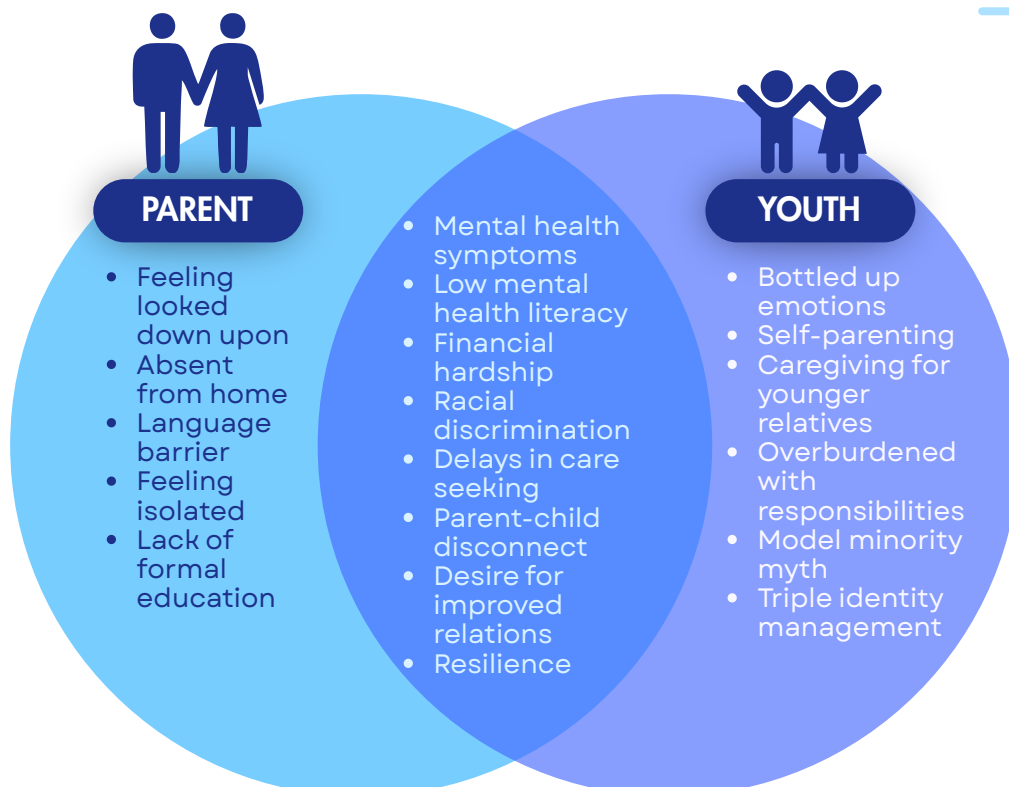
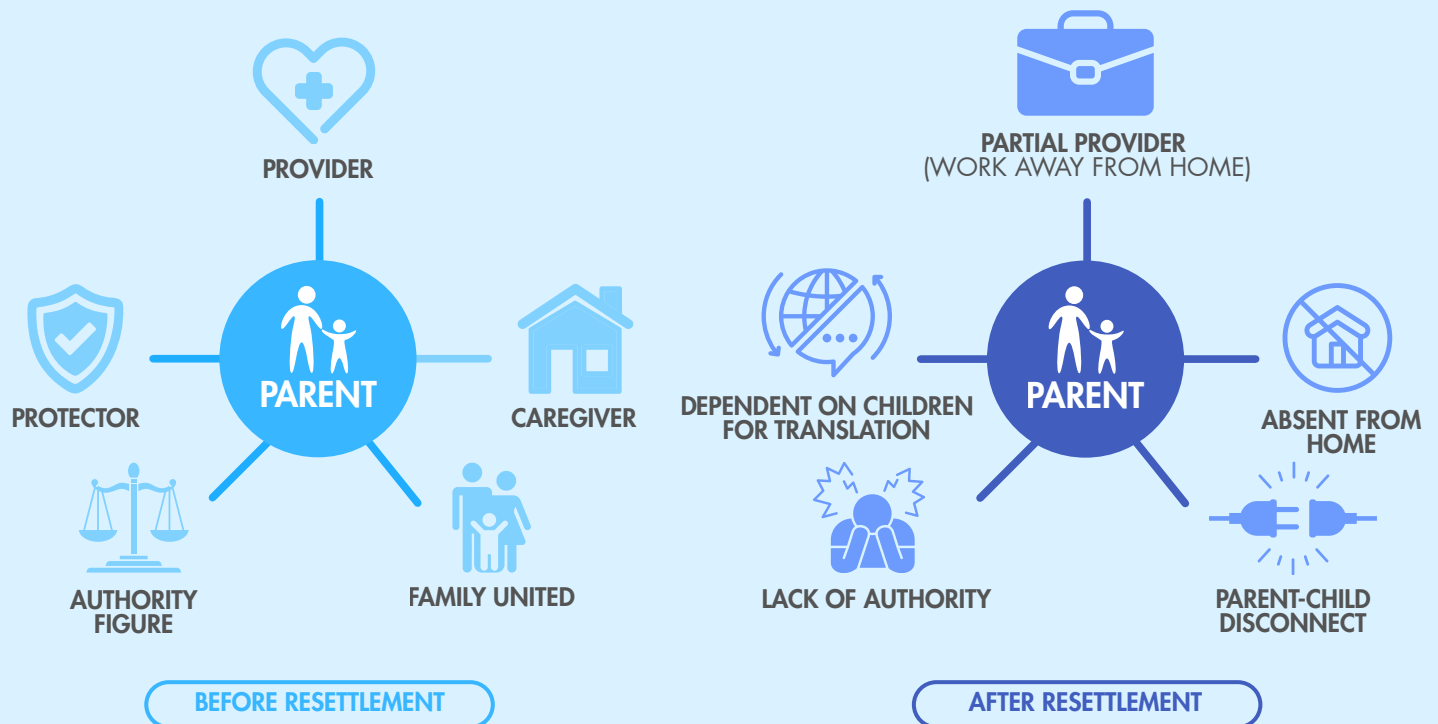
"PARENTS HAVE TO GO TO WORK TO TAKE CARE OF EVERYTHING...BUT IN THE REFUGEE [CAMP], FAMILY [IS] TOGETHER...YOU DON'T HAVE A JOB...BUT FAMILY [IS] TOGETHER."

(Female, 50 years old)

"I can't be myself in school. *My peers always make fun of me because I'm Asian...the food we eat, the way we talk... It's like Asian men were seen as less masculine than any other race...and most Asians—not just men—they let people bully them.*"

(Male, 24 years old)

PARENT ROLE CHANGES BEFORE & AFTER RESETTLEMENT





KEY FINDINGS

Across both generations, the interviews demonstrated that mental health challenges exist alongside significant barriers to accessing care. Participants described experiences of trauma and stress, yet professional mental health services were often underused. Several barriers emerged across the interviews, including:

① LANGUAGE & CULTURAL ACCESS



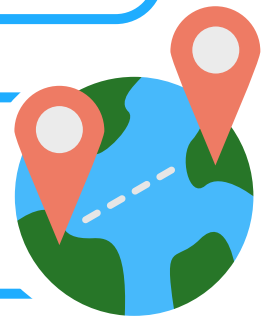
Limited language access and a lack of culturally responsive services made it difficult for community members to understand, navigate, and trust available mental health resources.

② MENTAL HEALTH KNOWLEDGE & STIGMA

Participants described limited knowledge about mental health and uncertainty about how to recognize symptoms or find appropriate professional support.

③ INTERGENERATIONAL DIFFERENCES

Parents and youth both described difficulties communicating across differences in language, culture, expectations, and experiences of resettlement.



④ TRUST & HELP-SEEKING

Distrust of unfamiliar professionals and uncertainty about where to begin seeking care contributed to delayed or absent help-seeking among youth.

⑤ RESILIENCE & COMMUNITY STRENGTH

Despite significant challenges, both parents and youth demonstrated strong resilience, family commitment, and a desire to strengthen their community and improve resources for future generations.

CONCLUSION

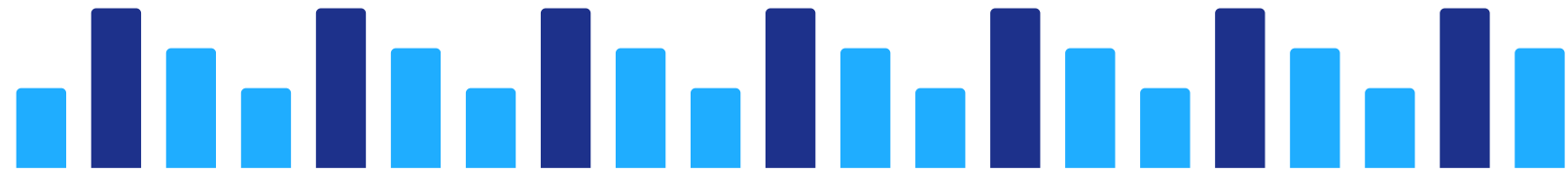
The interview findings challenge the assumption that Asian Americans experience uniformly positive health outcomes under the "model minority" stereotype. Participants' stories demonstrate how trauma, socioeconomic pressures, cultural expectations, language barriers, and limited access to culturally appropriate care can contribute to significant unmet mental health needs.

The findings point to the importance of expanding language-accessible mental health education, culturally responsive services, trusted community-based resources, and earlier pathways to care for Karen refugee families in North Carolina.

We live in a **very multicultural society**, and there are many layers to identifying with the culture and **identifying with your racial makeup**, and sometimes being mixed, you tend towards one more than the other, but **it doesn't mean that you can't embrace both**

Henry Golding





UNC Chapel Hill IRB #24-2708

SURVEYING THE LANDSCAPE

Aim 5: Survey



▶ INTRODUCTION

The community health needs assessment survey was designed to provide a broader quantitative picture of health experiences, healthcare access, and barriers to care among AAPI communities in North Carolina. While the project's listening sessions and focus groups provided opportunities for participants to describe their experiences in depth, the survey allowed the project team to collect standardized information across a larger and more diverse group of community members.

The survey was developed to address an important gap identified early in the project: existing public health datasets often do not contain enough Asian American respondents to generate reliable estimates for North Carolina, and they rarely allow health information to be examined by individual ethnic communities. By collecting information directly from community members, the project sought to generate data that better reflect the experiences of Chinese, Karen refugee, and other AAPI populations in the state.

The survey was intentionally designed to be culturally and linguistically accessible. The 211-question survey spanned 52 pages in its English version and was available in bilingual English/Chinese and English/Karen versions, allowing participants to complete the assessment in a language that was more comfortable and accessible to them. Recruitment also incorporated direct, in-person assistance for individuals with no or limited English proficiency.

METHODOLOGY

1. Structure: The survey was reviewed and approved by the Institutional Review Board (IRB) at the University of North Carolina at Chapel Hill. The cross-sectional, community-based assessment examined perceived health needs, health status, healthcare access and barriers, mental health and stress, health behaviors, and experiences of discrimination among AAPI adults in North Carolina. The survey was available in English, Chinese, and Karen to support culturally and linguistically appropriate participation.

Participants were recruited through the Carolina AAPI Health Coalition and its network of community partners. Recruitment strategies were intentionally varied to reach individuals across different AAPI communities and included community events, direct outreach, email communication, social media, and one-on-one recruitment.

Particular attention was given to reaching Karen community members, including individuals with limited English proficiency. Htoo Saw Yaw of Karen Community Farm at Oaky Grove played an active role in recruitment through in-person community outreach, including home visits and direct engagement with community members.

To broaden participation beyond the project's established coalition, the team also contacted more than ten additional organizations and networks, including NC Asian Americans Together, the NC Hmong Women's Association, the Montagnard Association of North Carolina, the NC Hindu Society, UNC-Chapel Hill, Duke University, North Carolina State University student groups, and community-based Facebook groups serving Asian Americans and families in the Triangle region.

Four in-person recruitment events were held during the reporting period:

- **July 2, 2025 – UCA WAVES Peer Support Event:** 10 participants
- **July 7, 2025 – Guangdong Association Event:** 25+ participants
- **July 11, 2025 – Hmong Student Wellness Event:** 10+ participants
- **July 25, 2025 – Seymour Center Event:** 20 participants

These events were supplemented by individual recruitment efforts and direct outreach through community partners using English, Karen, and Chinese, including Mandarin and Cantonese.

The completed survey sample included three broad groups: Chinese (n=222), Karen refugees (n=114), and other AAPI communities (n=66).

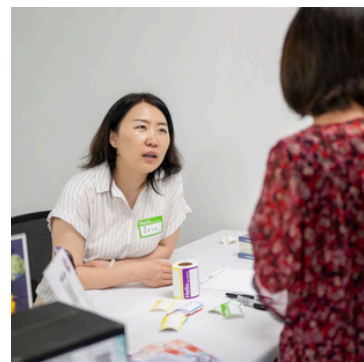
2. Recruitment & Community Engagement: Recruiting participants for a community health assessment requires more than distributing a survey. For communities that have historically been underrepresented in research, meaningful participation depends on trust, accessibility, and relationships with organizations and individuals that community members already know.

The project team therefore used a community-based recruitment strategy rather than relying solely on online or passive recruitment. Community partners helped distribute information, identify potential participants, and connect the research team with individuals who might otherwise have been missed through traditional recruitment approaches. The team also used culturally relevant platforms, including WeChat, to reach Chinese immigrant communities.

Language access was an important component of the effort. Chinese and Karen translations allowed participants to engage with the survey in their preferred language, while bilingual and in-person support helped individuals with limited English proficiency navigate the research process.

Karen Community Farm at Oaky Grove was particularly important in reaching Karen refugee participants. Htoo Saw Yaw provided direct recruitment support through home visits and community outreach, helping connect the project with community members who may face additional barriers to participating in research. Some surveys required two to two and a half hours to complete because of limited English proficiency, health literacy, and unfamiliarity with the research process.

The project also expanded its recruitment network beyond the original coalition. Outreach to universities, student organizations, cultural associations, advocacy organizations, and online community groups helped broaden participation across different AAPI populations.

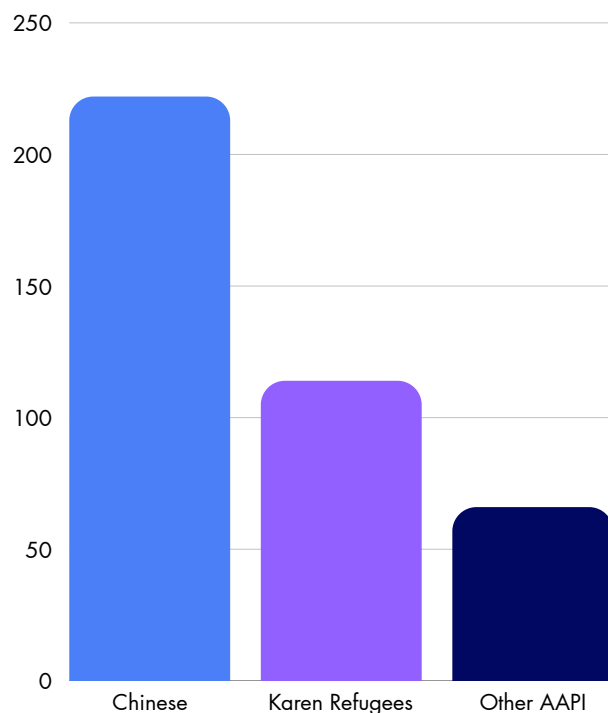


3. Data Analysis: Respondents were included in the primary analytic sample if they had less than 40% overall survey missingness and provided sufficient responses in at least 80% of the nine assessed survey sections. The primary subgroup variable categorized participants as Chinese, Karen, or Other AAPI based on self-reported identity. Rural or urban residence was determined using Rural-Urban Commuting Area (RUCA) codes linked to participants' ZIP codes.

The survey assessed sociodemographic and immigration-related characteristics, healthcare access and barriers, discrimination experiences, dietary behaviors, and perceived community health challenges and strategies. Perceived stress was measured using the 10-item Perceived Stress Scale (PSS-10), with total scores ranging from 0 to 40 and higher scores indicating greater perceived stress.

Descriptive analyses were used to summarize participant characteristics and survey responses. Unadjusted analyses examined differences in perceived stress, difficulty obtaining needed healthcare, and reported discrimination across Chinese, Karen, and Other AAPI respondents. Exploratory multivariable regression models were also used to examine adjusted associations with these three primary outcomes.

This analytical approach reflects a central goal of the project: moving beyond broad racial and ethnic categories to better understand the distinct experiences of AAPI communities in North Carolina. The survey findings complement the project's qualitative research by providing quantitative context for themes identified through listening sessions, focus groups, and individual interviews.



IDENTIFYING AAPI HEALTH PRIORITIES IN NC COMMUNITY LEVEL SURVEY

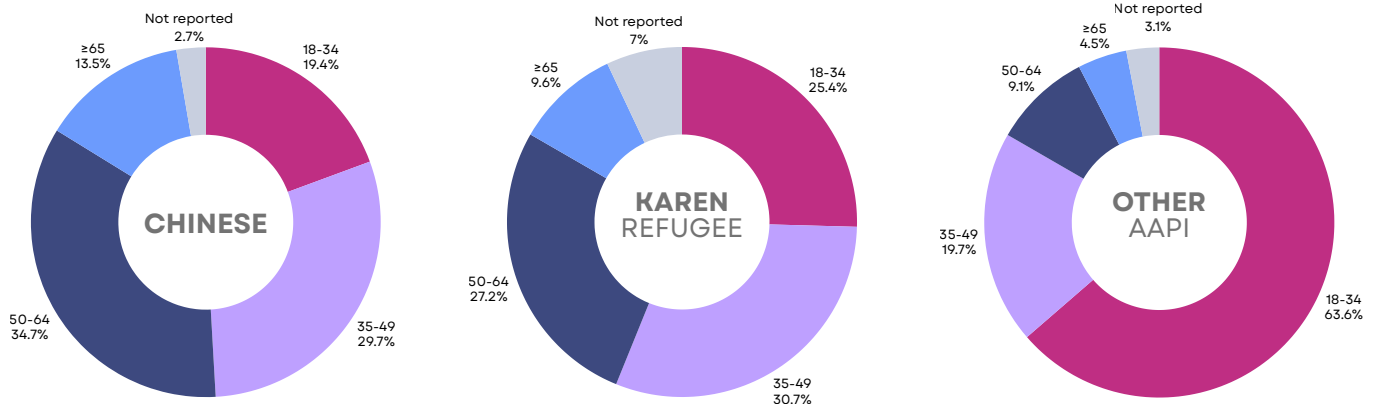


Study Population Breakdown

- Chinese (n=222)
- Karen refugees (n=114)
- Other AAPI (n=66)

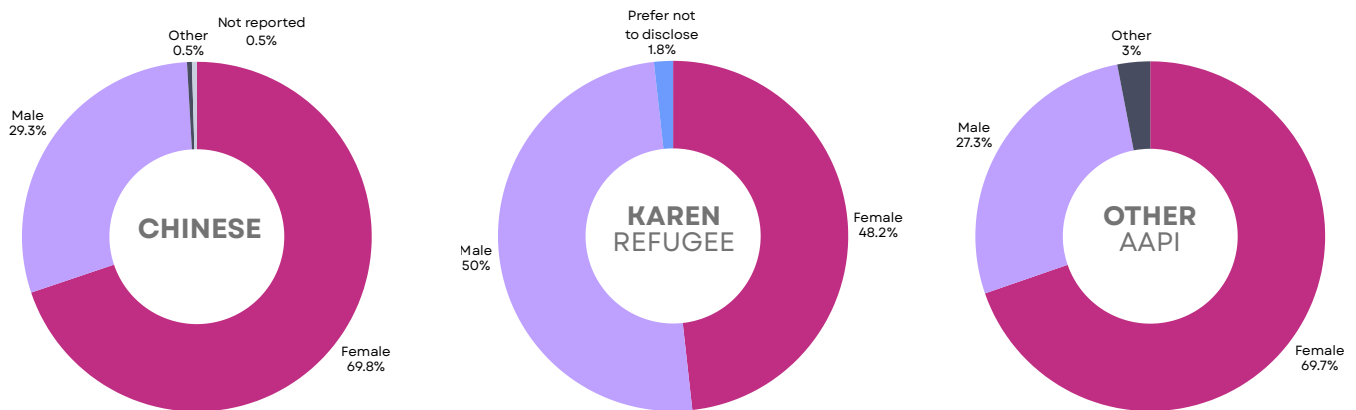
AGE GROUP (YEARS)

18-34 35-49 50-64 ≥65 Not reported



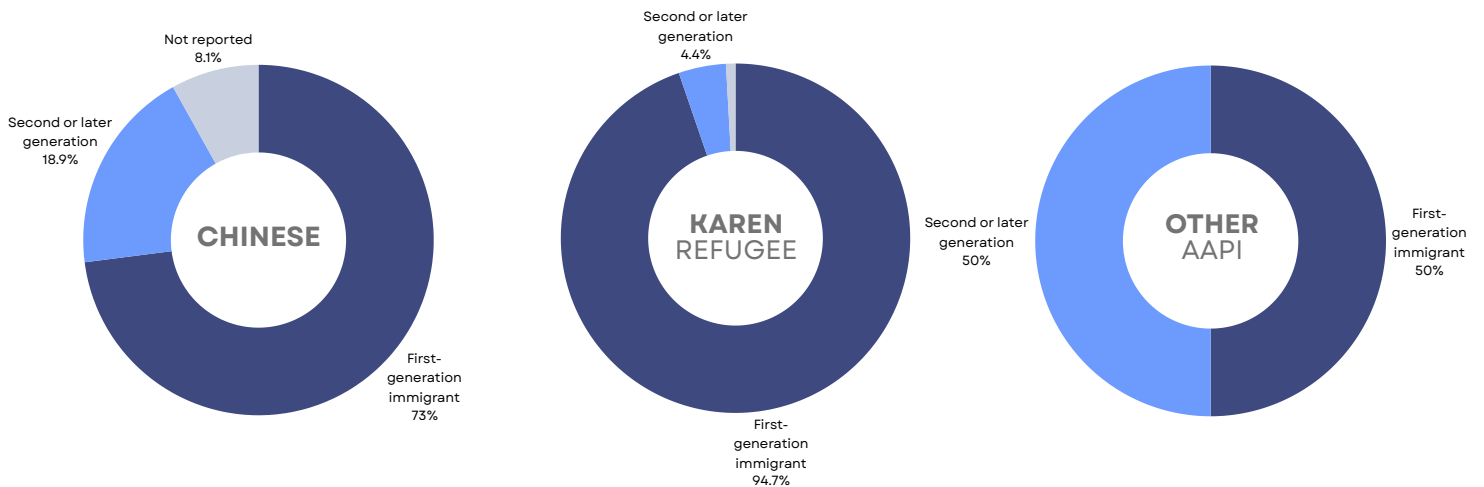
GENDER

Female Male Other Not Reported Prefer not to disclose

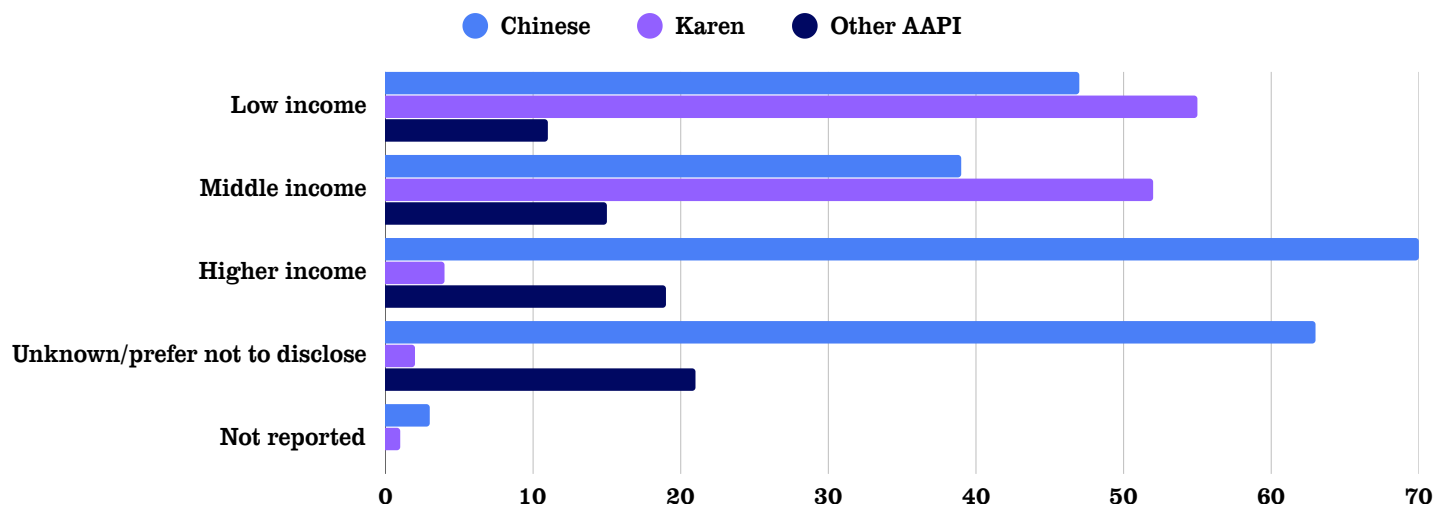


IMMIGRATION GENERATION

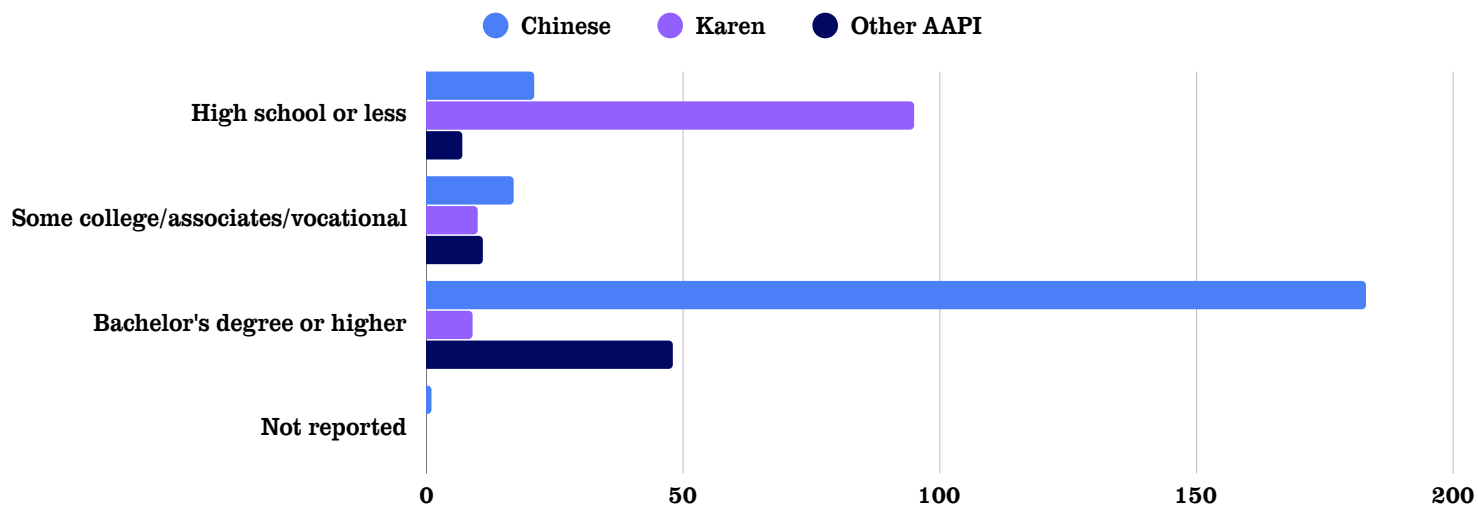
First-generation immigrant Second or later generation Not Reported



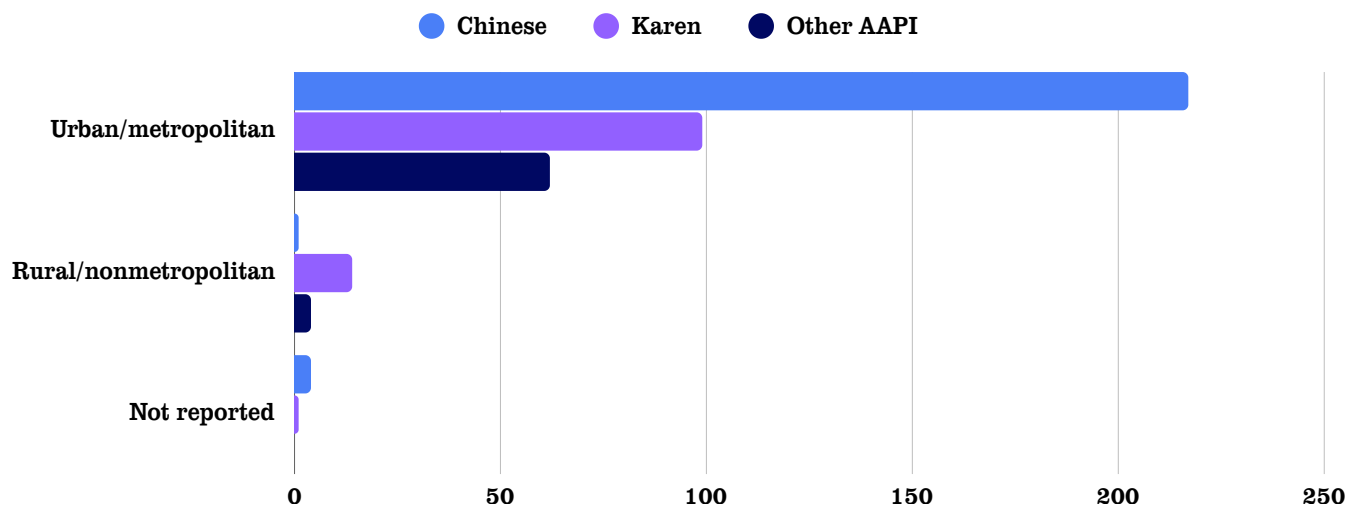
HOUSEHOLD INCOME



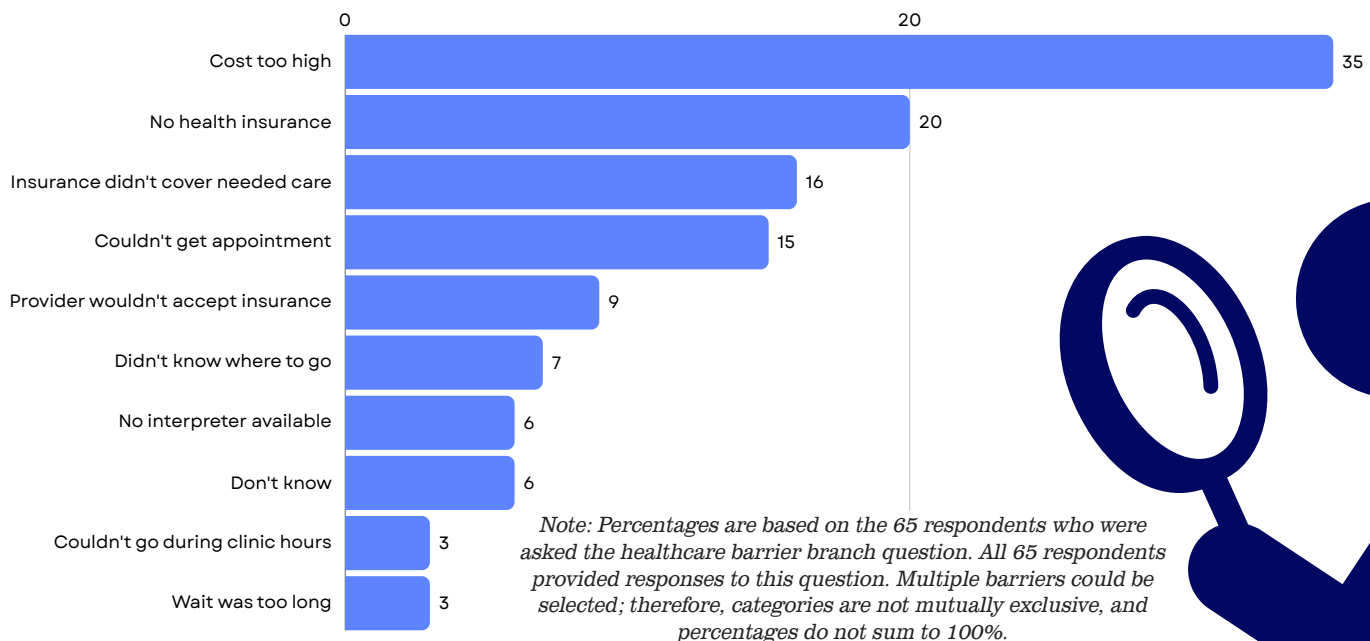
EDUCATION



RURAL-URBAN RESIDENCE (RUCA)



BARRIERS TO OBTAINING NEEDED HEALTHCARE AMONG RESPONDENTS REPORTING DIFFICULTY ACCESSING CARE

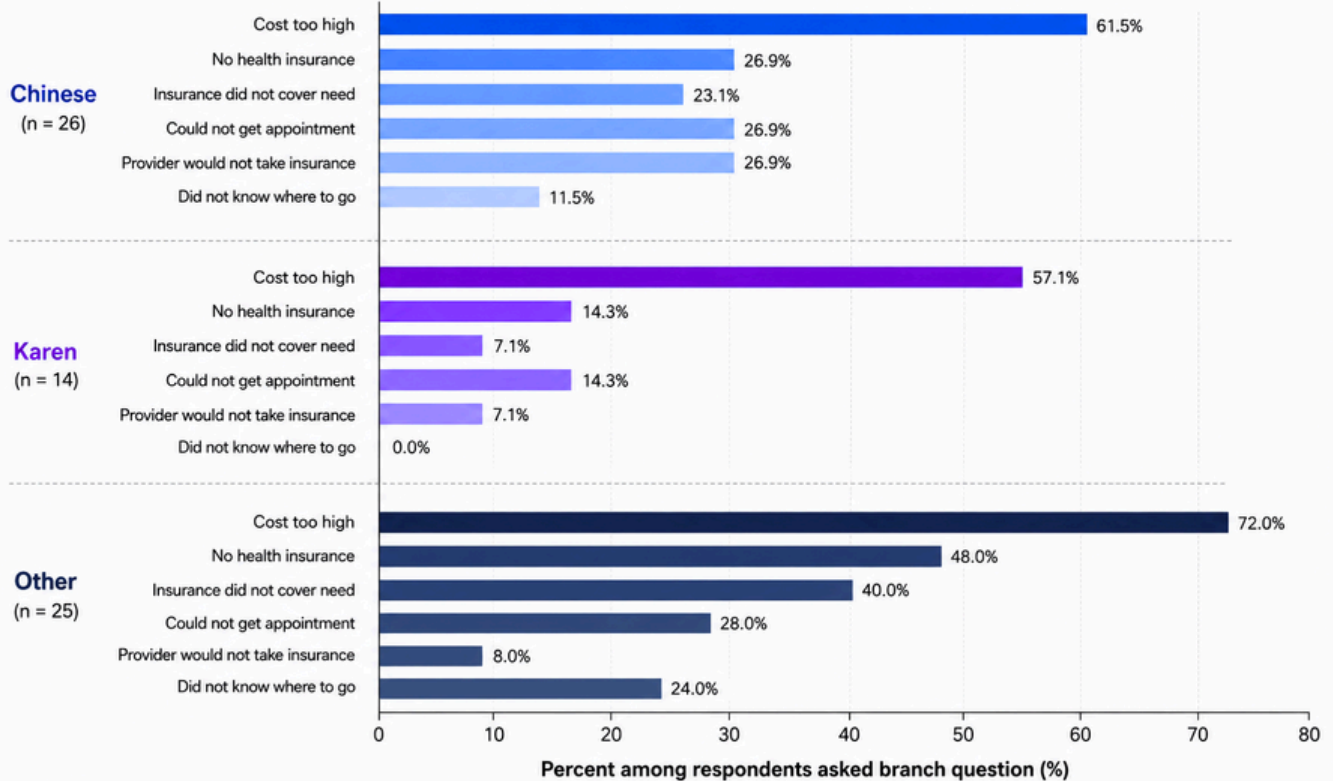


HEALTHCARE ACCESS CHARACTERISTICS BY SUBGROUP (N=402)

HEALTHCARE ACCESS INDICATOR	CHINESE (N = 222)	KAREN (N = 114)	OTHER AAPI (N = 66)
Has a Regular Healthcare Provider	185 (83.3%)	63 (55.3%)	59 (89.4%)
Currently Insured	195 (87.8%)	72 (63.2%)	64 (97.0%)
Currently Uninsured	22 (9.9%)	38 (33.3%)	1 (1.5%)
Uninsured at Any Time in the Past 12 Months	23 (10.4%)	34 (29.8%)	3 (4.5%)
Had Difficulty Getting Needed Care	34 (15.3%)	23 (20.2%)	8 (12.1%)

TOP HEALTHCARE BARRIERS BY SUBGROUP

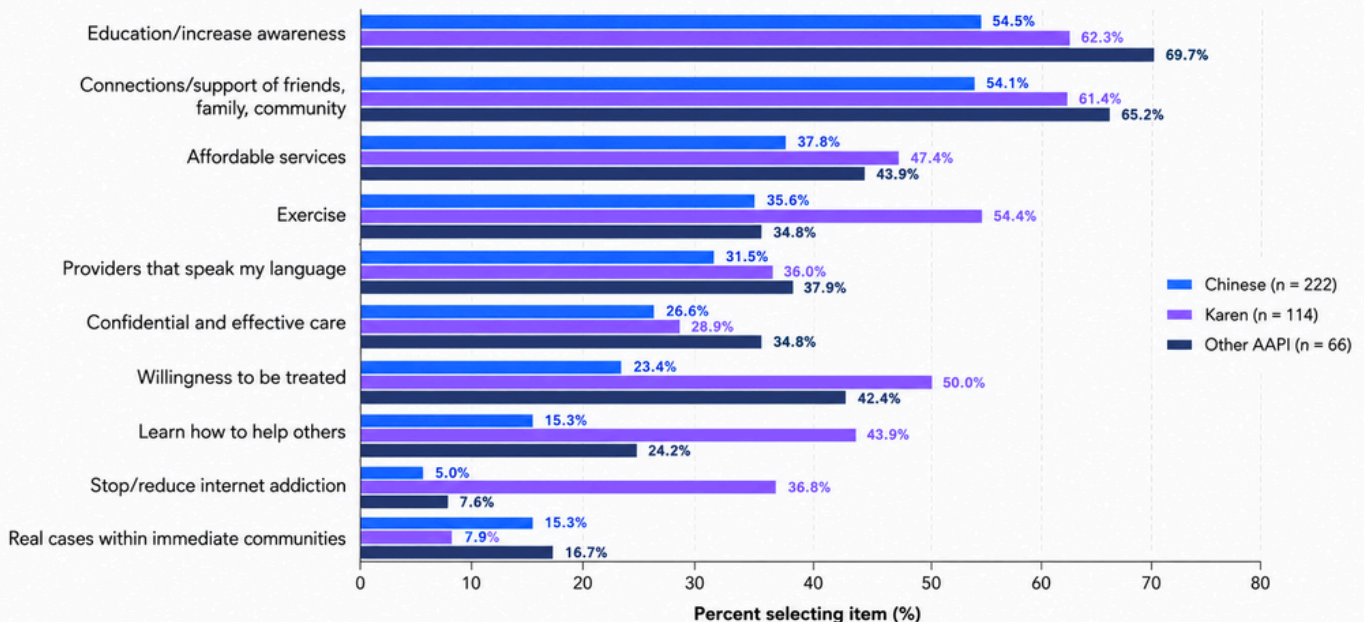
Among respondents asked the barrier branch question



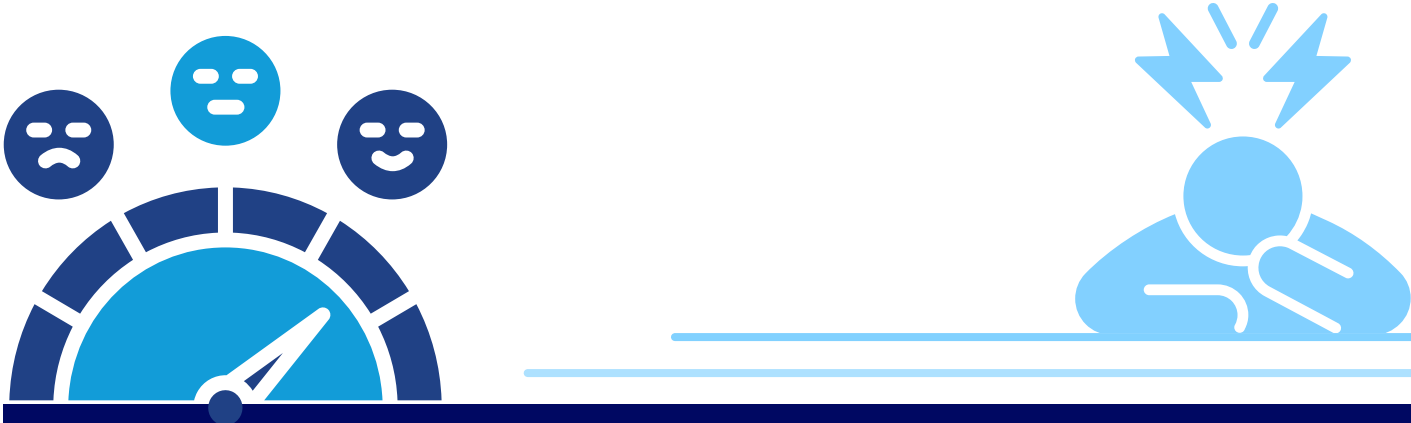
Note. Respondents could select more than one barrier; therefore, percentages do not sum to 100%.

TOP RECOMMENDATIONS TO IMPROVE HEALTH IN COMMUNITIES BY ETHNIC SUBGROUP

Among all respondents within each subgroup (multiple selections allowed)



Note. Respondents could select more than one recommendation; therefore, percentages do not sum to 100%.



PSS DISTRIBUTION AND OUTLIER ASSESSMENT

SUBGROUP	MEAN (SD)	MEDIAN (IQR)	SKEWNESS	IQR OUTLIERS, N
CHINESE (N=215)	14.64 (6.98)	15.00 (9.00–20.00)	0.011	0
KAREN (N=112)	12.60 (7.76)	12.00 (5.00–20.00)	0.319	0
OTHER AAPI (N=66)	16.42 (6.31)	16.00 (13.00–20.75)	–0.251	1



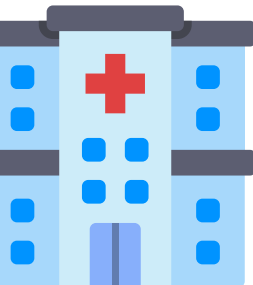
PSS-10 SUBGROUP COMPARISON USING WELCH’S ANOVA

OUTCOME	TEST	STATISTIC	DF	P-VALUE	N
PSS-10 total score	Welch’s ANOVA	6.45	2, 168.58	.002	393

Note: Welch’s ANOVA indicated an overall difference in mean PSS-10 scores across the three AAPI subgroups, Welch’s $F(2, 168.58) = 6.45, p = .002$. Because the omnibus test was statistically significant, post hoc pairwise comparisons were conducted using Welch pairwise t -tests with Holm adjustment for multiple comparisons.



KEY FINDINGS



1 HEALTHCARE ACCESS

Karen respondents had lower prevalence of having a regular healthcare provider and current health insurance than Chinese and Other AAPI respondents. In adjusted analysis, uninsured respondents had 3.55 times the odds of reporting difficulty obtaining needed healthcare compared with insured respondents.



2 COMMUNITY PRIORITIES

Frequently reported challenges included limited health and mental health awareness, cost of care, insufficient attention to mental healthcare, cultural influences on mental health, and stigma related to seeking mental healthcare. Respondents identified education, family and community support, affordable services, exercise, and language-concordant providers as important strategies for improving community health.



3 PERCEIVED STRESS VARIATIONS

Mean PSS scores were highest among Other AAPI respondents (16.42), followed by Chinese (14.64) and Karen respondents (12.60), with an overall subgroup difference ($p = .002$). However, AAPI subgroup was not independently associated with PSS after adjustment. Instead, age, gender, income, and education were associated with perceived stress.



4 DISCRIMINATION

Race/ethnicity and accent or English proficiency were frequently identified reasons for discrimination, with workplace, interpersonal, and shopping settings among the most common. While subgroup was not independently associated with discrimination, older respondents reported lower odds, while second-generation or later respondents had approximately twice the odds compared with first-generation immigrants.

Diversity in clinical research is essential for developing treatments that are effective for everyone. **Including people from various ethnic, racial, and socioeconomic backgrounds** ensures that the findings of these studies are more broadly applicable.

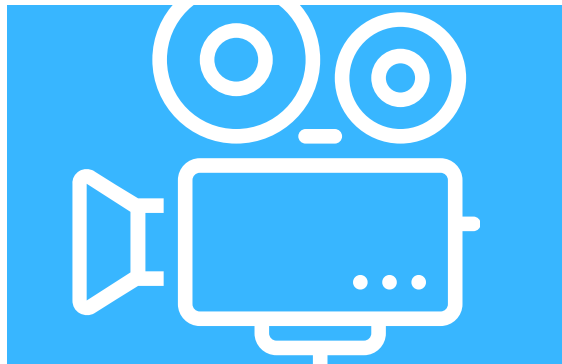
Rainier Research



▶ CONCLUSION

The survey findings demonstrate the importance of recognizing the diversity within AAPI communities when assessing health needs and developing interventions. Among Chinese, Karen, and Other AAPI respondents, differences in perceived stress, difficulty obtaining healthcare, and experiences of discrimination were more strongly associated with specific sociodemographic, socioeconomic, insurance, geographic, and immigration-related characteristics than with AAPI subgroup alone.

The findings point to several priorities for addressing health challenges, including reducing financial and insurance-related barriers to care, increasing health and mental health education, expanding affordable services, strengthening social and family support, and providing culturally and linguistically responsive care. These findings reinforce the value of disaggregated, community-engaged research and provide guidance for developing programs and strategies that address the specific needs and experiences of AAPI communities.



MAKING MEDIA THAT REPRESENTS

Aim 6: Video Project

▶ INTRODUCTION

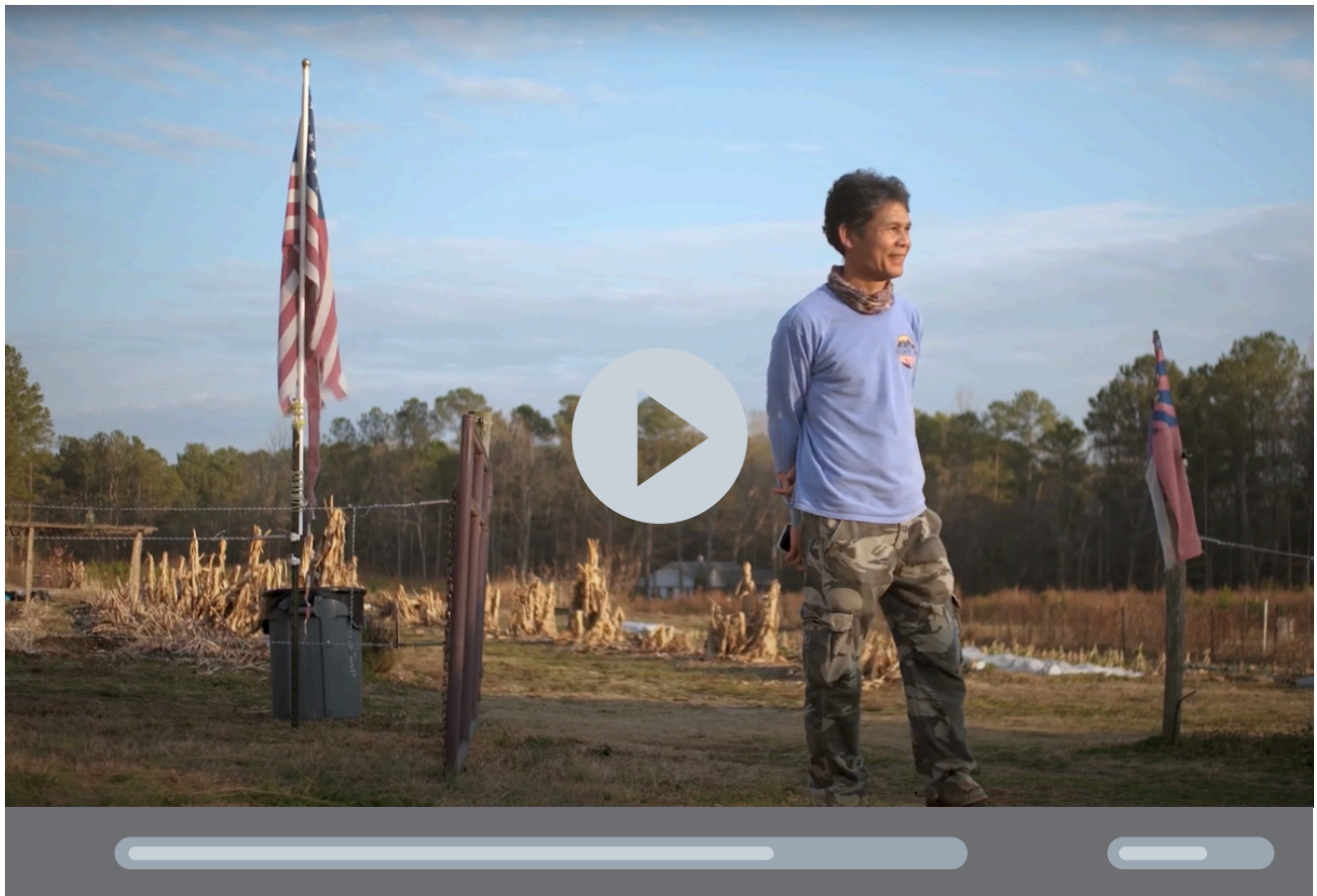
The sixth research aim used personal interviews and short documentary filmmaking to capture lived experiences that may not be fully represented through quantitative data. The project was designed to amplify community voices and explore how factors such as displacement, language, cultural identity, and access to community support shape health and well-being.

This approach built on UCA WAVES' previous experience using documentary storytelling to open conversations about sensitive topics including mental health, stigma, racism, and community resilience.

▶ METHODOLOGY

As part of this aim, Xiaohua Wang and Jing Chen created *Home, Burma*, a three-minute documentary featuring members of the Karen refugee community in North Carolina. Filmed at Karen Community Farm, the documentary explores what "home" means after displacement. Community members describe their experiences leaving Burma, rebuilding their lives in North Carolina, maintaining cultural traditions, and creating connections across generations.

The farm serves as an important setting in the film. Growing crops familiar from Burma provides a connection to cultural roots while creating a place for community members to gather and support one another.



KEY FINDINGS

① DISPLACEMENT & BELONGING



The film illustrates how community spaces can help people rebuild a sense of home and belonging after displacement.

② LANGUAGE & CULTURAL CONNECTION

Community members describe the challenges of maintaining language and cultural traditions, particularly among younger generations who grew up in the United States.

③ COMMUNITY & WELL-BEING

The farm provides more than food and agricultural resources. It creates opportunities for social connection, cultural preservation, and intergenerational engagement.



④ LIVED EXPERIENCE

By allowing community members to share their stories directly, the film adds personal context to the broader findings of the health needs assessment and illustrates experiences that may not be captured through traditional research methods.

The power of community to create health is far greater than any physician, clinic or hospital.

Mark Hyman



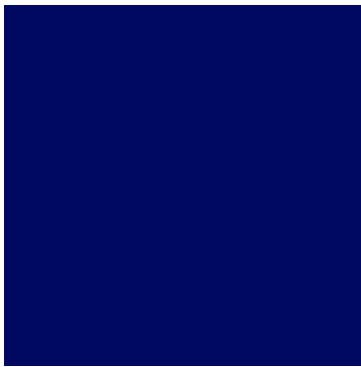
▶ CONCLUSION

Home, Burma demonstrates the value of storytelling in community health research. Through a brief, personal portrait of the Karen community, the film shows how displacement, language, cultural identity, and community connection intersect with health and well-being.

The documentary provides an accessible way to share community experiences beyond the research project itself and creates an educational resource for continued conversations about AAPI health, refugee experiences, and community resilience.

SECTION 3

PROJECT OUTCOMES



DATA THAT DID SOMETHING

▶ OUTCOMES SUMMARY

The *Identifying AAPI Health Priorities in North Carolina* project generated a more comprehensive understanding of the health priorities, barriers, and lived experiences of diverse AAPI communities in North Carolina while strengthening the community partnerships needed to address them.

Through six complementary research aims, the project combined population-level data with community listening sessions, focus groups, individual interviews, surveys, and storytelling to ensure that both data and lived experiences informed the findings. Community engagement remained central throughout the project, particularly in working with Karen refugee families and other populations often underrepresented in traditional health research. The project also demonstrated the value of culturally and linguistically responsive, community-engaged research in identifying gaps in existing data, amplifying community voices, and informing future approaches to improving health equity.



KEY IMPACTS AT A GLANCE

- 1. Expanded the AAPI Health Evidence Base:** Generated community-informed data on health priorities and barriers, particularly among underserved AAPI populations.
- 2. Elevated Karen Refugee Voices:** Amplified youth and parent experiences related to mental health, stigma, language access, cultural identity, displacement, and barriers to care.
- 3. Advanced Research:** Published findings from the Karen parent interview study in Archives of Psychiatric Nursing, helping fill a critical gap in the literature.
- 4. Shared Findings Broadly:** Presented project findings and community stories at APHA 2025, Roots & Resilience, community events, and other professional forums.

5. **Strengthened Dialogue:** Created opportunities to discuss AAPI mental health, stigma, racism, cultural identity, suicide prevention, and barriers to care.
6. **Strengthened Partnerships:** Connected community organizations and academic researchers to combine community knowledge with research expertise.
7. **Built Trust and Capacity:** Sustained engagement with community partners, particularly the Karen Community Farm, beyond data collection.
8. **Informed Future Action:** Brought community-identified priorities into broader conversations about health equity and culturally and linguistically responsive services.

“Representation is **showing the world who you are**,
at its most intimate levels.”

Zoe M. Chu



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UNC Hussman School of Journalism and Media

Jing Lin, MA, MS, LCMHCA, NCC (Survey)

UCA WAVES

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UNC Chapel Hill & UCA WAVES

Allison Connelly (Report Preparation)

UCA WAVES

We are especially grateful to the Karen Community Farm parents and youth; the UCA WAVES team; the 13 members of the Carolina AAPI Health Coalition; UNC School of Nursing: Cheryl Woods Giscombe, Jessica Williams & Jada L. Brooks; UNC Odum Institute: Paul Mihos; North Carolina Central University Department of Nursing: Yolanda VanRiel; and last but not least, Shelia Reich, Program Officer, Blue Cross NC Foundation.





CONNECT WITH US!

Founded in 2016 to address unmet mental health needs in AAPI communities, UCA WAVES is a volunteer-driven movement empowering families through education, support, research and advocacy. Together, we work to break stigma, bridge cultural gaps and uplift the voices of youth and parents for a healthier, more resilient future. Scan the QR code to find direct links to our social media platforms, website, and more!



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