Hawai'i's Kūpuna COVID-19 Vaccination Effort Executive Summary¹

Background. COVID-19 cases were first recorded in Hawai'i in early March 2020. Although people of all ages contracted COVID-19, kūpuna (older adults) were the most severely affected and accounted for the most COVID-19 hospitalizations and deaths. The Hawai'i State Department of Health (DOH) created a phased vaccine release plan that prioritized vaccines for kūpuna and established a Vaccine Kūpuna Outreach Working Group, which met monthly. DOH also supported the creation of the Kūpuna Vaccination Outreach Group (KVOG), co-chaired by the Executive Office on Aging (EOA), the City and County of Honolulu Elderly Affairs Division (EAD), and AARP (formerly the American Association of Retired Persons), to meet weekly to collaborate across sectors on kūpuna vaccination efforts, especially on O'ahu. The Neighbor Island District Health Offices worked with their respective county governments to coordinate vaccination efforts, supported by the islands' Aging and Disability Resource Centers (ADRCs). In June 2021, the University of Hawai'i (UH) at Mānoa Thompson School of Social Work & Public Health was contracted by the EOA to evaluate kūpuna vaccination efforts statewide. This study describes efforts and impacts from January 1 through July 31, 2021.

Data Sources. The evaluation team conducted a survey of KVOG members and interviewed 32 individuals involved in kūpuna vaccination efforts from state and county government agencies, healthcare organizations, and non-profit organizations. Data on the percentage of kūpuna that initiated and completed the vaccination series by age group and island were obtained from the Hawai'i State DOH COVID-19 Dashboard.

Findings. Overall, kūpuna vaccination efforts across the state were successful. By July 30, 2021, 94% of adults age 65+ were vaccinated, although prevalence varied by county—from 88% on Maui to 98% on Kaua'i.

Key barriers to vaccinating kūpuna included:

- Cumbersome online systems for scheduling vaccination appointments
- Difficulties posed to many kūpuna by mass vaccination sites, such as transportation
- Rapid need for health education materials and consent forms in multiple languages

Key success strategies included:

- Coalitions and advocacy efforts
- County- and language-specific calls centers for information and vaccination scheduling
- Translation and interpreter services
- Community mobile and pop-up clinics in locations where kūpuna congregate
- Mechanisms for in-home vaccinations
- Funding for community-based coalitions and groups

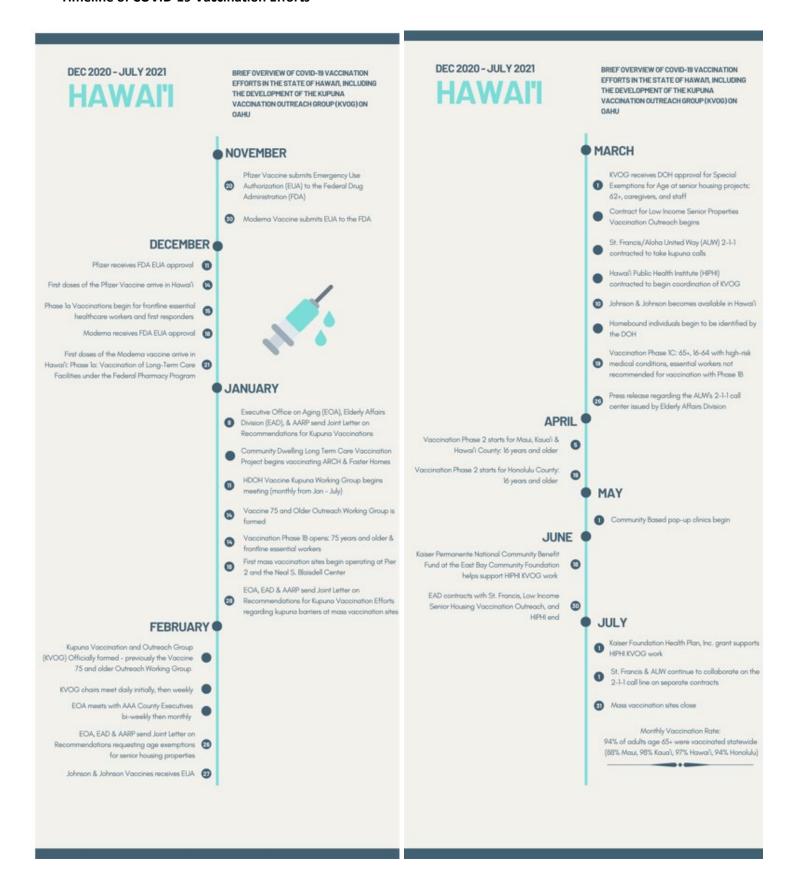
Recommendations. Based on the findings, these three recommendations should help leaders and planners prepare for future education and vaccination efforts targeting kūpuna in the state:

- Engage all relevant state and county agencies in pandemic response efforts.
- Increase early support for community-based vaccination sites, along with mass vaccination sites.
- Incorporate and fund community coalitions and organizations in state response efforts.

The engagement of community groups and support for coalitions are also good suggestions in the face of other emergencies requiring quick access to kūpuna.

¹ Suggested citation: Braun KL, Ibrao M. Hawai'i's Kūpuna COVID-19 Vaccination Effort. Honolulu, HI: University of Hawai'i at Mānoa, Thompson School of Social Work & Public Health.

Timeline of COVID-19 Vaccination Efforts



Background

The Purpose and Organization of this Report

Overall, kūpuna vaccination efforts across the state were successful. Vaccinations of older adults started in December 2020 and by July 30, 2021, 94% of adults age 65+ were vaccinated. The aim was to look statewide to identify barriers to vaccinating kūpuna and successful strategies used to educate and vaccinate older adults, the group most vulnerable to hospitalization and death from COVID-19. This study is bounded in time, describing efforts and impacts through July 30, 2021. It is hoped that identifying and documenting barriers and successful strategies can help leaders and planners facing future emergencies that require quick access to kūpuna.

This report is organized in sections:

Background

- o The purpose and organization of this report
- Acknowledgements

Data Sources

- Survey of members of the Kūpuna Vaccination Outreach Group (KVOG)
- Key informant interviews with KVOG members on O'ahu and with leaders of kūpuna vaccination efforts on the Neighbor Islands
- o Hawai'i State Department of Health (DOH) COVID-19 dashboard
- o Timeline

Findings

- o COVID-19 and the aging population in the State of Hawai'i
- o Hawai'i State COVID-19 response
- Focus on kūpuna
- o Executive Office on Aging (EOA) response
- Vaccination response by County
- Vaccination completion prevalence, July 30, 2021
- Barriers to vaccinating kūpuna
- Successful strategies to overcome barriers

Discussion

- o Recommendations to guide interagency collaboration in future pandemics
- Limitations of the study
- Concluding remarks

Acknowledgements

This report was compiled under a contract between the Hawai'i State EOA and the University of Hawai'i at Mānoa Thompson School of Social Work & Public Health to look specifically at Hawai'i vaccination efforts for kūpuna. The authors thank the individuals that generously participated in the survey and interviews. We apologize that lack of space precluded the sharing of more detailed stories from our informants. We stand in awe of the many contributions made by numerous individuals, agencies, and coalitions across the state to address COVID-19 and vaccinate kūpuna and other vulnerable populations. Throughout our work, your aloha for our kūpuna was clearly evident.

Data Sources

Evaluators used three major sources of data for this report—survey data, interview data, and data on vaccination completion prevalence for residents age 65 and older. The samples, measures, and analysis strategies for each source are outlined here.

Survey of KVOG Members

A survey was designed in collaboration with KVOG leadership to determine members' perception of the effectiveness and value of KVOG (Appendix B). The survey was designed using Qualtrics software and distributed to 61 KVOG members via email; 38 complete responses were received. The data were analyzed using Microsoft Excel and shared with KVOG members at the July 21, 2021 meeting. Survey findings were provided to Hawai'i Public Health Institute (HIPHI) for inclusion in its after-action report.

Key Informant Interviews with KVOG Members and Leaders of Neighbor Island Vaccination Efforts

The team also interviewed 32 individuals involved in kūpuna vaccination efforts. On Oʻahu, interviews were conducted with 21 KVOG members representing four state agencies, the City and County of Honolulu's EAD, 3 healthcare provider organizations, and 7 community-based organizations and groups (Table 1).

On Neighbor Island, interviews were conducted with 11 leaders, including representatives of the 3 District

Table 1. Key Informants from O'ahu

Hawai'i State Department of Health (DOH)

- Jon Shear, Ready Zone HQ, CEO Consultant with HDOH
- Chris "CJ" Johnson, Physical Activity Program Specialist, Chronic Disease Prevention Department
- Gloria Fernandez, Public Health Nurse, COVID-19 Coordinator

Hawai'i State Department of Human Services (DHS)

Curtis Toma, MD, Medicaid Unit (Med-QUEST)

Hawai'i State Executive Office on Aging (EOA)

• Caroline Cadirao, Director

Hawai'i State Office of Language Access

Aphirak "AP" Bamrungruan, Executive Director

City and County of Honolulu Elderly Affairs Division (EAD)

• Derrick Ariyoshi, County Executive on Aging

AARP

- Kealii Lopez, State Director
- Audrey Suga-Nakagawa, Associate State Director for Advocacy
- Craig Gima, Associate State Director for Communications

Hawai'i Public Health Institute (HIPHI)

Lindsey Ilagan, Kūpuna Program Manager

Pacific Gateway Center

 Terrina Wong, Deputy Director of Social and Immigration Services

Healthcare Association of Hawai'i

• Stacy Wong, Senior Communication Manager

Kaiser Permanente

• Mae Lynne Swaboda, Clinical Administration Manager for Prevention and Health Education

Papa Ola Lōkahi

 Kim Kuulei Birnie, Papa Ola L\u00f6kahi and Communications Officer, Native Hawaiian & Pacific Islander Hawai'i COVID-19 Response, Recovery & Resiliency Team

FilCom Cares

 May Rose Dela Cruz, University of Hawai'i at Mānoa and FilCom Cares Co-Chair

Aloha United Way (AUW) 211

Jennifer Pecher, Community Impact Director

St. Francis Healthcare System

Melissa Ah Ho-Mauga, Vice President of Client Services

Adult Daycares

Kathy Wyatt, Founder & President of Hale Hauoli Hawai'i

Senior Centers

• Susie Chun Oakland, Director of Lanakila Senior Center

ALU LIKE, Inc

Leslie Tanoue, Director, Kumu Kahi Elderly Services

Health Offices, 3 Area Agencies on Aging Executives, ALU LIKE, Inc. (Maui) and Community First Hawai'i on the Big Island (Table 2).

The interview questionnaires varied slightly across sectors for greater specificity. Generally, each questionnaire asked about the County or organization's experience with COVID-19, the impact of COVID-19 on kūpuna and other vulnerable groups, vaccination barriers, success stories, and data sources (see appendix C-E for sample interview questions). Data were analyzed to create summaries of vaccination efforts in each County and to distill key barriers and successful strategies in vaccinating kūpuna.

Table 2. Neighbor Island Key Informants

County

County of Kaua'i

Janet Berreman, Kaua'i District Health Officer

Kealoha Takahashi, County Executive on Aging, Kaua'i Agency on Elderly Affairs (KAEA)

Emily Medeiros, Program Specialist, Kaua'i Agency on Elderly Affairs

County of Hawai'l

Eric Honda, Hawai'i District Health Officer

Horace Farr, County Executive on Aging, Hawai'i County Office of Aging (HCOA)

Randy Kurohara, Executive Director, Community First Hawai'i

County of Maui

Lorrin Pang, Maui District Health Officer

Kalani Holokai, Secretary, Maui District Health Office

Deborah Stone-Walls, County Executive on Aging, Maui County Office on Aging (MCOA)

Bridget Velasco, Health Educator, Maui District Health Office Ka'ili Christophersen, ALU LIKE, Inc

Using a qualitative research method known as "member checking," portions of the report were sent to interviewees as the report was developed to clarify and extend the findings. We thank the individuals who helped with this process.

Hawai'i State Department of Health Vaccination Dashboard

Data on percentage of kūpuna that initiated and completed the vaccination series by age group and County were obtained on July 30, 2021 from the DOH COVID-19 Dashboard Disease Outbreak Control Division COVID-19 Hawaii COVID-19 Data.

Timeline

A timeline was created to visually display the timing of major milestones in the kūpuna vaccination process.

Findings

COVID-19 and the Aging Population in the State of Hawai'i

COVID-19 cases were first recorded in Hawai'i in early March 2020. Throughout 2020 people of all ages contracted COVID-19; however kūpuna (older adults) were the most severely affected and accounted for most of the COVID-19 hospitalizations and deaths. In this report, kūpuna are defined by those 65 years and older, although it is important to note that complex chronic diseases among certain ethnic groups have led the Older Americans Act to define kūpuna as those 60 years and older, while the Federally Qualified Health Centers (FQHCs) define kūpuna as those 55 years and older.

Kūpuna residents of the State of Hawai'i are spread across 7 habitable islands, organized into 4 county jurisdictions. These include: 1) Hawai'i County, encompassing the island of Hawai'i; 2) Maui County, encompassing the islands of Maui, Moloka'i, Lana'i, and Kaho'olawe; 3) Kaua'i County encompassing the islands of Kaua'i and Ni'ihau; and 4) the City and County of Honolulu encompassing the island of O'ahu.

The kūpuna population of the State of Hawai'i has grown faster than the national average. In 2018, 24.7% of the state's population was over the age of 60 in comparison to the national average of 23%. The proportion of older adults varies by County; in 2018, 28.9% (n=58,081) of Hawai'i County, 25.3% (n=42,351) of Maui County, 27.4% (n=19,793) of Kaua'i County, and 23.52% (n=230,662) of Honolulu County were over the age of 60. Residents of Hawai'i also live three years longer than the national average, with a life expectancy of 81.5 years. Hawai'i is racially diverse, and kūpuna speak many different languages; 16.2% of older adults in Hawai'i do not speak English well, compared to the national average of 8.8%. Kūpuna are less likely to live alone compared to elders in other states, as multi-generational families are common in the state. The demographics of the kūpuna population are diverse and created a unique challenge in the distribution of vaccines https://health.hawaii.gov/eoa/files/2013/07/Hawaii-State-Plan-On-Aging.pdf.

Hawai'i State COVID-19 Response

As part of a U.S. national effort, all states were tasked by the federal government with creating a COVID-19 Vaccination Plan by October 16, 2020 https://hawaiicovid19.com/wp-content/uploads/2021/01/Executive-Summary published in January 2021 https://hawaiicovid19.com/wp-content/uploads/2021/01/Executive-Summary Final1 010721.pdf Jon Shear, CEO of Ready Zone HQ, was contracted by the State of Hawai'i in September 2020 to run the Vaccination Response Team. The state's COVID-19 Vaccination Plan called for a phased vaccine release based on recommendations from the U.S. Centers for Disease Control and Prevention (CDC). Because the initial supply of vaccines would be limited, vaccinations for Phase 1A were slated for first responders, healthcare workers, and kūpuna in Long Term Care (LTC) facilities (defined as licensed nursing homes and those in congregate settings). Care Homes and Foster Home residents were also included in Phase 1a thanks to advocacy on the part of KVOG leadership. When the state was assured of an adequate supply of vaccines, Phase 2 opened vaccinations to persons 16 and older in April and to persons age 12 and older in May 2021.

Phase 1 Phase 2

Limited Doses Available

- 1a. Health care personnel and LTC facility residents
- 1b. Adults 75+ and essential workers
- 1c. Adults 65+, persons with high-risk conditions, other essential workers

Sufficient Supply of Vaccines

All persons aged \geq 16 years of age (April 2021) All persons aged \geq 12 years of age (May 2021) To assist with the statewide distribution of vaccinations, Hawai'i State DOH established multiple working groups that met weekly and then monthly. These groups worked diligently to identify vulnerable populations in the state and coordinate with significant state and private organizations to prepare for the arrival of COVID vaccines in mid-December.

The Pfizer vaccine arrived in Hawai'i on December 14, 2020 and was distributed to hospitals with the appropriate storage infrastructure. The Moderna vaccine, which can be stored at a warmer temperature, arrived in Hawai'i on December 21, 2020, and was administered to LTC residents via the Federal Pharmacy Program that same week. Hawai'i's nursing home vaccination rates are among the highest in the nation; as of August 15, 2021, 90% of residents and 89% of staff were vaccinated (COVID-19 Nursing Home Data - Centers for Medicare & Medicaid Services Data (cms.gov).

On January 14, 2021, Phase 1B opened vaccinations to those 75 years and older and essential frontline workers, with some of the first mass vaccination sites opening on the 18th of January. In March, Phase 1C began, opening vaccinations to those 65 years and older, those 16 years of age and older with a high-risk medical condition, and essential workers that were not recommended for vaccination in Phase 1B. Phase 2 for those 16 years and older began in April. The timeline for the introduction of phases varied slightly by County, primarily based on availability of the vaccine supply.

Focus on Kūpuna

Because older adults age 75+ were among the first groups to receive the vaccine, the Hawai'i DOH established a Vaccine 75+ Outreach Working Group, which was headed by Jon Shear and met monthly. With the introduction of mass vaccination sites on January 18, 2021, leaders of the Hawai'i State Executive Office on Aging (EOA), the City and County of Honolulu Elderly Affairs Division (EAD), and AARP issued a "Joint Letter of Recommendations for Those 75 Years and Older" that provided insight on the complex barriers kūpuna may encounter when visiting mass vaccination sites. The joint letter led to the formal establishment of the Kūpuna Vaccination Outreach Group (KVOG) led by the EOA, EAD, and AARP in February 2021. KVOG grew to include a broad membership from non-profits organizations, community-based organizations, and healthcare providers, and the group met weekly to discuss vaccination efforts for kūpuna and collaborate across sectors.

Executive Office on Aging Response

EOA played a key role in providing awareness of the needs of kūpuna through the DOH Vaccination Implementation Programming Committee (VIPC) and in the distribution and promotion of vaccinations for kūpuna statewide. As the State Unit on Aging, EOA:

- 1) Elevated issues important to kūpuna vaccinations and advocated for kūpuna needs
- 2) Distributed federal American Rescue Program funds to support vaccination efforts
- 3) Authorized use of federal and state funds to support access to vaccinations.

As noted previously, EOA's Director Caroline Cadirao partnered with EAD's County Executive Derrick Ariyoshi and AARP's Director Keali'i Lopez to issue a "Joint Letter of Recommendations for Those 75 Years and Older," to the Department of Health that led to the formal establishment of the KVOG in February 2021. This leadership team joined with Dr. Curtis Toma at the Hawai'i State Department of Human Services to advocate for earlier-then-scheduled administration of vaccines to residents and staff in Hawai'i Adult Residential Care Homes (ARCHs), Community Care Foster Family Homes (CCFFHs), and Developmental Disability Domiciliary Homes (DDDHs). The team also advocated for vaccination-timing exemptions for participants and staff of Day Care Centers and Senior Centers and residents and staff in senior housing projects.

Additionally, through the collaborations established within KVOG, EOA was able to financially assist with vaccination efforts and outreach on the island of O'ahu. EOA also conducted its own media campaign with the use of American Rescue Program funds, including the production of two commercials to encourage vaccinations. One was an intergenerational commercial produced with the UH volleyball team that aired on all the local stations. The second was a kūpuna focused "My Why" Campaign, which was produced by KHON2 News. For the latter, 16 older adults of various ethnic backgrounds were interviewed to explain why they were vaccinated. These commercials were aired for 7 weeks during June and July 2021.

The EOA also met weekly with the four Area Agencies on Aging (AAAs) to discuss kūpuna vaccination efforts in each County. On Oʻahu, KVOG played a major role in coordinating kūpuna vaccination efforts, while the Neighbor Island AAAs worked closely with their County and DOH District Health Office leadership and dedicated the resources of their Aging and Disability Resources Centers (ADRCs) to educate and facilitate vaccination of kūpuna in their counties.

Vaccination Response by County

County of Hawai'i. Hawai'i County government, primarily through its Civil Defense Agency, and Eric Honda, the District Health Officer for Hawai'i County, led vaccination efforts and were quick to onboard as many vaccine providers as possible. The Civil Defense Agency was the liaison and coordinator for all county resources and arranged the use of County facilities for vaccine distribution. In Phase 1a, the island's three hospitals (Hilo Medical Center, Kona Community Hospital, and the Queen's North Hawai'i Community Hospital) had the capacity to store the Pfizer Vaccine and vaccinated the medical community, while the District Health Office received and stored the Moderna vaccine and vaccinated the first responders. Mass vaccination clinics were then established in Hilo at the Afook-Chinen Civic Auditorium and Edith Kānaka'ole Multi-Purpose Stadium; and in Kona at the Kona Aquatic Complex. Concurrently, the District Health Office started to communicate with community partners to broaden vaccination capacity. Key community vaccination partners including the three FQHCs on the island (the Bay Clinic, the Hāmākua-Kohala Health Centers, and the West Hawai'i Community Health Center) and the local pharmacies, including KTA Super Stores Pharmacies, which took responsibility to vaccinate residents of ARCHs, CCFFHs, DD Domiciliary and Foster Homes, and the homebound. The District Health Office set up clinics at all low-income senior housing projects. The Hawai'i National Guard also played a significant role, providing manpower, traffic control, and medics for vaccine administration. As vaccination demand decreased, focus shifted from mass vaccination sites to community pop-up clinics in targeted communities.

Under the leadership of Horace Farr, County Executive on Aging, the Hawai'i County Office of Aging (HCOA) spent a lot of energy providing education to kūpuna through written materials, newsletters, and public service announcements (PSAs), as well as calls to clients in their ADRC database. HCOA directed kūpuna to call centers that could help them schedule vaccination appointments and assisted kūpuna who had difficulties getting appointments. HCOA also organized transportation for those kūpuna who couldn't get to clinics independently. They provided lists of senior housing projects to the District Health Office, which organized vaccinations there.

Throughout the vaccination effort, a community-based organization, Community First Hawai'i, hosted weekly meetings so all the providers could strategize together to target their efforts and reduce overlap. This group linked closely with the state and county sources of information to keep abreast of vaccine supply and availability for Hawai'i County and track vaccination venues and events, which they forwarded to the Civil Defense for posting on their website. Community First also developed and disseminated public service announcements to promote vaccination.

County of Maui. The District Health Office on Maui County took the lead on vaccination efforts. District Health Officer, Dr. Lorrin Pang, hosted weekly meetings to coordinate vaccination efforts. The District Health Office sponsored the first mass testing and vaccination site organized at the UH Maui College (UHMC) campus. Health providers sent staff, volunteers, and observers to help. The District Health Office also collaborated with Maui Memorial Hospital, Kaiser Permanente, the Maui Medical Group, the Community Clinic of Maui, Malama I Ke Ola, Minit Medical, Hui No Ke Ola Pono, and others to advance vaccination efforts. Doctors on Call, Mobile Doctors, Minit Medical, and the National Guard helped significantly in community testing efforts and were key partners during the mass vaccination clinics as well. As demand for the vaccine began to decrease, medical partners sponsored mobile vaccination clinics across the island at restaurants, bars, schools, low-income housing, hotels, churches, the prison, and other venues.

Under the leadership of Maui County Executive on Aging, Deborah Stone-Walls, the Maui County Office on Aging (MCOA) ADRC volunteered to be the gatekeeper for all 60+ vaccinations. In addition to reaching out to kūpuna registered in their ADRC, they also served as the call-in center for all kūpuna in the county to ask questions and register for vaccinations. Staff also provided reminder calls to kūpuna for their vaccination appointments, and called kūpuna after their appointments to see if all was well. Transportation and escort services were arranged for those who could not otherwise get to vaccination sites. MCOA coordinated directly with pharmacies to provide in-home vaccinations, especially for those who were homebound, although anyone with a disability was able to request one. MCOA worked with the District Health Office, the National Guard, and the Red Cross to host vaccination events at low-income senior housing. MCOA also used ArcGIS to identify areas of unmet need and areas where a vaccination clinic would be beneficial and conducted outreach and communication through faith-based organizations, ethnic clubs, and press releases.

County of Kaua'i. Overall efforts were led by Mayor's office and Dr. Janet Berreman, the District Health Officer for Kaua'i. In part because Kaua'i experienced a flood emergency in 2018, Kaua'i had established a high-functioning Emergency Operations Center (EOC) with strong relationships across departments. County government provided centrally located space and security for community testing and vaccination clinics. The County and the District Health Office were responsible for the vaccination of essential workers and the public based on the tiered system established by the State DOH. Hospital partners managed the logistical issues of storing the Pfizer vaccine, and Hawai'i Pacific Health (HPH) Wilcox and the Hawai'i Health Systems Coalition (HHSC) hospitals administered vaccines for healthcare employees affiliated with their organizations. Kaiser Permanente vaccinated both members and non-members and participated in community pop-up clinics.

Under the leadership of Kealoha Takahashi, Kaua'i County Executive on Aging, the Kaua'i Agency on Elderly Affairs (KAEA) raised the visibility about the full range of available resources for kūpuna related to COVID-19. As the one-stop shop, Kauai's ADRC collaborated with the District Health Office to assist kūpuna with online vaccination registration through phone triage. A KAEA representative also participated on the Kaua'i EOC.

As in other Counties, nursing home residents were vaccinated through the Federal Pharmacy Program. The District Health Office and the Kaua'i Developmental Disabilities programs worked to vaccinate residents of ARCHs, CCFFHs, and DD Domiciliary and Foster Homes. The District Health Office established a mechanism whereby those who were homebound could receive in-home vaccinations. Ho'ola Lāhui, the Native Hawaiian Health Care System and FQHC for Kaua'i and Ni'iahu, worked to vaccinate its clientele and other high-need groups through established and pop-up clinics at restaurants, places of worship, low-income housing facilities, worksites, and at locations identified as convenient for Ni'ihau residents. Another group, Malama Pono, worked with Ho'ola Lāhui on pop-ups and outreach, especially with the homeless. The Mayor broadcast a daily video message from the start of the pandemic, regularly featuring key partners, including representatives of the hospitals and the District Health Office. The County released a daily press bulletin as well. District Health Office staff recorded radio PSAs in multiple languages that were broadcasted on several stations.

City and County of Honolulu. EAD was the lead agency for kūpuna vaccination efforts on O'ahu, which is home to 230,662 older adults. This population includes large numbers of elders with low-English proficiency, elders living alone, elders in public housing, and elders in ARCHs and CCFFHs. In addition to co-chairing KVOG, the EAD contracted with the Hawai'i Public Health Institute (HIPHI) in March 2021 to staff KVOG to maximize cross-agency collaboration for kūpuna vaccinations. KVOG members included representatives from healthcare, eldercare, immigrant services, translation and languageaccess services, communications, community-based organizations, and other fields. KVOG actions and activities had statewide impact, while also increasing vaccination coverage and efficiencies on O'ahu.

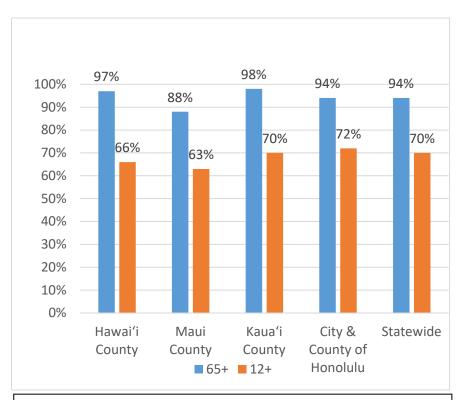


Figure 1. Vaccination prevalence on July 30, 2021, for residents age 65+ and 12+, by county and state

Within the City and County of Honolulu, vaccine prioritization was first given to hospitals and nursing homes. KVOG supported the Department of Human Services Med-QUEST Division, which led efforts for the early vaccination of residents and staff of ARCHs, CCFFHs, and DD Domiciliary and Foster Homes, the bulk of which are on Oʻahu. Mass vaccination sites were established through health care facilities and FQHCs, at the Blaisdell Center, Pier 2, Leeward Community College (LCC), and other sites. The DOH Public Health Nurses staffed the LCC site, administering over 50,000 doses over 3.5 months. However, kūpuna had difficulties accessing the online appointment system, leading EAD to subcontract with St. Francis and Aloha United Way (AUW)-211 to assist. AUW-211 was contracted to provide Oʻahu with a stand-up call center for kūpuna, offering assistance in 200 languages and support and access 7 days a week. Kūpuna were then referred to St. Francis Homecare who were contracted to conduct kūpuna vaccine appointment registration, call kūpuna to remind them of their appointments, provide transportation, and follow up with wellness calls. For kūpuna who were homebound, St. Francis worked with providers to schedule in-home vaccinations. EAD also subcontracted with HIPHI to organize vaccinations at low-income senior housing facilities which began in March 2021, and these efforts were greatly assisted by the provision of interpreters and translated materials from the Hawaiʻi State Office on Language Access and Pacific Gateway.

In early May as vaccine supply became more abundant, community-based organizations began sponsoring vaccination events with vaccine hesitant and underserved groups. Targeted outreach, education, and vaccination events were facilitated through the Community Outreach and Public Health Education (COPHE) group at the Hawai'i State Department of Health, which provided subcontracts to Papa Ola Lōkahi to reach Native Hawaiians and Pacific Islanders, Fil Com Cares to reach Filipinos, and Project Vision to reach homeless and other isolated groups. In-language outreach to specific ethnic groups included radio-thons in the Filipino community, COVID-related programing on Korean television and through Papa Ola Lōkahi, the mobile Project Vision van, and vaccination pop-up clinics at places of worship and community gathering places.

Vaccination Completion Prevalence, July 30, 2021

Overall, kūpuna vaccination efforts across the state were successful. By July 30, 2021, 94% of adults age 65+ were vaccinated, although rates varied by county--from 88% on Maui to 98% on Kaua'i (Figure 1). Statewide vaccination rates were higher in the age 65-74 age group, at 96%, compared to the 75+ group, at 91%. These rates compared to a vaccination rate of 80% of residents age 65+ in the United States and only 70% of residents age 12+ in Hawai'i (see Appendix F). At the time of this study, vaccines were not available for children under age 12.

Barriers to Vaccinating Kūpuna

Three key barriers to vaccinating kūpuna were identified through interviews with key informants across the state. These included: 1) cumbersome systems for vaccination scheduling; 2) difficulties posed by reliance on mass vaccination sites for kūpuna; and 3) the rapid need for health education materials and consent forms in multiple languages and for interpreters.

Cumbersome Systems for Vaccination Scheduling. The need to go online to schedule an appointment for vaccination was a barrier for many kūpuna and other vulnerable populations. These included kūpuna without computers or smartphones, kūpuna without email addresses, kūpuna with computers but insufficient internet connectivity, kūpuna unfamiliar with using their computers and smartphones for scheduling, and kūpuna with limited English proficiency. These barriers are not unique to the kūpuna population of Hawai'i, as national studies have found that half of the older adults surveyed did not have internet access at home and needed assistance with using technological devices. Kūpuna who were not tech-savvy could often get assistance from these family members to access and schedule appointments. But others could not.

Difficulties Posed with Mass Vaccination Sites. Initially, all four counties relied on mass vaccination sites to distribute vaccines. This is the most efficient way to distribute vaccines when there is a limited supply, to keep vaccines stored under proper conditions, and to assure standardized registration, vaccination, and observation protocols. Mass vaccination sites worked well for computer-savvy, physically able, and independently mobile older adults, and for older adults whose family members could help them navigate the online vaccination scheduling system and physically transport them to mass sites. However, many older adults could not schedule appointments (as noted above) and/or could not get to mass vaccination sites due to frailty, cognitive impairment, and lack of transportation/escort. They also expressed fear that mass vaccination sites might be crowded or might not have toilets or places to sit if there was a long wait.

The Rapid Need for Materials in Multiple Languages and for Interpreters. Hawai'i is a multicultural state, with many pockets of older adults with limited English proficiency. Health education materials from the CDC were initially provided in English and Spanish, requiring rapid translation. Consent forms also were in English. In some cases, translated materials were not enough, and kūpuna needed to hear about the vaccine from someone who spoke their own language.

Success Strategies

Key informants identified six strategies that were very successful in increasing the number of kūpuna vaccinated against COVID-19. These included: 1) coalitions and advocacy efforts; 2) County- and language-specific call centers for information and vaccination scheduling; 3) translation and interpreter services; 4) community mobile and pop-up clinic in locations where kūpuna congregate; 5) mechanisms for in-home vaccination; and 6) funding for community-based coalitions and groups.

Coalitions and Advocacy Efforts. Managing response to a pandemic requires multiple partners working together, and a number of well-functioning coalitions were developed at state, county, and organizational levels. These coalitions harnessed the energies of leaders, planners, providers, communicators, community-based groups, and others to come together to address COVID-19 overall and for specific groups. Coalitions and individual agencies also advocated on behalf of older adults. Several examples of coalitions important to the kūpuna vaccination effort are highlighted here:

• KVOG. As noted above, KVOG evolved from Jon Shear's Vaccine 75+ Outreach Working Group. Initially EOA, EAD, and AARP volunteered to lead kūpuna related efforts for vaccinations and formed the 75+ Vaccination Outreach Group. As the vaccine roll out progressed to include all older adults, the group evolved to become the Kūpuna Vaccination Outreach Group (KVOG). Established in February 2021, KVOG representatives were from more than 60 governmental agencies, non-profit organizations, community-based organizations, hospitals, pharmacies, FQHCs, umbrella organizations, communications professionals, and other coalitions. The leadership group met daily, and the larger group met weekly from February through June 2021 to discuss vaccination efforts for kūpuna and to collaborate across sectors. KVOG was modeled after the successful Kūpuna Food Security Coalition, which organized and coordinated massive feeding and food distribution activities serving up to 8,000 kūpuna each week (KFSC-After-Action-Report-Abbreviated-DRAFT.pdf (hiphi.org)) and included many of the same members.

KVOG Key Accomplishments. Details of KVOG's membership and achievements are featured in the KVOG After Action Report produced by HIPHI, with key accomplishments listed here:

- Advocacy for funding and personal protective equipment (PPE) prioritization for ARCHs and CCFFHs, followed by the development of infection control and vaccination protocol for these residential facilities.
- Advocacy, in partnership with the Department of Human Services Med-QUEST Division, for earlier-than-scheduled vaccinations for residents and staff of ARCHs, CCFFHs, and DD Domiciliary and Foster Homes.
- Funding of St. Francis and AUW-211 to assist kūpuna with getting vaccinated by serving as the O'ahu call center, scheduling appointments, providing reminder and follow-up calls, providing transportation, and arranging in-home vaccination for the homebound.
- Funding of HIPHI to organize and coordinate vaccinations in senior public housing using translated materials and interpreters from the Office of Language Access and Pacific Gateway to educate non-English speaking kūpuna about getting their vaccinations.
- Assistance with coordinating community pop-up and mobile clinics to ethnic minority communities, church groups, and underserved areas and populations.
- Celebrating and promoting the success of each partner and each collaboration in educating and vaccinating kūpuna.

KVOG Survey Findings. Members of KVOG were surveyed in May 2021. Survey questions were designed to determine member attitudes on the function, inclusivity, and overall merit of the KVOG working groups. Study findings found:

- Members participated in multiple roles simultaneously in the vaccination roll out process. For example, members helped
 - Identify individuals and groups in need of assistance getting vaccinated
 - Conduct education, outreach, and/or information and referral
 - Coordinate vaccination events and efforts
 - Administer vaccinations
 - Assist with vaccine promotion and communication
 - Leverage partnerships to meet KVOG's goal

- Provide funding and/or administrative services for vaccination efforts and partnerships
- Provide data on individuals reached and events hosted
- Provide expertise in the field of aging
- o KVOG was rated high by participating members. On a Likert-Scale of 1-5, members rated:
 - Their satisfaction with KVOG as a 4.5 out of 5.
 - The effectiveness of KVOG as a 4.5 out of 5.
 - KVOG's ability to increase vaccination outreach as a 4.7 out of 5.
 - KVOG's ability to increase vaccination outreach as a 4.7 out of 5.
- Native Hawaiian & Pacific Islander Hawai'i COVID-19 Response, Recovery & Resilience Team (NHPI 3R). Established in May 2020 by Papa Ola Lōkahi, NHPI 3R worked in alignment with the national NHPI Response Team, "to improve the collection and reporting of accurate data, identify and lend support to initiatives across the Hawaiian Islands working to address COVID-19 among Native Hawaiians and Pacific Islanders, and unify to establish a presence in the decision-making processes and policies that impact our communities" HOME (nhpicovidhawaii.net). This group brought together 60 organizations to create and disseminate COVID-19 PSAs and educational materials in 11 Pacific Islander languages. The group also hosted multiple webinars, PSAs, and "ask a kauka (doctor)" sessions to promote accurate information on the vaccine. Their website includes links to educational, food, health, housing, and financial assistance programs on all islands.
- Community Outreach and Public Health Education (COPHE). This group was sponsored by Hawai'i DOH and included community groups subcontracted by Hawai'i DOH to provide education and organize vaccination events in communities that had limited access to vaccine information in their languages and/or were hesitant to be vaccinated due to distrust of, lack of ability to pay for, or negative experiences with the US healthcare system. Funding for these activities came from the Cares Act and FEMA. Subcontractors included Papa Ola Lōkahi, which sponsored NHPI 3R, We Are Oceania, Project Vision, and FilCom Cares. COPHE was also helpful in linking these subcontractors to KVOG to broaden KVOG's understanding of issues in ethnic communities. One of the goals of this group's subcontractors has been to consider the social determinants of health when prioritizing vaccine availability in future pandemics. For example, if middle-aged Pacific Islanders are dying at greater rates than 65+ individuals in other races, it may be important to lower the vaccine eligibility for at-risk groups. Perhaps vaccines should first be made available to the oldest 10% of each zip code or each ethnic group.
- Community First Hawai'i. This community-based organization brought together groups engaged in vaccination efforts in Hawai'i County. Members included representatives from Hawai'i County Parks and Recreation, HCOA, AARP, vaccine providers, the District Health Office, and communication groups, including Olomana Loomis. Speakers from O'ahu were invited to share a broader picture, e.g., of vaccine supply, and Representative Kai Kahele would provide a federal update. The group met weekly to provide a space where people could share challenges, successes, and decide collectively how to move forward and make best use of resources. When it was seen that kūpuna faced barriers from the online registration system, the group focused on educating families to support kūpuna in getting vaccinated. When supply started to exceed demand, Big Island hospitals wound down mass clinics, and the coalition facilitated community outreach and vaccination efforts. The group maintained a spreadsheet for the providers to list all their community clinics, the location, the vaccine they were providing, and if the event was a public or private event (e.g., for an employer). The coalition worked with Big Island Civil Defense to create a public vaccination calendar that could promote public vaccination events. In this way, the coalition was effective in helping healthcare providers on the Big Island share information and work collaboratively to vaccinate the population.

• AARP. While AARP was a co-leader of KVOG, this organization also played a key role in advocating for and educating older adults throughout the pandemic. For example, AARP hosted monthly telephone-town-hall meetings, which were conducted by phone, like a radio talk show, and targeted kūpuna who did not have internet/computer access to attend webinars. Tele-town-hall speakers included Lt. Governor Josh Green, Senator Brian Schatz, and Dr. Sarah Kemble (State Epidemiologist). The content was also live streamed on Facebook and recorded. AARP organized letters to the editors, published articles, got on local news stations, and paid for educational materials that were mailed to AARP members without email addresses, as well as for programming on Korean and Filipino TV (see below). AARP advocated for PPE prioritization for ARCHs, helped to develop infection control guidelines for these residential facilities, and supported the Department of Human Services Med-QUEST Division's request for earlier-than-scheduled vaccinations for residents and staff of ARCHs, CCFFHs, and DD Domiciliary and Foster Homes. AARP also advocated that pharmacies receive increased compensation when providing in-home vaccinations, as this was costlier to pharmacies than participating at mass and congregate vaccination sites.

County- and Language-specific Call Centers for Information and Scheduling. The Hawai'i State DOH and each county established mechanisms for kūpuna to telephone for assistance with vaccination scheduling. Some had the capacity to field questions in a number of languages, and others targeted specific language groups, like Korean, Ilocano, and Tagalog speakers. For example:

- Kaua'i Agency for Elderly Affairs (KAEA). KAEA became the COVID information and vaccination call center for everyone age 60+ in Kaua'i County. This call center followed an earlier call center open in 2020 for all kūpuna age 70+ to register them for free, fresh produce being distributed by the County Economic Development Office and the local food banks. At that time, KAEA received up to 400 phone calls a day, including calls from kūpuna on other islands who were referred to local agencies for help. During the vaccination efforts, KAEA Office staff tried to help schedule everyone that called, including younger people who were caring for or calling on behalf of older family members. Vaccines were given primarily at the Kaua'i Veterans Memorial Hospital, Mahealona, and Wilcox, but this involved different sign-up systems. For older adults with email addresses, appointment information would be emailed to them. But for people without email addresses, staff either created them or used their own, and then arranged to mail or have kūpuna pick up their appointment information. Hospitals would contact KAEA about kūpuna who missed their appointments, and KAEA would have to follow up with these clients. Mostly, kupuna were able to get to vaccination sites by themselves, with family or caregivers, or on the County Transportation Agency Paratransit. Names of homebound kūpuna were collected from KAEA, and Public Health Nurses from Kaua'i District Health Office provided in-home vaccinations.
- Aloha United Way 211. St. Francis Healthcare System teamed up with Aloha United Way's (AUW) 211 Call Center to help kūpuna. Starting March 29, 2021, kūpuna were directed to call 211 for help. The Call Center was open 7 days a week and initially had Japanese, Korean, and Chinese speakers on staff. Later the Call Center transitioned to the use of a translation service that assisted with 200+ languages. Neighbor island callers would be referred to call centers in their counties. For Oʻahu-based kūpuna, the AUW-211 staff would collect necessary information from kūpuna, including demographics, location, and the kind of help they needed—from education, to scheduling, to transportation to the appointment. These intake forms were sent to St. Francis, and the St. Francis workers registered the kūpuna for appointments. When the worker received confirmation, he/she would mail it, or hand deliver it to the kūpuna. St. Francis staff called kūpuna to remind them of their vaccination appointment, provided transportation if needed, and followed up with wellness calls a couple of days after they got their vaccines. For kūpuna who were homebound, St. Francis worked with providers to schedule an in-home shot. By the end of June 2021, AUW-211 had fielded about 5,000 kūpuna calls,

and St. Francis had scheduled close to 1,000 vaccination appointments and arranged 200 in-home vaccinations for kūpuna.

• Korean Call Center. AARP worked with the United Korean Society to field telephone phone calls generated among viewers of Korean-Language television station KBFD. This television station developed a 5-week series about COVID-19 that included COVID education, stories, and an "ask a nurse" feature. The United Korean Society saw a 25% increase in calls from the publicity through KBFD. Most of the callers were kūpuna who spoke only Korean, and the United Korean Society helped them register for vaccinations. Additionally, the United Korean Society sponsored their own vaccination event in May 2021, and publicity through KBFD increased registration for the event from 100 to 500.

Translation and Interpreter Services. The inclusion of translation and interpretation services was vitally important for Hawai'i's richly diverse population. Highlighted below are two contracted translation and interpretation services that were active participants in KVOG. However, it should be noted that the FQHC and many other community-based organizations employed bilingual staff that assisted in the kūpuna vaccination efforts.

- Office of Language Access (OLA) organized interpreter services for a number of vaccination events and initiatives. Interpreters were provided through existing contracts in the OLA network, community volunteers, and the Hawai'i Language Bank. Interpreters conducted outreach and education as well as interpretation for vaccine administrators. In low-income, senior housing facilities, interpreters went door-to-door to personally invite non-English-speaking residents to attend the vaccination drive in the senior housing complex. The presence and expressed concern of these interpreters were critical elements to engaging non-English-speaking kūpuna, especially those that did not understand the vaccination drive and/or were hesitant to participate.
- Pacific Gateway Center (PGC) hosts the Hawai'i Language Bank, which has a registry of about 100 linguists that cover more than 30 languages. The Hawai'i Language Bank has been providing translation services in Hawai'i for years and has been contracted with the Community Outreach and Public Health Education (COPHE) program of the Department of Health to provide rapid translation services. PGC has developed strong community ties with the immigrant population in Hawai'i. These firmly established relationships have allowed PGC to act as a trusted advocate for COVID vaccinations. By working with community gatekeepers, PGC was able to help with vaccine pop-up clinics at multiple community churches and centers.

Community Mobile and Pop-up Clinics in Locations where Kūpuna Congregate. Great success was achieved by taking vaccination services to kūpuna in nursing homes, ARCHs, CCFFHs, DD Domiciliary and Foster Homes, low-income senior housing facilities, and adult day care and day health centers. Part of this success was an allowance by DOH to vaccinate staff and family members in younger age groups who cared for these kūpuna. Examples are provided for each of these spaces.

- Nursing Homes. Through the US Federal Pharmacy Program, select pharmacies received a limited COVID-19 vaccine supply directly from the federal government. In Hawai'i, Longs (CVS) and Walmart were contracted to use initial supplies to visit nursing homes and vaccinate the estimated 4,300 nursing home residents across the state.
- Community-based Long-Term Care Homes. Representatives from the Department of Human Services Med-QUEST Division were key advocates for taking the vaccine to kūpuna living in ARCHs and CCFFHs. These homes provide room, board, and personal care to people with long-term care needs, many of whom are as or more disabled than individuals in nursing homes. Most of these homes are small,

housing 1-5 individuals, and an estimated 90% of these clients are age 65+. DHS worked with DOH to secure a list of the 1,900+ licensed ARCHs and CCFFHs in the state, altogether serving an estimated 10,000 vulnerable individuals. On Oʻahu, 1,771 homes were divided into geographic regions, and regions were assigned to pharmacies willing to travel to these homes to vaccinate residents and staff, including Times Pharmacy, Pharmacare, 5-Minute Pharmacy, Foodland Pharmacy, Queen's Physicians Office Building Pharmacy, and ElixRx. By mid-February, 87% of Oʻahu homes had been visited for administration of first shots. Also, by mid-February, KTA Super Stores Pharmacy had visited 90% of 168 homes on the Big Island to administer the vaccine. At the same time, the Kauaʻi District Health Office reached over 90% of their 28 homes, and Maui about 50%.

- Senior Housing. On O'ahu, vaccination of low-income, senior housing residents was organized by HIPHI through a contract from EAD. HIPHI staff identified about 71 properties on O'ahu, housing about 8,400 kūpuna. The team reached out to property managers and case managers (if available for the property) to gauge vaccination need and interest. Managers from 39 properties identified residents that needed and wanted vaccinations. For 29 of the 39 properties (74%), onsite vaccination clinics were organized and staffed by pharmacy providers, volunteers, and personnel from HIPHI, EAD, Catholic Charities, St. Francis, the Office of Language Access, Pacific Gateway, and other groups. For the other 10 (26%), residents were assisted to a near-by, off-site vaccination site, with Catholic Charities and St. Francis assisting with transportation and escort. Through these efforts, 4,216 kūpuna on 39 properties were assisted to vaccination, 1,180 through onsite clinics and 3,036 at off-site clinics. Similar efforts to vaccinate residents in low-income senior housing units were conducted on the Neighbor Islands.
- Public Housing. Public Health Nurses administered vaccines in public housing sites that were not exclusive to kūpuna, but where many residents were kūpuna nonetheless. The Public Health Nurses worked with the Hawai'i Public Housing Authority to vaccinate at public housing sites in Wahiawa, Kalihi, Halawa, and other low-income properties. They helped arrange interpreters, distributed translated and large-print materials, and provided vaccine education to the hesitant. They reached an estimated 2,000 individuals, many of whom were kūpuna.
- Adult Day/Senior Centers. Adult Day Centers and Senior Centers are venues at which kūpuna congregate. When the vaccine became available, the leadership of Adult Day Centers of Hawai'i contacted the 25 adult day care centers on O'ahu to determine the number of clients and staff interested in receiving vaccinations. Because these sites were closed, many clients had family members who took them to mass vaccination sites, but 111 clients and 47 staff still needed to be vaccinated. Adult Day Centers of Hawai'i collaborated with Kaiser Permanente to arrange vaccination for these clients and staff. Vaccination clinics also were organized at senior centers and reached over 400 kūpuna.
- FilCom Cares. This community group was organized in 2020 to educate Filipinos about COVID and to offer COVID-19 testing. Members of the group worked with the Hawai'i DOH to translate COVID information into conversational Tagalog and Ilokano. Materials were disseminated through FilCom Center's Facebook page, community partners, and directed people to an "in-language" call center. When the vaccine became available, organizers learned that many Filipino kūpuna were hesitant to seek vaccination through FQHCs or physicians' offices for fear of being asked about their health issues that they were avoiding. Instead, they worked with FQHCs, pharmacies, and other providers to host vaccination clinics at Catholic churches and the FilCom Center in Waipahu, vaccinating more than 2,000 adults by mid-July 2021. The group also hosted a weekly radio program in KNDI and several

radio-thons to promote vaccine information and vaccination events. The group was funded in part through the State DOH COPHE group.

Mechanisms for In-home Vaccinations for Kūpuna. The in-home vaccination strategy can be broken into Phase 1 when vaccinations were limited to priority groups and Phase 2 when vaccinations were made widely available.

- Vaccine Distribution Phase 1. In the early stages of mobile vaccine efforts in Hawai'i, all counties developed mechanisms to provide on-site COVID-19 vaccination to kūpuna and other eligible populations that were defined as "homebound." The definition of homebound evolved over time. Originally, these efforts focused on vaccinating people who were unable to leave their homes without the help of another person or medical equipment or would develop worse health or illness because of leaving their homes. To receive services, these individuals or their caregivers would be referred to DOH by a service provider or would call DOH and request services directly. These individuals then provided their information to DOH. A mobile vaccine provider, either a DOH outreach lead or staff from Project Vision, would be dispatched to vaccinate the individual at their home or place of residence. There were approximately 100 requests for these services through the month of March 2021, the majority of which were located on O'ahu (referrals from neighbor islands remained in the single digits). At the same time, many mobile providers who were out in the community (e.g., supporting pop-up clinics) received referrals directly, many times by word-of-mouth or through informal referral processes. These providers worked in parallel with DOH and oftentimes were able to use extra doses from pop-up vaccine clinics to vaccinate close-by homebound individuals, increasing usage of opened vaccine vials, saving provider time, and quickly vaccinating those in need.
- Vaccine Distribution Phase 2. As supplies and provider capacity increased over time, an informal planning team was convened in mid-June 2021 as a subgroup of KVOG, including DOH call center staff, Healthcare Association of Hawai'i (HAH), Aloha United Way, St. Francis Healthcare Systems of Hawai'i, Pharmacare, Times Pharmacy, Project Vision, and KVOG leadership. This group was convened by HIPHI through support from the Kaiser Foundation Health Plan, Inc. The goals of the subgroup were to strategize ways to increase awareness of mobile services available, provide coordination across some of the mobile providers to meet increased demand, and foster collaboration to increase vaccination rates while minimizing disparities. Language used within the planning team shifted from "homebound" to "in-home" or "on-site" vaccination. This reflected the expanded definition of homebound to include all vaccine-eligible people 12 and older who would otherwise remain unvaccinated unless services were received at their home or place of residence, recognizing that people benefitting from these services were not necessarily homebound by a more traditional definition. The subgroup, under the leadership of HAH's communication team, created an awareness campaign tailored to older adults, those with low digital literacy or access, and populations with low vaccine rates. As part of the campaign, a grant awarded by the Kaiser Permanente National Community Benefit Fund at the East Bay Community Foundation, administered by HIPHI, supported print ads in the sole statewide newspaper, the Honolulu Star-Advertiser. The DOH call center worked with vaccine providers, in alignment with Aloha United Way 211, to oversee back-end coordination of referrals and mobile efforts. As a result, 164 people called in and were scheduled for in-home vaccination and 51 people received at least one dose through July 2021, with numbers continuing to trend upwards.

Funding for Community-based Coalitions and Groups. A variety of funding methods were used to support the essential work of community-based organizations to conduct outreach, education, and provide vaccines to their communities. These funds made it possible to conduct targeted outreach to vulnerable populations with great success. Community-based organizations also increased the state's capacity for vaccine distribution.

Federal and State Sources of Funding. In support of kūpuna vaccination efforts, the EOA and the AAAs identified funding resources to broaden access to and delivery of vaccinations to older adults and dispersant populations. EOA through the EAD leveraged existing state and federal funds to support the contracts for the AUW-211 call center, transportation services for kūpuna to vaccination sites, and outreach to vulnerable populations with great success. Through partnership with community-based organizations, they increased the state's capacity for vaccine distribution.

In March 2021, Congress passed the American Rescue Plan Act of 2021 that provided \$1.434 billion in mandatory funding for Older Americans Act (OAA) nutrition services, supportive services for COVID-19 vaccination efforts, activities to prevent and mitigate social isolation related to COVID-19, family caregiver services, disease prevention, grants for tribal organizations, and the long-term care ombudsman program. Activities funded under this initiative included addressing vaccine hesitancy, providing information and assistance, disseminating credible information about the vaccine, providing resources, addressing inequity in COVID vaccination access among older adults, caregivers, network staff and volunteers, providing transportation stipends and vouchers, and supporting efforts to assist with vaccine booster shots.

Since EOA with the AAA had proactively carried out initiatives that provided access to vaccinations for older adults, they decided to leverage these funds to support media and mass outreach to mitigate vaccine hesitancy. In addition, they supported community grass roots efforts of the KVOG team by: 1) supporting philanthropic and other community grants to support vaccination efforts and 2) supporting the infrastructure for our partnering organizations allowing these organizations to successfully apply for additional funding to enhance ongoing vaccination efforts.

 Other Sources. Community coalitions and organizations also received funding from other sources, including the Kaiser Permanente Foundation. These funds have allowed for the continuation of valuable work established under State funding.

Discussion

Provided in this section are three recommendations, limitations of the report, and concluding remarks.

Recommendations

- Engage All Relevant State and County Agencies in Pandemic Response Efforts. Government-led Emergency Operations Centers should work closely with leaders in the Med-QUEST Division (which supports aged and disabled residents in ARCHs, CCFFHs, and DD Domiciliary and Foster Homes) and leaders of the Hawai'i aging network to identify venues where older adults are living and congregating and supporting them to devise and carry-out vaccination efforts with these kūpuna. The Hawai'i Aging Network includes the EOA, the four AAAs, the AAA-associated ADRCs, and community-based organizations that provide direct services to kūpuna.
- Increase Early Support for Community-based Vaccination, along with Mass Vaccination Sites. Although distributing vaccines through mass vaccination sites is a good strategy when faced with limited supply of a vaccine that needs to be stored under extremely cold conditions, many kūpuna were not able to participate due to difficulties with the online scheduling system, frailty, cognitive impairment, fear, and/or lack of transportation/escort. This report includes numerous examples of the success of taking the vaccine to places where kūpuna live and congregate, including nursing homes, ARCHs, CCFFHs, DD Domiciliary and Foster Homes, senior housing projects, day care and senior centers, community clinics, churches, and so forth.

• Incorporate and Fund Community Coalitions and Organizations in State Response Efforts.

Government-led Emergency Operations Centers and Aging Network personnel should engage and fund community coalitions and organizations can increase the state's capacity to find and vaccinate elders. Community, non-profit, and private organizations can assist with call centers, education, and outreach to specialized memberships, quickly create translation materials, provide interpretation services, and host community-based vaccination events for hard-to-reach groups. Coalitions can help to facilitate education and cooperation across government, private, non-profit, and community-based organizations in vaccinating the public. Because coalitions include partners that can take on varied and different roles, they can assist with collaboration, reduce redundancies, and create a community of resiliency. Their early inclusion in coalitions, planning efforts, and funding opportunities is critical.

Limitations of this Report

The information in this report is limited by the data collected and its focus on kūpuna. Interviews were completed within a short timeframe, which limited the number of individuals interviewed. The authors know there are many more stories that illustrate the successes and challenges in preventing and controlling COVID-19 and thank all players for their help in vaccinating our kūpuna, adults, and keiki in Hawai'i.

Concluding Remarks

This report serves to document COVID-19 vaccination efforts with kūpuna. Findings should be useful in the event of another pandemic and for vaccination efforts for seasonal influenza, pneumonia, shingles, and other vaccines targeting older adults.

Appendix B: Survey of Kūpuna Vaccination Outreach Group Members

We are asking you to complete this survey because you are a member of the Kūpuna Vaccine Outreach Group (KVOG).

As a reminder, the goal of KVOG remains centered around the health and wellbeing of kūpuna and other underserved populations by actively minimizing disparities and ensuring that each vaccination strategy is equitable for our communities served, regardless of geographic location, language proficiency, physical/mental abilities, and economic status.

To evaluate our group, we ask that you complete this short survey. This quality assurance project has been approved by the University of Hawai'i at Mānoa Institutional Review Board.

Provide the name of the organization you represent
Select your role(s) in vaccination efforts (check all that apply) Identified individuals and groups in need of assistance getting vaccinated Conducted education, outreach, and/or information and referral Coordinated vaccination events and efforts Administered vaccinations Assisted with vaccine promotion and communication
Leveraged partnerships to meet KVOG's goal Provided funding and/or administrative services for vaccination efforts and partnerships
Provided data on individuals reached and events hosted
Provided expertise in the field of aging Other (please specify)

Question	Response	Options				not relevant or don't know
1. Partners had the ability to reach	5	4	3	2	1	
kūpuna in diverse settings, e.g.,	Strongly	Agree	Neutral	Disagree	Strongly	
daycare service, senior housing,	Agree				Disagree	
churches, etc.						
2. Partners had the ability to reach	5	4	3	2	1	
kūpuna who needed extra help in	Strongly	Agree	Neutral	Disagree	Strongly	
accessing vaccine services, e.g., elders	Agree				Disagree	
with no or limited English, elders with no						
or limited internet, homebound elders,						
etc.						
3. The coalition strove to include	5	4	3	2	1	
partners who represented or could reach	Strongly	Agree	Neutral	Disagree	Strongly	
isolated, hesitant, or hard-to-reach	Agree				Disagree	
groups.						
4. KVOG supported and/or	5	4	3	2	1	
enhanced my organization role in	Strongly	Agree	Neutral	Disagree	Strongly	
community vaccination and outreach	Agree				Disagree	
efforts.						

5. Partners were meaningfully	5	4	3	2	1	
engaged in KVOG.	Strongly	Agree	Neutral	Disagree	Strongly	
	Agree			-	Disagree	
6. KVOG meetings were effective.	5	4	3	2	1	
	Strongly	Agree	Neutral	Disagree	Strongly	
	Agree				Disagree	
7. KVOG communications were	5	4	3	2	1	
effective.	Strongly	Agree	Neutral	Disagree	Strongly	
	Agree				Disagree	
8. KVOG was effective in increasing	5	4	3	2	1	
kūpuna access to vaccination	Strongly	Agree	Neutral	Disagree	Strongly	
opportunities.	Agree				Disagree	
9. KVOG was broadly recognized as	5	4	3	2	1	
an authority or major player in ensuring	Strongly	Agree	Neutral	Disagree	Strongly	
vaccine access for the population served.	Agree				Disagree	
KVOG provided a sense of community	5	4	3	2	1	
across partners involved in this work.	Strongly	Agree	Neutral	Disagree	Strongly	
	Agree				Disagree	
10. I was satisfied with the	5	4	3	2	1	
functioning of KVOG.	Strongly	Agree	Neutral	Disagree	Strongly	
	Agree				Disagree	
11. I felt appreciated for my	5	4	3	2	1	
contributions to achieving the goal of	Strongly	Agree	Neutral	Disagree	Strongly	
KVOG.	Agree				Disagree	
12. I felt like my participation was	5	4	3	2	1	
valued by the group.	Strongly	Agree	Neutral	Disagree	Strongly	
	Agree				Disagree	
My personal and professional network	5	4	3	2	1	
has been enhanced by participating in	Strongly	Agree	Neutral	Disagree	Strongly	
KVOG.	Agree				Disagree	
Because of my participation in KVOG, I	5	4	3	2	1	
gained an increased situational	Strongly	Agree	Neutral	Disagree	Strongly	
awareness of COVID-19 vaccine efforts.	Agree				Disagree	

- 16. What did you find most valuable about participating in KVOG?
- 17. How could KVOG have been improved?
- 18. We are interviewing select members of KVOG on the functioning and impact of KVOG. Would you also like to be interviewed? If yes, please provide your name, email address, and phone number.
- 19. Any other comments?

Mahalo!

Appendix C: Kūpuna Vaccination Outreach Group Interview Questions

- 1. Name your organization and your role within it.
- 2. When and why did you join KVOG.
- 3. What role did you play in KVOG? Examples from the survey include:
 - a. Identified individuals and groups in need of assistance getting vaccinated
 - b. Conducted education, outreach, and/or information and referral
 - c. Coordinated vaccination events and efforts
 - d. Administered vaccinations
 - e. Assisted with vaccine promotion and communication
 - f. Leveraged partnerships to meet KVOG's goal
 - g. Provided funding and/or administrative services for vaccination efforts and partnerships
 - h. Provided data on individuals reached and events hosted
 - i. Provided expertise in the field of aging
 - j. Other (please specify) _____
- 3. Tell us about the specific strategies your organization used to increase access to vaccination among kūpuna, people with disabilities, or other underserved groups.
- 4. We are eager to document success stories. Tell us about specific successes in your county.
 - a. In this example or another, how did you leverage resources across agencies?
- 5. Tell us about possible data sources that may show the impact of these strategies.
- 6. Tell us about barriers, and lessons learned
 - a. Were there any critical moments or major shifts in your vaccine efforts that made a difference in how things turned out?
 - b. If we were to find ourselves in a similar situation in the future, what would be the most important thing to know/do?
- 7. Is there anything else you'd like to share?
 - a. Which populations still need to be reached?
 - b. Which new strategies can be tried?
- 8. Did you complete the KVOG online survey? If not, may I ask you 15 quick survey questions? (from survey)
- 9. Please share anything more about your experience with KVOG.
 - a. Good things about it
 - b. Ways to improve

Appendix D: Kūpuna Vaccination Questions for County Executives

- 1. Tell us about the situation of COVID-19 in your county and how kūpuna were affected.
- 2. Tell us about the specific strategies and activities in your county to increase kūpuna access to vaccination.
- 3. Describe the resources and structures that supported these strategies and partnerships, including the role of the AAA/ADRC in any of these efforts.
- 4. Tell us about data and/or data sources that may show the impact of these strategies.
- 5. We are eager to document success stories. Tell us about specific successes in your county.
- 6. Tell us about barriers, and lessons learned
 - a. Were there any critical moments or major shifts in your vaccine efforts that made a difference in how things turned out?
 - b. If we were to find ourselves in a similar situation in the future, what would be the most important thing to know/do?
- 7. Are there other partners in your county we should talk to?
 - a. District Health Officer?
 - b. Others?
- 8. Tell us about our experience being on the steering committee with EOA.
- 9. Is there anything else you'd like to share?

Appendix E: Interview Question for County Partners (other than Honolulu County)

- 1. Please give us the bigger picture of vaccination efforts on (your island) and the key partners in vaccination efforts on (your island).
- 2. Tell us about data and/or data sources that may show the impact of these strategies.
- 3. Tell us about barriers, and lessons learned. If we were to find ourselves in a similar situation in the future, what would be the most important thing to know/do?
- 4. Is there anything else you'd like to share?

Appendix F: COVID Vaccination Rates by Hawaiian County & Overall



Hawaii COVID-19 Vaccine Summary



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