

Community Health Workers in Hawai'i: A Scoping Review and Framework Analysis of Existing Evidence

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Abstract

Introduction: Community health workers (CHWs) play a vital role in health across Hawai'i, but the scope of this work is not comprehensively collated. This scoping review describes the existing evidence of the roles and responsibilities of CHWs in Hawai'i. **Methods:** Between May and October 2018, researchers gathered documents (eg, reports, journal articles) relevant to Hawai'i CHWs from health organizations, government entities, colleges/universities, and CHWs. Documents were reviewed for overall focus and content, then analyzed using the Centers for Disease Control and Prevention's 10 Essential Public Health Services as well as the Community Health Worker Core Consensus Project roles to identify workplace roles and gaps. **Results:** Of 92 documents received, 68 were included for review. The oldest document dated to 1995. Document types included curricula outlines, unpublished reports, and peer-reviewed articles. Documents discussed trainings, certification programs, CHWs' roles in interventions, and community-, clinical-, and/or patient-level outcomes. Cultural concordance parity between CHWs and patients, cost savings, and barriers to CHW work were noted. Most roles named by the Community Health Worker Core Consensus Project were mentioned in documents, but few were related to the roles of "community/policy advocacy" and "participation in research and evaluation." Workplace roles, as determined using the 10 Essential Public Health Services, focused more on "assuring workforce competency" and "evaluation," and less on "policy development," and "enforcing laws." **Discussion:** CHWs are an important part of Hawai'i's health system and engage in many public health functions. Although CHW roles in Hawai'i mirrored those identified by the CHW Core Consensus Project and 10 Essential Public Health Services frameworks, there is a noticeable gap in Hawai'i CHW professional participation in research, evaluation, and community advocacy.

Keywords

Community health workers, CHW, roles, interventions, training, outreach, Hawai'i

Abbreviation List

CHC = Community health center

CHW = Community health worker

HDOH = Hawai'i State Department of Health

HPCA = Hawai'i Primary Care Association

UHET = University of Hawai'i Evaluation Team (Office of Public Health Studies)

Highlights

- A scoping review of documents on community health workers (CHW) in Hawai'i was conducted
- Documents discussed workforce programs, intervention roles, barriers, and outcomes
- Many roles performed by Hawai'i CHWs reflect the roles performed by the national workforce and identified in public health frameworks
- CHWs are working statewide and are important to Hawai'i's public health and health care systems
- Opportunities exist for CHW engagement in research, evaluation, and advocacy

Introduction

Community health worker (CHW) is a broad term encompassing a wide range of job titles including lay health worker, outreach worker, navigator, and others.¹ The American Public Health Association defines CHWs as frontline public health workers who are trusted community members with an unusually close understanding of the community served, with roles including bridging health/social services and the community, increasing health access, ensuring cultural competency of interventions, and building community and individual capacity,² though other definitions exist.^{3,4} Common activities include mediation between health and social systems, communities, and individuals; health education; case management; coaching and social support; advocacy; and service provision.⁵ Nationally, CHWs may participate in health interventions and health promotion activities related to cancer screening,⁶⁻⁸ cardiovascular disease prevention,⁹⁻¹¹ mental health interventions,⁶ asthma control,¹² and medication safety.⁶ Community membership and racial/ethnic concordance between CHWs and patients can positively affect intervention success;^{6,13} however, health outcomes and cost effectiveness of CHW interventions vary.^{6,14}

National interest in expanding the roles of CHWs is demonstrated through federal policies and initiatives. CHW roles were recognized in the Patient Protection and Affordable Care Act.¹⁵ The Department of Labor's Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant provided \$2 billion nationally toward training and development of in-demand jobs, including CHWs, at community colleges across the country and in Hawai'i.¹⁶ The Centers for Disease Control and Prevention (CDC) supported CHW engagement in proffering community-clinical linkages for disease prevention and management.¹⁷

While CHWs have long been engaged across Hawai'i, the full scope of this work has not been comprehensively collated. Although individual projects and studies document CHW participation in trainings and health interventions, reports on CHW activities in Hawai'i may not be published in peer-reviewed journals and thus may not be mentioned in systematic literature reviews nationally.^{6,14} To describe the breadth of CHW engagement in Hawai'i, we conducted a scoping review to understand the history and evidence base of CHW activities, roles, and responsibilities across all types of available literature.

Methods

Research Collaboration

The University of Hawai'i at Mānoa Healthy Hawai'i Initiative Evaluation Team (UHET) was asked by the Hawai'i State

Department of Health (HDOH) to conduct a scoping review of the breadth of CHW engagement in Hawai‘i. Scoping reviews examine the range of activities and the state of research where knowledge is limited.¹⁸ Following one method for scoping reviews,¹⁹ we identified the knowledge gap on CHWs in Hawai‘i, then gathered relevant documents. We solicited documentation, reports, and journal articles on Hawai‘i-based CHWs from leaders and CHWs at health organizations, government agencies, and colleges and universities via email, face-to-face contact, and phone. Documents collected from May through October 2018 were sent to UHET. We also identified journal articles through PubMed and the UH Mānoa Library OneSearch system from May through September 2018.

Analysis Plan, Framework Analysis, and Theoretical Frameworks

Document data were entered into a Microsoft Excel database, including publication year, setting of the CHW work, document type (eg, journal article, report), CHW roles (eg, training, intervention), types of outcomes (eg, training or patient outcomes), and cost-savings data. Only documents discussing work done in Hawai‘i related to CHWs were included. Descriptive quantitative data were analyzed in Stata 15.1 (StataCorp, College Station, TX). Documents were qualitatively analyzed for CHW titles, themes related to engagement, barriers, and opportunities using the Excel database. To understand how CHWs were engaged in service, we conducted a framework analysis²⁰ using 2 nationally recognized frameworks (Table 1): the CHW Core Consensus Project (C3 Project, a partnership between the University of Texas-Houston School of Public Health’s Institute for Health Policy and the Texas Tech University Health Sciences Center, El Paso), which identified major CHW roles,⁵ and the CDC’s 10 Essential Public Health Services (10 EPHS).²¹ The C3 Project roles were developed using a community-based participatory research approach that included gathering primary data from 5 states and 2 national organizations on CHW roles and training, and then reviewing the findings. The review was conducted by an advisory body and also by CHWs at national meetings and online prior to publication.⁵ The roles identified by the C3 Project were used to understand the roles and responsibilities of CHWs in Hawai‘i, and to improve the comparability of our findings to those of other studies.¹ The 10 EPHS were selected to understand the public health functions of CHWs in Hawai‘i. This study did not include human subjects and thus did not require institutional review board oversight.

Results

Scoping Review

UHET collected 92 unduplicated documents via document solicitation and library search. Sixty-eight documents were retained for the scoping review (Figure 1). Table 2 describes both self-reported job titles of CHWs from recent conference registrations and titles used by employers.^{22,23} Commonly reported titles were care coordinator, case manager or worker, community health advocate, community health outreach worker,

health educator, patient navigator, or peer educator. Other titles were also reported, such as community health educator, health care worker, peer advocate, and public health aide.

Descriptive statistics about the documents are reported in Table 3. The oldest document was dated 1995. Just over a third (35.82%) were published since 2015, coinciding with a period of increased workforce development programs. Many reported on statewide projects (41.79%), followed by work on O‘ahu (31.34%). Island-specific project examples include a CHW diabetes self-management intervention on O‘ahu²⁴ and delivery of a lifestyle-change program on Moloka‘i.²⁵ Three documents contained information about a Pacific-²⁶ or national-level project that included work in Hawai‘i, including national evaluations.^{27,28} Most documents were academic products such as journal articles (38.81%), followed by reports (26.87%), which included evaluations of conferences or trainings,²⁹ or reports to grantors about curriculum development.³⁰⁻³² We received agendas and minutes for trainings²⁹ or planning meetings,³³⁻³⁶ and strategic plans that envisioned CHWs as part of community behavioral health teams.^{37,38} Lastly, we found state legislative documents regarding CHWs.³⁹⁻⁴¹

Over half of the documents related to educational or training opportunities for CHWs. The oldest document among these dated to 2002 and discussed CHW certificate programs as part of the Wai‘anae Health Academy, a partnership between Wai‘anae Coast Comprehensive Health Center and Kapi‘olani Community College.^{27,42-44} Between 2002–2007, two more college-delivered certificate programs were offered in “Case Management” and “Outreach for Health Promotion,” designed by a statewide community advisory group including representatives from Community Health Centers (CHCs) and Native Hawaiian Health Care Systems, convened by the Hawai‘i Primary Care Association and funded by the Hawai‘i Rural Development Project. More than 150 CHWs participated in 1 or both certificate programs delivered face-to-face on 5 islands through 2007.⁴⁵ The 2015 Department of Labor TAACCCT Grant funded year-long CHW certificate programs at community colleges across the state.⁴⁶

Disease- and/or population-specific trainings were developed, which included diabetes^{47,48} and cardiovascular disease-specific trainings⁴⁹ for CHWs working with Native Hawaiians, Pacific Islanders, and Filipinos. The ‘Imi Hale Native Hawaiian Cancer Network developed a cancer patient navigation program for CHWs and outreach workers to facilitate timely cancer screening and treatment.⁵⁰ Three statewide workshops in 2013 were developed specifically to assist CHWs with working with public benefit programs (ie, MedQuest, financial assistance, Social Security, federal housing assistance, Supplemental Nutrition Assistance Program), along with working with special populations (eg, people affected by homelessness, migrants from the nations of the Compact of Free Association).²⁹ In 2017, a training on chronic disease prevention and management occurred at a statewide CHW conference.²³

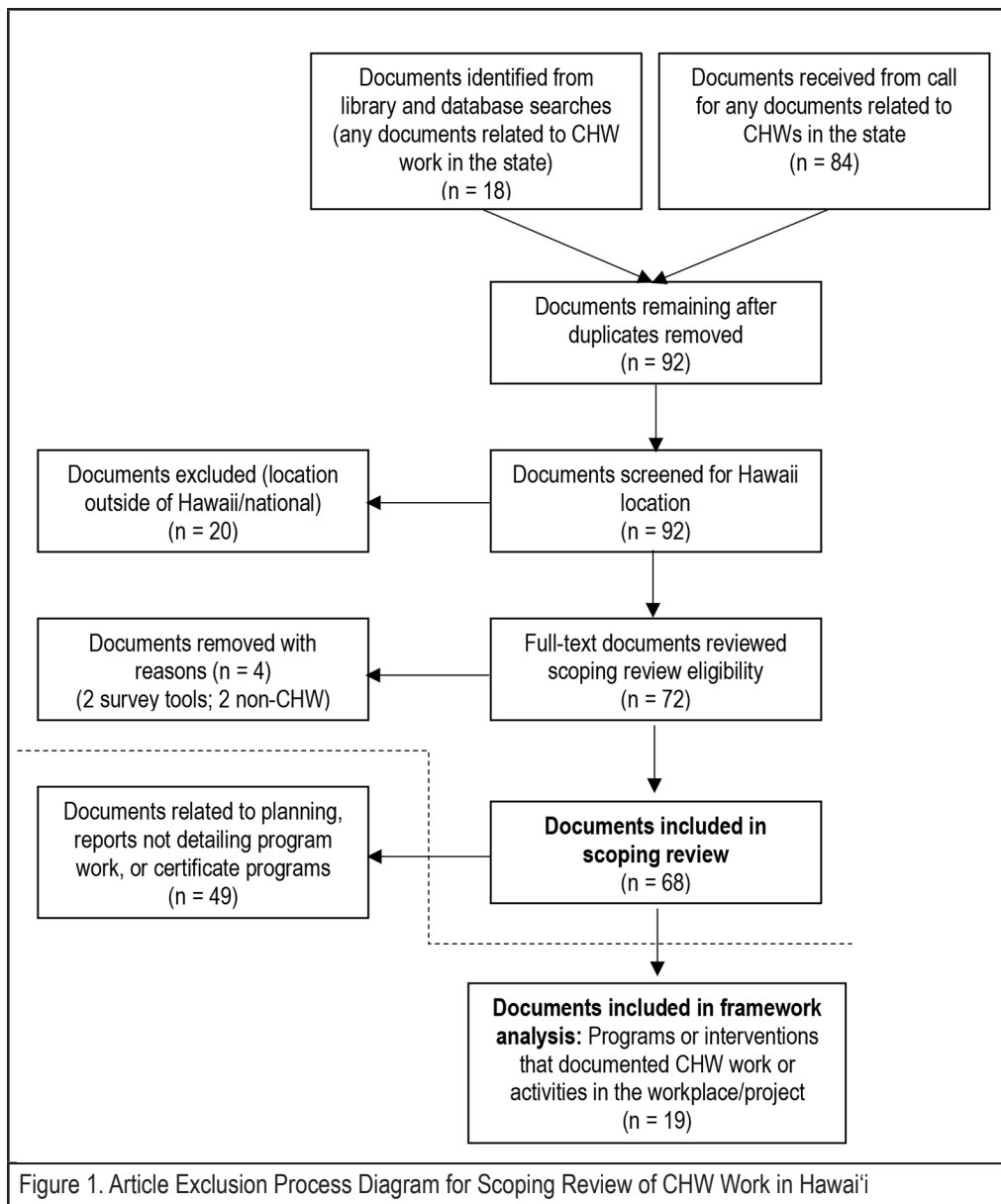
Barriers to advancing the work of CHWs were identified in needs assessments and other documents. Themes from recent documents included the need for more educational and training

Table 1. CDC's Ten Essential Public Health Services Framework ²¹ and the C3 Project CHW Roles ⁵	
10 Essential Public Health Services ²¹	Community Health Worker Core Consensus (C3) Project Roles ⁵
Monitor health status to identify community health problems	Cultural mediation among individuals, communities, and health and social service systems
Diagnose and investigate health problems and health hazards in the community.	Providing culturally appropriate health education and information
Inform, educate, and empower people about health issues	Care coordination, case management, and systems navigation
Mobilize community partnerships to identify and solve health problems	Provide coaching and social support
Develop policies and plan that support individual and community health efforts	Advocating for individuals and communities
Enforce laws and regulation that protect health and ensure safety	Building individual and community capacity
Link people to needed professional health services and assure the provision of health care when otherwise unavailable	Provide direct services
Assure a competent public health and personal health care workforce	Implementing individual and community assessments
Evaluate effectiveness, accessibility and quality of personal and population-based health services.	Conducting outreach
Research for new insights and innovative solutions to health problems.	Participating in evaluation and research

Table 2. Commonly Self-reported and Employer-reported CHW Job Titles in Hawai'i (Alphabetized)	
Commonly Reported	Less Frequently Reported
Care coordinator or care guide	Certified forensic peer specialist
Case managers/case workers	Clinical social worker
Community health advocate or advisor	Community advocate
Community health representative	Community health educator
Community health worker	Community health service program assistant
Community liaison	Community health worker supervisor
Community outreach worker/ community health outreach worker	Community wellness advocate
Enrollment specialist	Doula
Health ambassador	Eligibility worker/manager
Health educator/Lay health educator	Employment counselor/job coach
Patient navigator	Family caregiver
Patient representative	Government and social service specialist
Peer educator	Health care worker
	Housing counselor
	Interpreter
	Mentor/Kupuna
	Nutrition assistant
	Outreach education worker
	Paramedical assistant
	Patient care coordinator
	Peer advocate or advocate
	Public health aides
	Student

Table 3. Document Descriptions	
Description	Frequency (%) (n=68)
Year of Publication	
1999 or older	4 (5.88)
2000-2004	8 (11.76)
2005-2009	16 (23.53)
2010-2014	13 (19.12)
2015 and newer	25 (36.76)
Undated	2 (2.94)
Specific Geographies	
Statewide (all islands)	28 (41.18)
National or Pacific plus any island	3 (4.41)
Any island or combination of islands (except whole state)	37 (54.41)
Any Hawai'i Island ^a	6 (8.82)
Any Kaua'i ^a	4 (5.88)
Any Lāna'i ^a	1 (1.47)
Any Maui ^a	11 (16.18)
Any Moloka'i ^a	9 (13.24)
Any O'ahu ^a	27 (39.71)
Document Type	
Journal articles, dissertations, or poster presentations	27 (39.71)
Reports	18 (26.47)
Certification curricula or flyers	9 (13.24)
Agendas and minutes	8 (11.7)
Strategic plan	3 (4.41)
Legislation	3 (4.41)
CHW Engagement	
Education and training programs	37 (54.41)
Interventions	18 (26.47)
Needs assessment	7 (10.29)
Other	6 (8.82)

^aFrequency of each island mentioned; for example one article mentioned Lāna'i, Hawai'i Island, and O'ahu.



opportunities, resource and information sharing, standardized training curricula, increased pay and reimbursement strategies, and CHW empowerment and support for their work.^{23,51} Training needs related to chronic disease management,^{23,52} including the management of diabetes,^{47,52,53} cardiovascular disease,⁴⁹ heart disease,⁵² and cancer,⁵² were frequently identified. Other topics of interest were learning about community resources^{22,46} for families, working with people experiencing homelessness, and financial aid.^{23,51} An unpublished survey found CHWs sought other additional skills, including crisis management, community building and leadership development, outreach strategies, policy and advocacy, self-care and boundary setting, team building, and working with underserved populations.²³ Barriers to educational programs or workforce development access included program

availability and location⁵⁴ and college entrance requirements, cost, and time limitations of busy CHWs.⁵⁵ Currently, workplaces have addressed some of these issues through in-house training programs;⁵⁴ however a study of professional development programs found these types of programs face a number of worker-, clinic-, and community-related barriers which will require system-level changes to overcome.²⁷

Funding barriers were consistently identified across documents. The staff at Federally-Qualified Health Centers (FQHCs) report previously wanting to hire more CHWs⁵¹ and that CHWs are an integral part of the workforce, but also that CHW positions are constructed from multiple grants and not necessarily reimbursed through other payment sources.⁵⁴ For example, insurers may contract with interpreters for physician appointments, but

interpreters may not be available during scheduled appointments, resulting in CHWs providing those services unreimbursed.⁵⁴ The lack of a career pathway was another barrier identified to advancing the field.⁵⁶ However, one study examining cancer navigators found as the level of navigator education increased, so did the cost of the navigator (ie, navigators who were nurses received higher pay),⁵⁷ suggesting increased education is a means to increased pay.

Documents discussed a number of opportunities, past and present. First, CHC-based CHWs and their employers agree with the APHA's definition of CHWs, and also agree that the C3 Project roles broadly reflect CHWs' scope of work.⁵¹ Support and opportunities from different sectors exist for statewide networking and for potentially starting a CHW association. For example, 6 statewide conferences of CHWs have been held since 2002 to provide networking and training for CHWs, along with encouragement to build a CHW professional association.^{23,58} Among CHWs, support exists to develop task forces or groups^{59,60} for planning around policymaking and legislation.⁵⁹ In addition to the training and certification opportunities mentioned above, FQHCs are in a unique position to provide on-the-job training for CHWs.^{27,54} Two documents reported that CHW-involved interventions yielded cost savings, including reduced hospital utilization among high utilizers for a savings of \$34,681-\$71,338 per navigator,⁶¹ and a 91% drop in emergency department use among pediatric asthma patients, with a savings of \$931 per patient.⁶² Lastly, policies related to CHWs were introduced into the Hawai'i State Legislature³⁹⁻⁴¹ which further demonstrates interest in this growing workforce.

Framework Analysis

For the framework analysis, we further limited the documents to those that directly discussed or evaluated CHWs' interventions or research work, in order to further understand the roles of CHWs in the workplace and analyze their roles vis-à-vis the C3 Project roles and 10 EPHS frameworks. This left 19 studies that specifically discussed the roles in these settings (Figure 1). Documents that discussed training programs, strategic planning, certification, or legislation were excluded from analysis. The included studies discussed chronic disease prevention and management, cancer navigation and screening interventions, a pediatric asthma management and control intervention, and lifestyle change interventions. Four studies⁶³⁻⁶⁶ discussed a single program, the Wai'anae Cancer Research Project, and were combined for analysis.

The C3 Project roles (Table 4) most frequently discussed were "cultural mediation among individuals, communities, and health and social systems," "providing culturally appropriate health education and information," "care coordination, case management, and systems navigation," and "providing coaching and support." Nearly all articles mentioned mediation

between patients or program participants and the health system, including providing assistance to patients overcoming systemic barriers to cancer treatment^{28,69,70} or screening,^{64,68} bridging between patients and clinics to improve treatment compliance,²⁴ navigating social systems,^{61,71} or improving a health system's interventions.⁷¹ Activities were also aligned with providing culturally-appropriate health education and information. For example, in the Wai'anae Cancer Research Project, lay health workers participated in the design of the study materials and implemented a culturally-appropriate intervention for Native Hawaiian women.⁶³⁻⁶⁶ Eleven articles mentioned care coordination, case management, systems navigation, and/or coaching and support. Case management and systems navigation were most prominent in articles regarding cancer services,^{28,63-66,68-71} and other articles mentioned case management as part of the duties of CHWs for other chronic disease interventions.^{24,54,62} Coaching and support were also prominent in cancer-related articles,^{28,63-66,69-71} although CHWs also served as lifestyle coaches for lifestyle-change programs.^{25,54} The C3 Project role that was cited least frequently was "implementing individual or community assessments." For example, doctors trained in cancer screening, rather than CHWs, would provide assessments.⁶⁸ However, CHW-implemented assessments included asthma risk assessments⁶² and community-level assessments in which data collection was conducted via focus groups⁴⁸ or computer-assisted telephone interviewing.⁶³⁻⁶⁶

CHWs perform many of the 10 EPHS services (Table 5). The most frequently performed services were "inform, educate, and empower," "link to or provide care," "assure a competent workforce," and "mobilize community partnerships." CHWs provided health education and promotion across all articles in a variety of chronic disease prevention or management contexts. These included diabetes prevention⁵⁴ and management;²⁴ hypertension management;^{54,67} lifestyle change programs;²⁵ cancer screening, navigation, and education;^{28,48,63-66,68,71} smoking cessation;⁷² emergency department diversion;⁶¹ and pediatric asthma management.⁶² Linkages to other services or provision of care was another key activity conducted by CHWs that was mentioned in all but 1 article. CHWs participated in some type of training program to deliver interventions or to participate in research projects,^{48,50,63,65} which we counted toward "assuring a competent workforce." Additionally, CHWs marshalled community resources to promote health improvement, such as building community-clinical linkages.^{50,54} The least frequently mentioned of the 10 EPHS was the role of CHWs in evaluation.^{69,73} Two of the 10 EPHS were not mentioned in any articles. One was policy development, which includes developing local health policy and state-level planning, and the other was enforcing laws, which includes education on health laws and regulations, and compliance support.²¹

Table 4. Community Health Worker Core Consensus (C3) Project Roles ³ Identified in Studies Included in the Framework Analysis											
Author(s) or Organization(s)	1 [†]	2 [†]	3 [†]	4 [†]	5 [†]	6 [†]	7 [†]	8 [†]	9 [†]	10 [†]	Total
Stupplebeen, et al, 2019 ⁵⁴	X	X	X	X	X	X	X		X	X	9
Braun, et al, 2015 ⁷⁰	X	X	X						X		4
Allison, et al, 2013 ⁷¹			X	X	X	X					4
Braun, et al, 2012 ²⁸	X	X	X	X	X				X		6
Aitaoto, et al, 2012 ⁷³	X	X	X	X		X	X		X	X	8
Fernandes, et al, 2012 ⁶⁷	X	X				X	X		X		5
Domingo, et al, 2011 ⁶⁹	X	X	X	X	X	X					6
Gellert, et al, 2010 ²⁵		X					X				2
Braun, et al, 2008 ⁵⁰	X	X									2
Santos, et al, 2008 ⁷²	X	X		X			X		X		5
Aitaoto, et al, 2007 ⁴⁸								X		X	2
Gellert, et al, 2006 ⁶⁸	X			X					X		3
Beckham S, et al, 2004 ⁶²	X		X	X		X	X	X	X	X	8
A Breast and Cervical Cancer Project in a Native Hawaiian Community: Wai'anae Cancer Research Project (Gotay, et al, 2000; Banner, et al, 1999; Matusnaga, et al, 1996; Banner, et al, 1995). ⁶³⁻⁶⁶	X	X	X	X	X		X	X	X	X	9
Humphry, et al, 1997 ²⁴	X	X	X	X		X	X				6
Cheng, et al, n.d. ⁶¹	X	X	X	X	X	X					6
Total	13	12	11	11	6	8	8	3	9	4	

[†]Key: 1. Cultural Mediation Among Individuals, Communities, and Health and Social Service Systems. 2. Providing Culturally Appropriate Health Education and Information. 3. Care Coordination, Case Management, and System navigation. 4. Providing Coaching and Social Support. 5. Advocating for Individuals and Communities. 6. Building Individual and Community Capacity. 7. Providing Direct Service. 8. Implementing Individual and Community Assessments. 9. Conducting Outreach. 10. Participating in Evaluation and Research.

Table 5. 10 Essential Public Health Services ²¹ Identified in Studies Included in the Framework Analysis											
Author(s) or Organization(s)	A [‡]	B [‡]	C [‡]	D [‡]	E [‡]	F [‡]	G [‡]	H [‡]	I [‡]	J [‡]	Total
Stupplebeen, et al, 2019 ⁵⁴	X		X	X			X	X			5
Braun, et al, 2015 ⁷⁰		X	X	X			X	X			5
Allison, et al, 2013 ⁷¹	X		X	X			X	X			5
Braun, et al, 2012 ²⁸			X	X			X	X			4
Aitaoto, et al, 2012 ⁷³		X	X	X			X	X	X	X	7
Fernandes, et al, 2012 ⁶⁷			X				X	X			3
Domingo, et al, 2011 ⁶⁹	X		X	X			X	X	X		6
Gellert, et al, 2010 ²⁵			X								1
Braun, et al, 2008 ⁵⁰			X	X			X	X		X	5
Santos, et al, 2008 ⁷²			X	X			X	X			4
Aitaoto, et al, 2007 ⁴⁸		X						X		X	3
Gellert, et al, 2006 ⁶⁸			X	X			X				3
Beckham S, et al, 2004 ⁶²	X	X	X				X	X		X	6
A Breast and Cervical Cancer Project in a Native Hawaiian Community: Wai'anae Cancer Research Project (Gotay, et al, 2000; Banner, et al, 1999; Matusnaga, et al, 1996; Banner, et al, 1995). ⁶³⁻⁶⁶	X		X	X			X	X		X	6
Humphry, et a., 1997 ²⁴	X	X	X	X			X	X			6
Cheng, et al, n.d. ⁶¹	X		X	X			X				4
Total	7	5	15	12	0	0	14	13	2	5	

[‡]Key: A – Monitor Health. B – Diagnose & Investigate. C – Inform, Educate, Empower. D – Mobilize Community Partnerships. E – Develop Policies. F – Enforce laws. G – Link to/Provide Care. H – Assure Competent Workforce. I – Evaluate. J – Research.

Discussion

This scoping review found CHWs (and workers functioning as CHWs) have been part of the Hawai'i health landscape for well over 20 years, during which time they have contributed to a number of health interventions with diverse populations. Additionally, formalized training and certification programs have been offered for at least the last 15 years, and a rich and diverse network of non-profit, academic, and government organizations has supported the growth of the CHW field. We identified several barriers and opportunities related to the field. In addition, we performed a framework analysis that examined CHWs roles in Hawai'i related to both public health and the workplace.

To overcome some barriers related to training, distance-learning tools such as Zoom have been used for single-subject trainings and within some certificate programs. Use of these tools, plus asynchronous course delivery, could further promote access to training for CHWs across the state including those in rural, remote communities. Because such efforts may feel less personal than in-person courses, engagement and peer support should be considered in these modalities. Eliminating college admission and financial aid barriers could help in increasing certification enrollment. Programs should also work to ensure that working adults who enroll are able to secure practicum locations that will support their work schedules.⁵⁴ Based on existing best practices, CHWs should be continuously involved in training development, facilitation, and support.⁷⁴

In looking at the C3 Project roles, the least frequently mentioned role was "implementing individual or community assessments"; however, researchers in a few articles mentioned CHWs as fulfilling this role.^{48,62,63-66} Thus, CHWs in Hawai'i may also be engaged in non-clinical roles in the areas of academic research and evaluation. Researchers may want to consider CHWs for positions on their teams. CHWs recently mentioned policy and advocacy as a training need.²³ CHWs in Hawai'i fulfilled many of the 10 EPHS services, although "law enforcement" and "policy development" were not found in this study. These roles may be filled by other types of employees, although CHWs have successfully participated in community-level advocacy to address policies related to the social determinants of health and promote health equity in other settings.^{75,76} CHWs could potentially serve as key informants for health in the community for policymakers.

Lastly, organizations working toward creating momentum for a statewide CHW association should support CHWs' development as leaders in organizing efforts, and provide support for trainings, networking, and reimbursement for CHWs. Lessons learned from other communities and states should be leveraged to build capacity; the new National Association of Community Health Workers can be a capacity building resource. Existing trainings for CHWs could be leveraged into online or distance training formats for greater reach. Building reimbursement infrastructure for CHWs, a multifaceted topic, will require participation of CHWs statewide including those working at non-profits, health centers, and state institutions.

Limitations

This study is not without limitations. We relied on submitted documents and those found via searches, and our reliance on written documents likely led to omission of projects with CHWs that lacked documentation. While written documents are resistant to memory decay,⁷⁷ documents may not contain information germane to the engagement of CHWs. Additionally, we did not receive documents from known CHW employers and no comprehensive list of CHWs or their employers exists, thus, a call for documents may not have reached all CHWs or their employers. Documentation may simply not exist, pointing to a need for further data collection and recording of activities related to the field. It is possible that some documents may have been withheld for unknown reasons. Short-term funding cycles may also hamper information gathering due to turnover and institutional memory loss. As a result, CHWs' contributions to health care in the state are likely underreported. One planned remedy to these issues is the development of a website to house knowledge of Hawai'i CHWs that can be continually updated. Other recommendations for research and data collection include conducting a statewide CHW assessment, collecting oral histories on the CHW movement in the state, and performing updated scoping reviews over time. Finally, documents analyzed could suffer from selection bias, as a large number of documents discussed training programs rather than CHW work in the field. We addressed this through the framework analysis.

Conclusion

This review collected and analyzed 68 documents related to the various contributions of CHWs to Hawaii's health care landscape. CHWs work largely mirrored the nationally recognized C3 Project roles and some of the 10 EPHS services. We have provided a snapshot of the landscape, not a complete picture. This project highlights the need for a comprehensive inventory of CHWs and CHW employers in Hawai'i, and the need for more documentation and research on CHW contributions to the health of Hawaii's communities.

Practical Implications

This article gathers and describes existing documents about community health workers in Hawai'i to show where they have been working, what work they have been doing, and needs of the workforce. We hope this article will expand and support the CHW field in Hawai'i in the future. The documents used in this review are cataloged on a publicly accessible website to assist CHWs and others in their work.

Conflict of Interest

The authors report no conflicts of interest.

Disclosure Statement

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