Strategies for Building a Dementia-Capable Workforce in Hawai'i

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Abstract

Health care workers with specialized knowledge and skills to work with people living with symptoms of dementia are needed in all sectors of the health care industry in Hawai'i as the number of people in the population diagnosed with Alzheimer's disease and related dementias (ADRD) is expected to increase along with the overall number of older adults (ages 65+). This article provides a scoping review of relevant population data that suggest an urgency to address this need even as the state contends with an overall shortage of workers throughout the public health and health care industry. The authors then provide practical solutions, recommending a multi-pronged approach to introduce or enhance dementia-care competencies at various levels of education – from high school to graduate or professional studies – and through continuing education and professional development programs for practicing health professionals. Consistent with the public health philosophy of health equity, the authors propose that providing quality care to persons living with dementia is a social justice goal that can be achieved through this multi-pronged approach.

Abbreviations and Acronyms

ADRD = Alzheimer's disease and related dementias
CDC = Centers for Disease Control and Prevention
BOLD = Building Our Largest Dementia Infrastructure
CNAs = Certified Nurse Assistants
HBI = Healthy Brain Initiative
UH = University of Hawai'i

Background and Introduction

The risk of developing Alzheimer's disease, vascular dementia, frontotemporal dementia, Lewy Body dementia, and other diseases that cause symptoms of dementia such as memory loss, difficulty communicating, and impaired judgment increases with age.[1] Hawai'i's older adult (ages 65+) population is increasing. Currently estimated to be just under 20% of the total state population, these numbers will continue to increase as the baby boom generation ages into older adulthood.[2] Population aging is expected to result in growing numbers of people living with dementia. The Alzheimer's Association projects that 35 000 people in Hawai'i will be living with Alzheimer's disease in 2025, a 21% increase from 2020.[3]

Because older adults use far more health services than younger age groups, and because older adults are at greater risk for developing symptoms of dementia, it is critical that the public health and health care workforce in Hawai'i be dementia-capable through a variety and continuum of dementia care educational opportunities both within formal educational structures as well as in community and paraprofessional settings.

This article provides a scoping review of relevant population data that suggest an urgency to address the need for a dementia-capable workforce even as the state contends with an overall shortage of workers throughout the public health and health care industry. The authors then provide practical solutions, recommending a multi-pronged approach to introduce or enhance dementia-care competencies at various levels of education – from high school to graduate or professional studies – and through continuing education and professional development programs for practicing health professionals.

Methods

The scoping review method was used to cast a wide net and capture a large number of resources (eg, peer reviewed scholarship, news reports, websites, etc) on preparing a dementia-capable workforce through existing curriculum modules developed by a range of different types of organizations with a particular focus on core competencies. Consistent with this method, the authors reviewed and synthesized their findings around relevant population data, trends, and practical solutions for developing a dementia-capable workforce in the state of Hawai'i.

Demographics Trends: United States and Hawai'i

Numerous demographic shifts are impacting the family structure and the availability of family to care for aging relatives. For example, the general fertility rate (GFR), which has been declining for decades in the United States (US), reached a record-low in 2023, at 54.4 births per 1000 females between the ages of 15-44.[4] The GFR in Hawai'i was 59.3 births per 1000 females between the ages of 15-44 in 2022 and has been in steady decline over the years.[5] For example, as a point of comparison, it was 69.2 births per 1000 females between the ages of 15-44 in 2005.[5] Moreover, recent US Census research has shown that a growing number of elders have no biological children. Childlessness is more prevalent among elders in the 55 to 64 age cohort than in the over 65 age category.[6] Adults ages 55-64 years will age into a period of time when care needs tend to increase. Also, life expectancy has been rising since the mid-1950s, although deaths due to the COVID-19 pandemic resulted in a life expectancy decline.[7] Hawai'i's life expectancy is the highest in the nation at 80.7 years in 2020.[8] This confluence

Table 1. Examples of Core Competencies in Dementia Care Organizations

Organization	The Georgia Alzheimer's and Related Dementias Collaborative, Workforce Development Committee.[10]	Illinois Department of Public Health.[11]	Agency for Integrated Care (Singapore). Dementia Care Competency Framework 2016.[12]
Core Competencies	Targeted toward educators and trainers of direct care workers: 1. Understanding Dementia 2. Person-Centered Care 3. Communication 4. Reduction of Preventable Hospitalization 5. Dining and Nutrition 6. Pain Management 7. Prevention and Reporting of Abuse 8. Empowering the Person and Enriching Their Life 9. Palliative and End-of-Life Care	Targeted toward anyone who works with or inter- acts with persons living with dementia, including their "care partners": 1. Knowledge of Dementia 2. Person-Centered Care 3. Communication 4. Understanding Behaviors 5. Safety 6. Palliative Care	Targeted toward health and social care workers in intermediate and long-term care: 1. Dementia Knowledge 2. Person-Centered Care 3. Care Interaction with Persons with Dementia 4. Behaviors of Concern 5. Enriching Lives 6. End-of-Life Dementia Care 7. Care for Self and Caregivers 8. Capability Building

of demographic factors will result in ever growing numbers of elders and their advocates seeking acute, long-term, and home-based care.

These demographic shifts will have repercussions for eldercare, since family caregivers have provided most of the long-term services and supports for elders who need assistance with their activities of daily living and instrumental activities of daily living.[9] In the absence of family caregivers, those services and supports will need to be provided by paid caregivers such as personal care aides and nursing assistants, placing an even greater burden on the health care workforce as hospitals, long-term care facilities, community-based residential care homes, homecare agencies, and other institutions compete for paraprofessional support. Taken together, these demographic shifts signal a critical need and urgency for a skilled dementia-capable workforce.

Dementia Care Education

Core Competencies

Ensuring an appropriate and effective dementia-capable workforce requires the development of core competencies as well as a standardized and widely available dementia curricula. Models of both already exist and can be expanded and culturally tailored for use in Hawai'i with its diverse population of paid and unpaid caregivers, care recipients, and interested community members.

Various organizations have identified what they consider to be core competencies for dementia care education. Examples in **Table 1** show 3 different types of organizations – 2 in the US and 1 in Singapore – that developed competencies targeted toward different learner cohorts. Their core competencies are similar to each other with some deviations shared to provide possible prototypes for dementia training curricula core competencies.

Key stakeholders in Hawai'i need to convene to develop core competency standards for Hawai'i that are culturally competent to meet the needs of our diverse communities. These standards would apply across different health care sectors, professions, and settings. A model, comprehensive curriculum that aligns with these standards will lead to a more dementia-capable workforce. Hawai'i can build upon existing dementia curriculum from trusted sources.

Dementia Care Education: Model Curriculum

An excellent example of a "ready-made" curriculum is a joint production of the Alzheimer's Association, Centers for Disease Control and Prevention (CDC), and Emory University Rollins School of Public Health called "A Public Health Approach to Alzheimer's Disease and Other Dementias."[13] It is intended to increase awareness of the impact of Alzheimer's disease and related dementias (ADRD), a term that encompasses neurological disorders that result in symptoms of dementia, as well as the role of public health. This curriculum addresses cognitive health, cognitive impairment, and ADRD and is for use by undergraduate faculty in schools and programs of public health. The curriculum has 4 modules that are designed to be used individually or as a whole. Additional support for teachers and trainers includes a faculty guide, list of learning objectives, competencies, discussion questions, learning activities, slide guide with talking points, sample test questions, case studies, video resources, references, PowerPoint slides, novel approaches for implementing the curriculum. The descriptions of each module in **Table 2** are taken directly from the curriculum's outline as made freely available on the CDC's website.[13]

This curriculum is an example of a widely available and reputable dementia curriculum. Any dementia education curriculum, regardless of the learning community, should include appropriate evaluation activities that attempt to measure not only changes in competency level, and also solicit honest feedback from learners about curriculum content, organization, and delivery with the goal of improving the training and education programs through an assess-

Table 2. Sample Dementia Care Curriculum: A Public Health Approach to Alzheimer's Disease and Other Dementias[13]

Module 1	**"Alzheimer's Disease – A Public Health Crisis"** frames Alzheimer's disease and dementia as a public health epidemic with a large and rapidly growing burden that has a significant impact on the nation. Alzheimer's disease is felt at a national, state, and local level through financial burdens, resource needs, and profes- sional requirements.
Module 2	**"Alzheimer's and Other Dementias – The Basics"** provides background information on Alzheimer's disease and other dementias. It lays a foundation for what cognitive health is and how changes within the brain may lead to cognitive aging, cognitive impairment, and Alzheimer's disease and other dementias. The module then shifts to focus more specifically on Alzheimer's disease. Learners gain a general understanding about the stages of Alzheimer's disease, risk factors, and how the disease is diagnosed and treated. The module also addresses unique aspects of Alzheimer's disease (including financial hardship, stigma, and vulnerability to abuse) and the role of caregivers and caregiving impacts.
Module 3	**"What is the Role of Public Health?"** briefly describes the Alzheimer's disease epidemic in the US, followed by a discussion of 4 tools of public health that may play significant roles in mitigating the Alzheimer's disease crisis. These 4 public health intervention tools include: (1) surveillance/monitoring; (2) primary preven- tion; (3) early detection and diagnosis; and (4) ensuring safety and quality of care. Each tool is described and applied to the context of a public health response to Alzheimer's disease and dementia. Progress to date and challenges associated with each tool are addressed.
Module 4	**"Dementia Capable Systems and Dementia Friendly Communities"** addresses the public health response to the Alzheimer's disease epidemic at the state and community levels. The module describes the concepts of "dementia-capable" systems and dementia friendly communities, both of which involve accommodat- ing the needs of a population with memory loss, and a variety of related physical, cognitive, and behavior symptoms, as well as other co-morbidities. Module 4 explores how public health may support the development of such systems at the state and local levels through support services and programs, workforce training, and the creation of dementia friendly communities.

ment of learners' performance and insights. More evaluation data are needed to better understand the outcomes from currently available dementia education programs. It is possible that these evaluations exist but have not been made publicly available at this time.

The sample curriculum also illustrates the need for dementia curriculum that strengthens the public health workforce. There are multiple targets for dementia education, not only those who provide direct care but the public health workforce as well, in order to create a dementia-capable state.

Interventions and Recommendations: A Multi-Pronged Approach

A multi-pronged approach to delivering this education is needed to reach the diverse audiences. This approach should be ethcally grounded. A common principle in the code of ethics of all health care professionals is the commitment to competent care and adherence to the standards of professionalism, compassion, and patient rights. Considered through a social justice lens, people living with dementia may not be as able to fully advocate on their own behalf due to the nature of their cognitive impairments. They deserve to be treated by competent health care providers who understand at least the basics of their disease and – minimally – engage in interactions that demonstrate effective interpersonal communication, cultural awareness, and evidenced-based best practices whenever possible.

The development of a dementia-capable health care workforce in Hawai'i is a public health goal consistent with the philosophy of health equity that requires a multi-pronged approach across health sectors.

First, there is no "one-size-fits-all" solution and no single curriculum that can be used for all learners in the health field. Second, the ambitious goal of achieving a dementia-capable workforce across all the health sectors is one that has to be undertaken incrementally to be realistic. For example, an initial goal can be to start with 1 or 2 definable categories of potential learners such as care home operators and gerontological social work students. Third, buy-in from leadership in constituent organizations is essential. In certain cases, changes to an organization's existing curriculum need to be approved by multiple people in the management structure. Fourth, varying degrees of intensity and complexity of instruction should be built into a "master curriculum" – ie, a vast and organized collection of teaching and learning resources made readily available for incorporation into a class, seminar, or workshop. And fifth this master curriculum along with supplemental resources such as sample lesson plans, blank lesson plans, discussion topics, question bank for composing tests and quizzes, readings, websites, video resources, and so forth should be housed, supported, and maintained by a leading organization in gerontological education and elder advocacy.

Because different learning communities have different training needs, there is no recommendation to develop a standardized curriculum across the board. Instead, core competencies can be developed for Hawai'i learners based on learning modules already in use outside of Hawai'i and customized to reflect Hawai'i's particular social and cultural milieu. For example, cultural informants across ethnic communities in Hawai'i can contribute insights about family dynamics, trusted community resources, and effective communication practices relevant to specific ethnic groups (or sub-categories such as generational cohorts within ethnic groups). In the interest of achieving health equity, underserved populations with high dementia burden (includ-

ing those at risk of developing dementia due to high rates of certain chronic diseases) should be reached with culturally and linguistically informed programs and services aimed both at prevention and intervention. Dementia care education in Hawai‘i should blend broadly accepted core competencies derived from national or international dementia care curricula with culturally tailored content as appropriate and delivered through 3 models (Infusion, Professional Continuing Education, and Community Education) of dementia-care education (**Table 3**).

Workforce Development Initiatives in Hawai‘i

Hawai‘i has a window of opportunity to implement dementia education models to strengthen the dementia capability of our workforce. The CDC's Healthy Brain Initiative (HBI) seeks to improve understanding of brain health as a central part of public health practice. The initiative creates and supports partnerships, collects and reports data, increases awareness of brain health, supports populations with a high burden of ADRD. The HBI's Road Map series provides actionable steps to promote brain health, address cognitive impairment, and address the needs of caregivers. In addition, the HBI supports the development of a dementia-capable workforce.[18] With funding from the CDC to align with the HBI, Hawai‘i's Building Our Largest Dementia Infrastructure (BOLD) initiative engaged in a 2-year planning process to produce "Hawai‘i 2035: State Strategic Plan on Alzheimer's Disease and Related Dementias", which includes strategies for building a dementia-capable workforce in Hawai‘i (**Table 4**).

Led by the state Executive Office on Aging, the Hawai‘i BOLD initiative has built a strong network of organizations and educational institutions that can be mobilized to develop and implement dementia care education. Many organizations are resources for dementia-care education in Hawai‘i and can be integrated into this initiative including the Alzheimer's Association, American Association of Retired Persons (AARP), John A. Burns School of Medicine's Department of Geriatric Medicine, UH Center on Aging, UH West O‘ahu's Health Sciences and Long-Term Care programs, the various community college programs that offer health care career training (eg, Kapiolani Community College's CNA and Community Health Worker programs), St. Francis Healthcare System of Hawai‘i (which offers community education classes), and others. With its 5-year grant from the CDC to implement the State Strategic Plan, Hawai‘i can take tangible steps toward creating a dementia-capable workforce.

There are parallel efforts among various key stakeholders in Hawai‘i to improve and sustain the recruitment, retention, and placement of direct care workers, including a long-term care task force convened by Hawai‘i state Senator Sharon Y. Moriwaki; the study and reporting of Hawai‘i's direct care workforce needs with possible policy solutions proposed by the UH Center on Aging and the state's Executive Office on Aging; the continuing training and education efforts by the John A. Burns School of Medicine's Geriatrics Workforce Enhancement Program; and other health care-related workgroups. The task ahead is for these groups to work in collaboration and concert to meaningfully develop our workforce and strengthen the long-term care system.

Discussion and Conclusion

The multi-pronged approach to dementia care education addresses training needs in both formal educational settings as well as in community-based and paraprofessional settings. It would be particularly valuable for those on the front lines caring for persons living with dementia such as direct care workers in home care as well as acute and long-term care establishments.

The challenge of developing a dementia-capable workforce is part of a larger national challenge to build a sufficient and high-quality geriatric workforce at all levels from direct care workers to geriatric physicians.[19,20] This challenge is not new, but the urgency for a dementia-capable workforce is more pronounced given demographic shifts in the population. The American Public Health Association (APHA) is at the forefront of dementia-capable workforce advocacy as dementia care is increasingly framed as a public health concern.[21] The topic is gaining traction as major national organizations such as AARP, the Milken Institute, and the American Geriatrics Society focus critical attention on the problem.[22-24]

Direct care workforce challenges include low wages; inconsistent, often part-time hours; lack of fringe benefits (eg, paid sick leave); lack of affordable health care and vehicles for retirement savings; outdated, insufficient, poorly enforced training; risks and stress of COVID-19; disrespect and isolation; sexism, racism and xenophobia; workforce shortages; high turnover; underprepared workers; disconnection from health care and social service delivery systems; little capacity to exert organized political influence; and lack of portability of existing certifications across care settings.[25] These challenges may not affect every community in the same way, but are factors that should be recognized and addressed in developing policy solutions and public health strategic communication campaigns. Competition from other industries such as tourism and retail for employees is also a major factor. Those engaged in the recruitment, retention, and placement of direct care workers should emphasize the non-tangible rewards to be gained from highly personal dementia-capable direct care, a practice in which professional competence and altruism intersect.

Workforce shortages at acute care and long-term care facilities have been well-publicized in Hawai‘i.[26,27] The situation may be particularly pronounced on the island of Hawai‘i since Hawai‘i County has the highest percentage of older adults of all 4 counties in the state, and health care positions tend to be harder to fill on neighbor islands.[28] Initiatives such as the Geriatrics Workforce Enhancement Program targeted its training efforts on all Hawai‘i islands as well as the US Affiliated Pacific Islands.[29]

Table 3. Three Models to Deliver Dementia Care Education

	Infusion	Professional Continuing Education	Community Education
Description	Infusion of dementia curricula in existing post-secondary community college, undergraduate, graduate, and professional degree levels, adjusted accordingly to fit the needs and abilities of the learners. Dementia content can also be delivered to high school students interested in healthcare careers.	Professional continuing education in dementia care provided to working professionals and paraprofessionals who are already working with older adults.	Education provided to anyone in the community who is interested in dementia education. The purpose of the open community education model is not for formal training or credentialing but for the pursuit of knowledge, information, and assistance in a more informal and casual setting.
Current Context	This approach can be modeled after an Advanced Gero Social Work Practice Guide[14] developed by the Council on Social Work Education and the John A. Hartford Geriatric Social Work Initiative. A comprehensive curriculum on gerontological education was offered to social work programs across the nation for "infusion" into existing social work courses to use in conceptualizing specialized practice in aging and infusing aging within their curricula.	Most, if not all, of the allied healthcare professions have a requirement for enhanced or updated learning for working professionals and paraprofessionals in their respective fields of practice as a condition of relicensing. This learning may revolve around knowledge, skills, values, ethics, professionalism, advocacy, and so forth. Licensed social workers, for example, must complete 45 credit hours of continuing education (CE) prior to every triennial renewal, provided 3 of those credits are in ethics.[15]	Community education and training provided by organizations such as the Alzheimer's Association Aloha Chapter and the Geriatrics Workforce Enhancement Grant target broad sectors in the community to reduce stigma and raise awareness on dementia.
Opportunities for Workforce Development	A dementia education master curriculum could be geared toward post-secondary students at the community college, undergraduate, graduate, and professional degree levels, and adjusted accordingly to fit the needs and abilities of the learners. The content in the dementia master curriculum could also be used for high school students interested in health care careers, such as students in health pathway-type programs in high schools. Application in non-credit courses that could result in a certificate of completion or a dementia-capable micro-credential such as "digital badges" that could be displayed on a person's website, signature line in an e-mail, or social media presence.	Because of CE requirements for relicensing, dementia-care education should be a widely publicized and available option to fulfill those requirements since an incentive is already present to seek out these classes. Additional resources for further learning about dementia can be included in the courses for self-study after the course is completed. Well-trained educators and CE courses revolving around various aspects of dementia care need to be available for this model to succeed, and gerontological organizations can support this effort. In most cases, courses will need to be approved by a professional organization for appropriate, relevant content and to verify the credentials of the teacher. CE can also be offered to care home operators as evidence of their good standing with vari-ous oversight organizations and agencies.	Dementia training would include seminars, workshops, and presentations that target different sectors of the community that could potentially interact with persons with dementia in the community. These could include banks, law enforcement agencies, recreational businesses, postal employees, libraries, restaurants, veterans organizations, and caregiver support groups
Current Programs in Hawai'i	Kapi'olani Community College students in the Community Health Worker program receive instruction on dementia basics. Students in select high school health academies have received dementia education as part of a larger eldercare curriculum through a local initiative called Punahele Pathways, in collaboration with the UH Center on Aging.	John A. Burns School of Medicine, Geriatrics Workforce Enhancement Program has provided training on Alzheimer's Disease and related dementias to health care professionals and paraprofessionals statewide. Federal Administration for Community Living grants were awarded to the University of Hawai'i Center on Aging, the Executive Office on Aging, and Catholic Charities with common goal of providing professional and paraprofessional training statewide on a range of dementia-related topics.[16] The digital video recordings from these online presentations can be incorporated into classroom or CE learning modules where appropriate.	Dementia Friends Hawai'i is part of a national and global movement to help people better understand what dementia is, and then turn that understanding into action. Dementia Friends Hawai'i "champions" lead live, interactive sessions with community members of all ages to enlist their help in creating dementia-friendly communities in Hawai'i. The Hawai'i Alzheimer's Disease Initiative website features dementia-related cultural resources in Marshallese, Pohnpeian, Samoan, and Tagalog.[17]

Solutions to the general health care staffing shortage in Hawai'i are complex, multifaceted, and an area of active policy activity. These involve increased funding from federal and state governments for capital improvements, expansion of services, and innovative recruitment and retention strategies addressing the state's high cost of living. Other solutions include the initiation or continuation of rural health training programs, more attractive medical reimbursement rates, and favorable tax incentives for health care providers, scholarships for students interested in pursuing careers in health care, student loan forgiveness in the health care fields, career-track enhancement programs, and more. A lack of certified nurse assistants (CNAs), for example, has motivated some health care facilities to train employees on the job rather than try to recruit nurse assistants who are already trained. Scholarships for CNA stu-

Table 4. Strategies for Building a Dementia-Capable Workforce in Hawai‘i

Education • Develop, maintain, and publicize a master dementia-related curriculum to use as a comprehensive resource for educators and trainers in age-related subject areas. • Help to publicize continuing or enhanced educational and training opportunities. • Do outreach and support to high school students considering careers in healthcare. • Help publicize financial aid incentives.
Public Awareness and Education • Engage in public messaging on recruitment and retention of a direct care workforce. • Promote and participate in community engagement efforts and public service messaging in both traditional and social media, and explore other innovative pathways of public communication. • Frame chronic illness and cognitive decline, including Alzheimer's disease and related dementias, as a public health issue that impacts most, if not all, healthcare specializations that treat chronic diseases. • Discuss an ethical decision-making framework for those who work with people living with dementia. • Maintain and update a directory of dementia-related specialists in Hawai‘i.
Policies and Programs • Monitor developments in the dementia-capable workforce public policy and healthcare/social services arena. • Study and promote innovative models of worker compensation. • Strengthen collaborations among key age-related organizational and networking centers. • Identify, deliberate, and disseminate solutions for paying for dementia care services and supports. • Consider recommending a government-supported recruitment of dementia-capable workers from outside Hawai‘i.

dents have also been awarded at various training sites. One innovative example is the CNA to Licensed Practical Nurse (LPN) Bridge Program – a partnership between Maui's Hale Makua Health Services and UH Maui College. The program helps working CNAs at Hale Makua and other Ohana Pacific Health facilities transition to licensed practical nurses, increasing the number of LPNs annually.[30]

Funding dementia care and the building of a dementia-capable workforce is a challenge that must likewise be approached from multiple angles involving both public and private funding sources and new and existing programs. During the 2023 legislative session, bills were introduced at the Hawai‘i State Legislature to raise public awareness about dementia and to support dedicated staffing to coordinate ADRD services, as well as to fund health care workforce development initiatives. Guided by the aforementioned state strategic plan on ADRD with both federal and state support, the state's Executive Office on Aging and its ADRD Services Coordinator, hired in 2023, can serve as a hub for information, networking, and coordination, using its networking capacity and dedicated website to connect key stakeholders and other interested members with a broad array of resources as well as strengthening community-clinical linkages that enhance public health in general and brain health in particular.[31,32] With key stakeholders networked and working together, and in the spirit of promoting public health equitably for all Hawai‘i residents, it is hoped that the state's population can collectively and effectively address the complex and progressive impacts of dementia at all levels of society and implement thoughtful, culturally aware, and effective solutions.

Conflict of Interest

None of the authors identify a conflict of interest.

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