

## CALIFORNIA DEPARTMENT OF AGING | California GROWS

Promising Practices Scan | August 9, 2022

### 1. INTRODUCTION

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This report synthesizes the literature scan we conducted of peer-reviewed studies, published reports, case studies, and profiles of initiatives mainly in the United States that demonstrate common and promising practices in designing and delivering effective direct care workforce (DCW) training programs. Effective DCW training programs are defined as positively influencing at least one of the three areas: **workforce retention, job satisfaction, and beneficiary (i.e., client, consumer, etc.) outcomes**. The findings of the literature scan will inform the design and delivery of the California Department of Aging's (CDA) direct care workforce training and stipends initiative: **Growing a Resilient and Outstanding Workforce in the Home and Community (California GROWS)**.

The promising practices we identified derive from the following elements:

- **Stakeholder partnerships**
- **Career ladders and lattices**
- **Core competencies**
- **Flexible training design**
- **Intentional training design**
- **Program evaluations**
- **Sustainability**

There are growing and competing demands for direct care workers, juxtaposed with a direct care industry that offers low wages, few benefits, and stressful working conditions for predominantly female workers. Direct care worker retention is low and training to help workers better serve clients and advance their skills is limited, informal, and fragmented.

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#### KEY TERMS & CONCEPTS

**Direct care workers** provide daily task and activity support and assistance to older adults and people with disabilities in various settings, including private homes, residential settings, and skilled nursing homes.

This workforce generally consists of three occupational categories, **personal care aides (PCAs), home health aides (HHAs), and nursing assistants**, and are commonly referred to by various job titles and classifications.

**Career pathway** initiatives are integrated groupings of programs and services intended to develop workers' academic, technical, and employability skills through continuous education, training, and guidance. Pathways initiatives include partnerships between schools, workforce and economic development agencies, employers, labor groups, and social service providers.

Few workers and employers see direct care jobs as contributing to potential career pathways within the human services and health care fields.

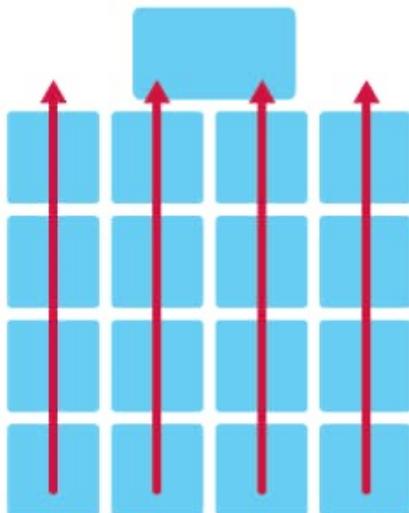
The following provides insights into how the design, implementation, and evaluation of DCW training programs can contribute to better outcomes for direct care workers, their care recipients, and the public and private systems where direct care occurs. We organized the report into **design components of DCW training programs**. The appendices provide case-specific information about the design and outcomes of the workforce training and stipends programs reviewed in this report.

## 2. CAREER PATHWAYS

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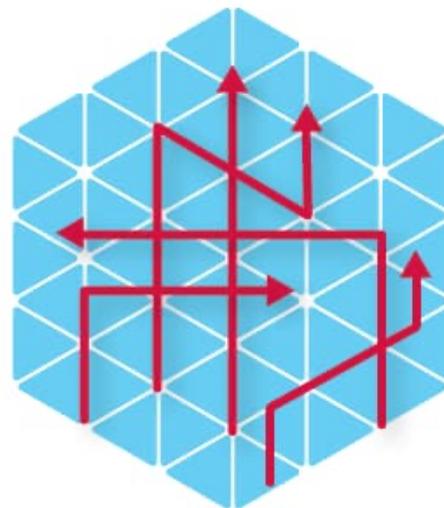
**Designing a successful direct care workforce training program should ensure that training is meaningful to the workers and valued by the system.** Recognizing that a direct care job is not a dead-end, but a doorway into a variety of personal and professional advancement opportunities is a responsibility of the public and private institutions regulating and operating within and across health care, long-term care, long-term services and supports, and home-and community-based services systems.

**Career Ladder Pathways**



- Hierarchical structure
- Work is a place you go to
- Separation of career and life
- Linear, vertical career paths
- Individual contributor driven
- Tasks define the job
- Many workers are similar

**Career Lattice Pathways**



- Flatter, matrixed structure
- Work is what you do
- Integration of career and life
- Multi-directional career paths
- Team- and community-driven
- Competencies define the job
- Many workers are different

Image Source: *The Corporate Lattice* (Benko, Anderson, and Vickberg, 2011).

Direct care jobs paid an average hourly rate of \$13.51 or an annual salary of \$20,200 – lower than many entry-level jobs (Drake, 2022). Low wages, combined with a lack of career advancement opportunities, are fueling workers' lack of meaning in their roles and contribute to a higher rate of leaving the direct care workforce (PHI, 2021b). Low morale and high turnover contribute to poor quality of care and increased costs of workforce recruitment and training (Larivee et al., 2018). In response to the numerous structural and systemic challenges facing the direct care workforce, many states have developed career pathways programs, which rely on competencies and credentials that help workers advance their direct care practice and career trajectories within the same or similar industries.

**An organization or system of organizations can establish career pathways that follow a linear logic (a ladder) and non-linear logic (a lattice) of professional advancement.** Designing a pathways program includes various components to create, visualize, and operationalize an ecosystem that direct care workers can utilize – and trust – to advance into and across job roles, classifications, growth opportunities, and employers. Many approaches to designing and developing workforce career pathways involve the standardized definition of roles, responsibilities, and affiliated compensation. The required skills, competencies, and knowledge to fulfill those roles and responsibilities are then defined, followed by the design and delivery of training and certification programs that are needed to build, strengthen, and expand those competencies and credentials to operationalize a career pathways ladder or lattice (SHRM, 2022).

**An essential component of effective career pathways is the portability and stackability of credentials and competencies.** Portability allows workers to account for and transfer their competency and credentials to obtain jobs across employers, programs, and settings. Stackability enables workers to build on their present credentials, competencies, and skills to qualify for vertical, lateral, and diagonal career roles with overlapping responsibilities. For example, moving from a personal care aide to a certified nursing aide or preparing for more well-paid direct-service professions or a higher-level position such as moving from certified nursing aide to an occupational therapist. **Because of the scope of**

#### KEY TERMS & CONCEPTS

**Career ladders** represent a traditional vertical progression from entry-level positions to higher levels of pay, skill, responsibility, or authority. Because the career ladder does not indicate lateral movement, it represents a narrow track within an organization or industry than a career lattice.

**Career lattices** represent the vertical, horizontal, and diagonal career progressions available to a worker. Lattices represent a diversity of opportunities and flexibilities to switch job roles and learn new competencies and skills that suit a person's particular skills, needs, and ambitions.

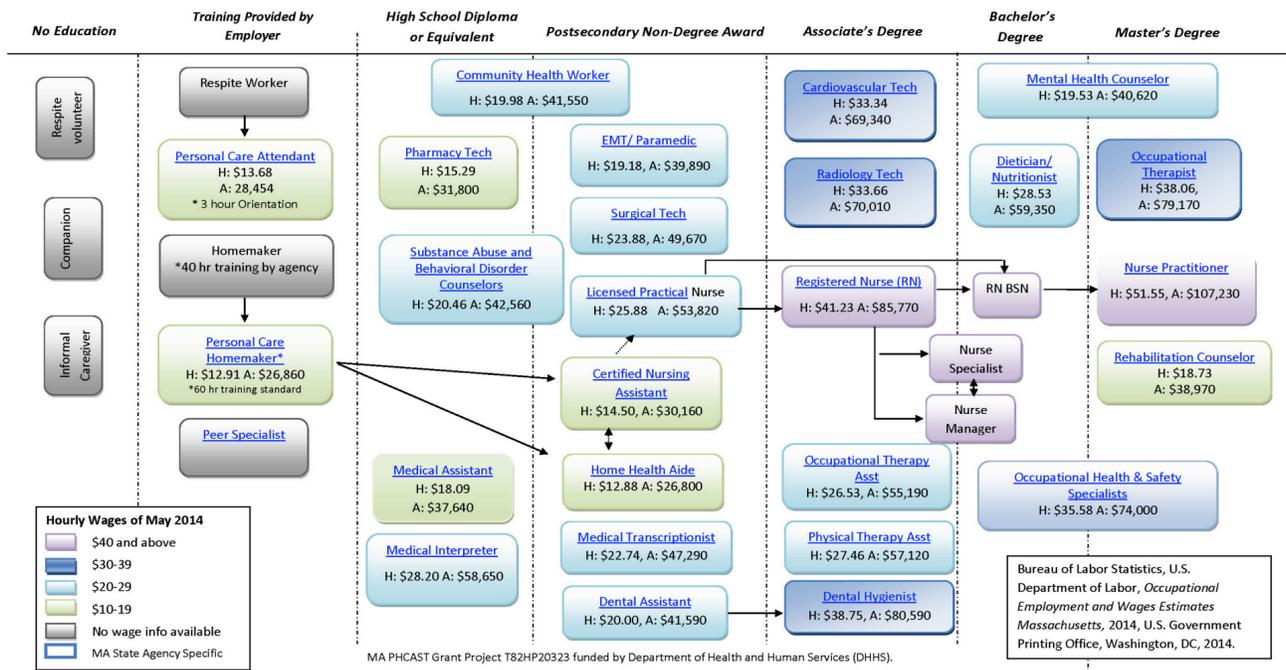
**Portability** is the degree to which training experience and credentials can be applied toward qualification and employment in the same role in another care setting or geographic region. Portability is important because it enables learners to use learning in more than one setting, such as through different employers.

**Stackability** is the degree to which training experience and credentials can be applied toward training, qualification, and employment in a different or higher-level role. It is important to career pathways and lattices because it ensures credentials can go towards qualifying for higher-level positions.

**creating viable career pathways, efforts to build them are often driven by a state-level entity.**

Several states have incorporated stackable competencies and certifications into their direct care workforce development programs, including **Alaska, Arkansas, Maine, Massachusetts, and New York**. These programs allow certification as a personal care aide to be applied toward training for home health aides or certified nursing assistants; some require that certification as a nursing aide must start within a specific time frame (e.g., two years) after receiving a personal care aide certification. Regarding portability, many states allow moving qualifications and credentials between employers within the state. States like **Iowa, Massachusetts, and Tennessee** have established and formalized pathways combining portability and stackability.

**Iowa** has developed portable and stackable direct care career pathways under its **Prepare to Care** program, with standard credentials valid throughout the state. The program allows direct care workers to enter the workforce with only 6 hours of training to become what the state has designated as *Direct Care Associates*. Iowa’s program includes state-provided and accredited training that can be mixed and matched to earn the following certifications above the *Direct Care Associate* level: *Community Living Professional, Personal Support Professional, and Health Support Professional* (see **Appendix A** for all the competencies identified in the training programs reviewed for this report).

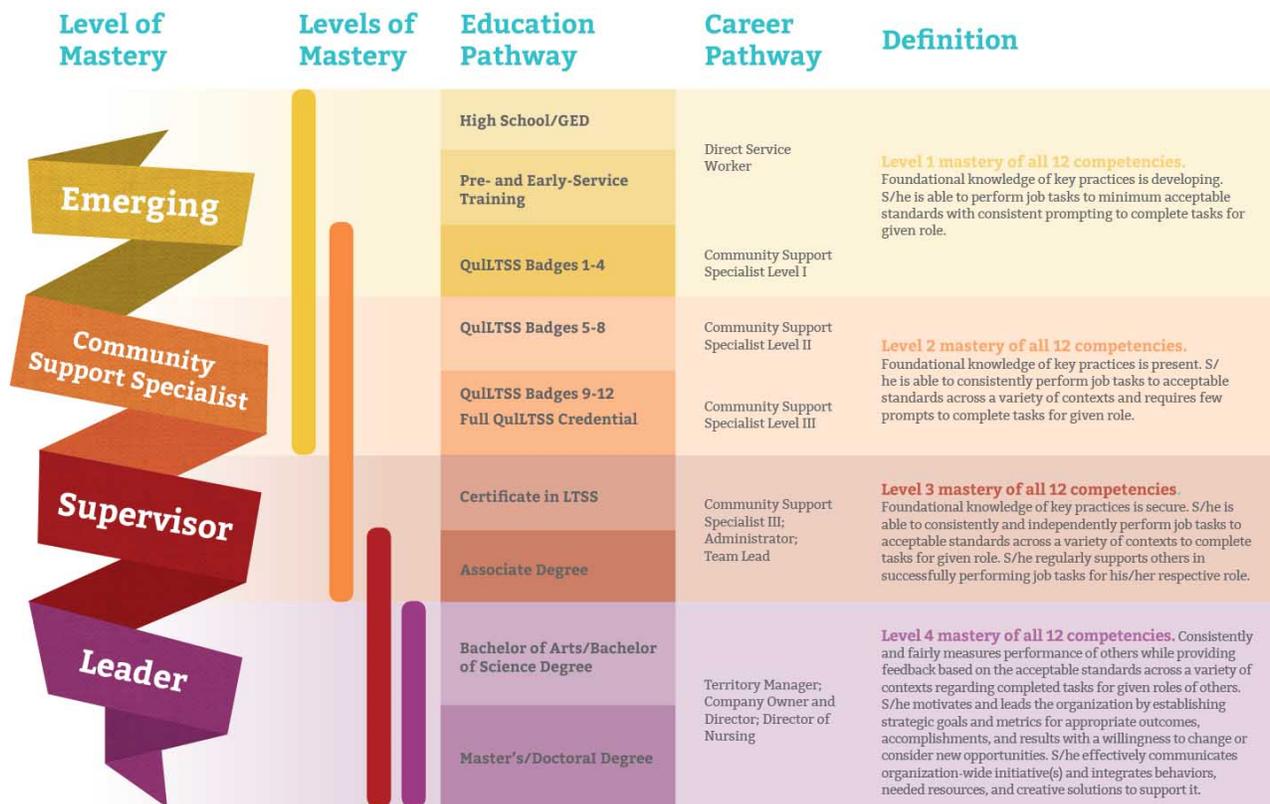


*Massachusetts' Direct Care Worker Career Lattice with Wages and Education Requirements*

**Massachusetts** developed a healthcare workforce career pathways program utilizing lattices that begins with minimum qualifications for the direct care workforce, including home health aides and resident care aides, personal care aides, orderlies, and physical therapist aides. It branches into **two career pathways: Nursing and Therapeutic Services**. The Nursing pathway ends in the positions of

physician’s assistants, nurse anesthetists, nurse practitioners, and nurse instructors. The Therapeutic Services pathway ends in the positions of occupational and physical therapists. Pathways include the required educational qualifications and the expected hourly rate and annual salary of each role and position identified.

Tennessee’s Medicaid agency, TennCare, created a public-private career pathways program fueled by a new learning center, the **Quality Improvement in Long Term Services and Supports (QuILTSS) Institute**, designed to promote “consistency, portability, and stackability” across the “Direct Service Worker” and affiliated LTSS occupations. The training is portable across direct care professions statewide, and workers can qualify for college credits. Requirements are also stackable in terms of leadership and management opportunities and qualifications. Participating direct care workers complete up to 12 courses within an LTSS certificate pathway and can utilize the credentials to qualify for higher-level job categories defined by the state. The LTSS certificate is worth up to 18 college credits, providing a pathway that encourages some workers to earn a bachelor’s degree. The pathway, which resembles more of a ladder within the LTSS field than a lattice spanning multiple fields, is demonstrated visually below:



Tennessee’s Career & Education Pathway via the QuILTSS Institute, 2022.

Tennessee’s program is comprehensive in its approach to creating a clear pathways system that demonstrates to workers what advancement looks like and how it can be achieved. With one glance at

the QUILTSS pathways diagram, an entry-level “Direct Service Worker” can understand what it would take to advance into a higher-paid professional in the field.

### 3. COMPETENCIES, CURRICULA, and CREDENTIALING

#### Competencies

**Most workforce training curricula are designed based on the needed and desired competencies and credentials of the target workforce.** This requires the identification of common and specialized competencies needed in the target workforce roles in a field. Our review of workforce training programs and initiatives revealed four common competency categories with common focus areas and competencies that have been used to design training and curricula (see **Appendix A** for all the competencies identified in the training programs we reviewed for this report):

<p><b>Physical Aspects of the Job</b></p> <ul style="list-style-type: none"> <li>• Activities of daily living</li> <li>• Body mechanics</li> <li>• Emergency response (falls, incidents, fires)</li> <li>• Food, nutrition, and meal preparation</li> <li>• Housekeeping</li> <li>• Infection control and cleanliness</li> <li>• Physical safety and accident/injury prevention</li> <li>• Rehabilitation and restorative care</li> </ul>	<p><b>Emotional Aspects of the Job</b></p> <ul style="list-style-type: none"> <li>• Cultural competency</li> <li>• End-of-life care, grief</li> <li>• Managing stress</li> <li>• Respecting differences</li> <li>• Self-care</li> <li>• Strengths- and solutions-focused practices</li> <li>• Team building</li> </ul>
<p><b>Complexity of Population Served</b></p> <ul style="list-style-type: none"> <li>• Abuse and neglect</li> <li>• Crisis prevention &amp; intervention</li> <li>• Person-centered practices</li> <li>• Understanding aging</li> <li>• Understanding developmental disabilities</li> <li>• Understanding physical disabilities</li> <li>• Understanding dementia and Alzheimer’s</li> </ul>	<p><b>Workplace Readiness &amp; Professional Growth</b></p> <ul style="list-style-type: none"> <li>• Behaving professionally &amp; ethically</li> <li>• Communication skills</li> <li>• Documentation, delegation, and reporting</li> <li>• Legal and ethical issues</li> <li>• Principles of teaching &amp; learning</li> <li>• Problem-solving</li> <li>• Role of the direct care worker</li> <li>• Team building</li> </ul>

**Training program curricula design and development should be informed by and with stakeholders.** For state programs, a multistakeholder committee representing state agencies, higher education institutions, direct care workers, employer agencies, and non-profit organizations is usually convened by state agencies (LeadingAge, 2020). Under this process, the multistakeholder committee develops competencies based on internal consensus after soliciting feedback from community members through listening sessions, written surveys, key informant interviews, and focus groups.

In some cases, state governments and multistakeholder committees adopt and adapt existing competencies developed by national trade and advocacy institutions, such as PHI and the Center for

Medicare & Medicaid Services, to inform curriculum development. For example, in the **PHCAST** project, the federal government asked states to utilize PHI's Competencies for Direct Care Workers (See "PHI Competencies for Direct Care Workers" in the Appendices) as the basis for curriculum development (HRSA, 2015).

### **Curricula**

**Once competencies and skills have been defined for a training program or initiative, the curricula to develop those skills can be designed.** After the competency development process, states contract project teams or utilize the previously mentioned stakeholder committees to establish the training curricula. These teams and committees, steeped in the field, leverage their collective experience to develop curricula. In **Iowa**, the state assigned workgroups consisting of direct care professionals, educators, employers, and associations, to design and draft curricula. In **Alaska**, a four-member project team created the curriculum by building an instructional PowerPoint slide for each competency in their program (See "Alaska Core Competencies for Direct Care Workers in Health and Human Services" in the Appendices for more information). They annotated each slide with notes that guide the trainer, including prompts for interactive group discussions or exercises, schedules for organizing the content into training sessions, content summaries and sample handouts, a self-assessment tool for workers to rate their skills and learning, and guidance on adapting the curriculum to specific settings or jobs. In **Maine**, the state partnered with the University of Southern Maine to develop the curriculum.

After the curriculum is developed, it is reviewed by external stakeholders or piloted to test its relevance to the needs, interests, and responsibilities of direct care workers in each state. In **Iowa**, a committee of six direct care workers and a separate group of employers and consumers reviewed the initial draft curriculum and provided feedback for the final program. **Arizona** piloted its curriculum with direct care workers, of which 95% validated the training as satisfactory.

**Direct care worker training curricula should match the breadth, depth, and complexities of workers' professional roles, responsibilities, and lived experiences.** Where it does exist, direct care training curricula can vary from short, simple, and limited to robust and multi-faceted. The design quality and scope of training programs directly influence worker satisfaction and wellbeing, work quality, and care recipient experience and health outcomes (Reckrey et al., 2019). Unfortunately, there is a noticeable gap between training curricula and the field experiences and responsibilities of direct care workers. For example, a survey of paid caregivers who completed the **New York** home care training reported receiving little to no training around monitoring chronic health conditions, tracking health needs and appointments, and combatting client depression and anxiety (Reckrey et al., 2019). Many training programs provide inadequate attention to the physical demands, social and emotional difficulties, and complex care conditions direct care workers are expected to account for in their jobs (PHI, 2020). This underscores the importance of training design and development processes that are inclusive of stakeholders and responsive to the workers' needs and preferences.

**Effective direct care workforce training curricula design and implementation involves meaningful engagement with workers.** There are two major benefits to having meaningful engagement built into a training program from the beginning. One is that the program is ultimately designed for the benefit of workers, employers, and consumers, so it is natural to include their perspectives, needs, and preferences in the design process. Second, there is a need for workers and employers to adopt and participate in a workforce development program, so they must be able to realize the tangible and intangible benefits of the program.

Many examples of how meaningful engagement has been utilized to design feasible solutions and gain and retain buy-in from worker and employer stakeholders. The **California Long-Term Care Education Center's** approach to creating its care integration training involved a multistakeholder committee that incorporated perspectives from consumers and workers in the IHSS program. **Iowa's** *Prepare to Care* curriculum was developed via the state legislature's Direct Care Worker Task Force and involved multiple stakeholders, including direct care workers, consumers, health care providers, long-term care providers, disability providers, mental health providers, and state agencies impacted by these issues.

### **Credentialing**

**For workforce development programs involving direct care worker certifications and credentials, workers are assessed on their competence and knowledge.** Assessments help ensure that certified workers are providing safe, effective support to beneficiaries. Elevating worker standards and documenting direct care workers' successful completion of training and assessments elevates the professional role of these workers. Some entry-level home care positions are commonly referred to as "unskilled," a term that poses numerous challenges for workforce development advocates. By elevating standards, direct care workers can improve the quality-of-care delivery and how they manage themselves in relation to the job and the prospect of a career in the field – physically, emotionally, and even financially in some training programs.

Well-designed workforce development programs utilize credentials as building blocks for career pathways. **Tennessee's** program offers badges and pins that workers can wear to demonstrate to employers and beneficiaries that they have completed certain training and proved proficiency to be a professional Direct Service Worker. When the entire training has been completed, the worker earns their full QuILTSS credential.

### KEY TERMS & CONCEPTS

**Meaningful engagement** involves working collaboratively with those who share similar situations, concerns, or challenges, ideally creating better informed and practical solutions. Meaningful engagement can increase the likelihood and degree of a program's success.

Meaningful engagement should involve key stakeholders beyond information gathering strategies such as surveys, interviews, and focus groups, and include strategies such as multi-stakeholder committees and commissions that can become and remain directly involved in the design, development, implementation, and monitoring and evaluation of a program. In this way, key stakeholders can function as core partners.



*Three badges from the Tennessee QuILTSS Institute's 12-part certification program for Direct Service Workers. Workers earn a badge (and corresponding based pin they can wear) when they complete each training module.*

Assessments for certification as a personal care aide, home health aide, or certified health aide often involve knowledge and competencies. Knowledge-based components, such as tests, quizzes, and written assignments, are conducted to assess an understanding of the details, context, and technical expertise taught within a training curriculum. Competency-based assessments are meant to assess a direct care worker in care settings with real-time scenarios. Within real-time scenarios, direct care workers are assessed on their abilities to effectively communicate with the beneficiary and other health professionals, provide care that complies with safety standards and best practices, and manage their caregiving under pressure and uncertainty.

While direct care worker assessments are similar in their structure and approach, there is limited evidence on the best-standardized assessment of competencies or whether higher thresholds to passing assessments yield stronger effects on care outcomes, care experiences, or direct care worker satisfaction.

#### 4. TRAINING DESIGN

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**How training is designed can negatively and positively influence worker stress levels, satisfaction, morale, performance, and retention.** Training is delivered in various ways, including online classes (live/pre-recorded), in-person classes (small/large group), and on-site. In addition to one-time foundational learning, many workforce training and certification programs include continuing education requirements to ensure workers maintain professionalism and expertise in the field and continue to learn the latest practices and techniques.

##### **Online Training**

**Creating opportunities for live and pre-recorded online learning modules allows for easier access by many direct care workers with limited availability and transportation for in-person training.**

Online training is delivered through web applications for smartphones and tablets, web pages, and electronic books and has become more common in recent years. There is evidence that web-based learning can effectively deliver topical knowledge, increase access to training, and lower training costs

(Ochylski, Luz, and Shen, 2017). Online training is also effective when designed with engaging interfaces, involving opportunities for interaction and critical thinking within the online interface. Interactive elements such as videos demonstrating the themes, scenarios, and contexts surrounding specific conditions and quizzes and online question and answer sections are akin to role-playing activities delivered through in-person training. Online training is also effective when there are opportunities for live interaction with other direct care workers and mentors. Utilizing social media applications to resolve problems, ask questions, and deliver peer-to-peer support can improve psychological safety and reduce loneliness and isolation.

There is limited research and evidence on how online training might affect clinical outcomes for beneficiaries (Sinclair et al., 2016). Online programs will typically have lower completion and passage rates due to care workers' lack of access to a computer and high-speed internet. Online programs, if only designed in one language, pose problems for direct care workers with limited language competency in English or with deficiencies in reading ability. (Ochylski, Luz, and Shen, 2017; HRSA, 2015).

### ***In-Person Training***

**There is evidence of the positive effects of in-person training on enhancing direct care worker satisfaction, efficacy, retention, and care recipient outcomes** (HRSA, 2015; Feldman et al., 2017; PHI, 2020). In-person training has shown higher completion rates than online platforms. In-person training has demonstrated improved clinical outcomes, reduced hospital admissions, cost savings, enhanced recipient experience, increased worker effectiveness and confidence, and increased knowledge compared to workforce populations that have not had training (CLTCEC, 2019; Sterling et al., 2020). In-person training is also highly effective because of its interactive nature, allowing for more discussion, reflection, practice, and applied learning compared to online training (Lawn et al., 2017).

Most state-led curricula and training programs require at least some in-person attendance and completion - while portions of training can be taken online, clinical training, and assessments are done in person. The major drawbacks of in-person training involve the lack of flexibility in when, where, and how training transpires. For the direct care worker, in-person training can be challenging and costly. **The completion of in-person training is impacted by a person's ability to pay for, access, or make time to travel to the location of the training, as well as a person's schedule and priorities involving their professional or personal caregiving responsibilities** (Luz and Hanson, 2015).

### ***Hybrid Training***

**Since there are unique advantages and disadvantages of online and in-person training, a hybrid approach can offer the best of both modalities.** The training and workforce landscape has changed in the aftermath of COVID-19, where there is increased recognition of the complementary role of online training to in-person programs. In the face of substantial worker shortages and competing priorities in the workforce, the need for flexibility between online and in-person formats has increased (PWI, 2021). There is evidence that combining knowledge-based online training with in-person mentorship and applied learning can increase worker satisfaction and reduce stress and isolation. Online training can be effective for knowledge-based learning, while in-person and hands-on training in the classroom and other settings can provide opportunities for students to practice skills and interact with others (LeadingAge, 2020). A potential strategy in designing a hybrid training program is to assess the extent to which an activity can

be done remotely and the physical, spatial, and interpersonal context involved (McKinsey, 2021). A hybrid training regimen can provide flexibility, accessibility, and affordability for direct care workers.

### ***Continuing Education***

**Continuing education throughout a direct care worker's career is critical to reinforcing, relearning, and updating knowledge, competencies, and skills for direct care workers.** Continuing education content and requirements vary substantially state by state and program by program. Workers are generally open to learning content relevant to their skills, communications, professionalism, and self-care and mental health needs. Continuing education content varies as widely as training curricula, including self-care, client care, workplace conflict, conflict management, Alzheimer's and dementia-related care, and CPR.

However, given the value and importance of continuing education in workforce training initiatives, few states require continuing education for direct care workers. For example, **Alaska** and **California** do not require continuing education for personal care aides, leaving it to employers to offer or require. **Arizona** and **New York** mandate 6 hours of continuing education annually; in Iowa, Virginia, and Washington, it is 12 hours annually. This gap indicates an opportunity to leverage continuing education as a retention strategy for direct care workers. Continuing education positively influences workforce retention by providing an increased sense of purpose and advancement for direct care workers and can increase job satisfaction and a perceived sense of effectiveness in treating and assisting beneficiaries (PHI, 2021b; Cheong and Hsu, 2021; Price and Reichert, 2017).

### ***Required Training Hours***

**Requiring online and in-person classroom training hours to certify direct care workers increases the number of competencies that can be taught and ensures competencies in certain areas.**

(LeadingAge, 2020). Additional hours can help direct care workers fully understand a range of scenarios, client needs, and situations they will experience in their careers. Training programs identifying and teaching more competencies have increased hourly requirements, allowing for the teaching of essential skills that have been cited as real responsibilities in the care workforce, including communication, self-care and management, critical thinking, and clinical skills (HRSA, 2015; Spetz et al., 2019).

Federal training requirements for home health aides and certified nursing aides is 75 hours, of which 16 hours must be in clinical settings (PHI, 2021b). **California** requires substantially more hours for these professionals: for home health aides, 120 hours are required; for certified nursing assistants, 150 hours are required (Care Academy 2022). However, there are no federal minimum hourly requirements for personal care aides. In the absence of this federal requirement, only 15 states and the District of Columbia require 40 or more hours of training (PHI, 2020). **Washington** has the highest minimum requirement of 75 hours of training; only **Maine** and **Massachusetts** set a minimum of 10 and 20 clinical hours in their direct care worker training programs.

**California's** requirements for training direct care workers are low: personal care aides are required to take 5 hours of initial training and 5 hours of additional continuing education annually, while residential care facility staff are required to take 40 hours of initial training and 20 hours of continuing education annually (Care Academy 2022). **These hourly requirements for direct care workers are hundreds of**

**hours lower than those of regulated cosmetology and barbering professions** (IOM, 2008; BarberCosmo, 2022). The increasing responsibilities of direct care workers include a range of recommended competencies, including medication knowledge and management, health information, chronic disease management (e.g., heart failure and diabetes), Alzheimer’s and dementia, use of technology, supervisory, and communication skills, mental health, and telehealth (Spetz et al., 2019; IOM, 2008). Training hours ensure direct care workers are competent to manage the challenges of their jobs and the opportunities of their careers.

Direct care workforce development experts recommend increasing training hours relative to career lattices and pathways (Leading Age, 2020; HRSA, 2015). For example, in designing a curriculum for personal care aides, California can compare the competencies required for certification with the 120-hour training requirement for home health aides and the 150-hour training requirement for certified nursing aides. This would ensure training requirements and hours of work in tandem with the additional training and qualification required to move up a defined career pathway or lattice. Coincidentally, two states with defined career lattices, **Massachusetts**, and **Iowa**, have high hourly requirements of up to 80 hours.

## **5. INSTRUCTORS, CLASS SIZE, and LANGUAGE**

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### ***Instructors***

**Qualified instructors with experience in direct care and clinical settings can deliver the best practices, competencies, and standards to enhance the quality of the workforce** (Reckrey et al., 2019; PHI, 2020). Most direct care workforce training programs require qualified instructors who either possess experience as direct care workers or are registered nurses (RNs). There are additional requirements or flexibilities depending on the training an instructor may be hired to conduct. For example, when training such as physical therapy or mobility training is provided, licenses and exercise physiology expertise and qualifications are required. If instructors are hired to provide basic care training, qualified care aides or licensed home care agency staff are typically allowed to provide these levels of training.

A barrier to scaling training of direct care workers is the shortage of health workforce instructors. With a shortage of highly qualified direct care professionals, instructors will become increasingly difficult to hire and retain. Excess registered nurse vacancies (many direct care workforce trainers are registered nurses) could exacerbate the shortage of qualified direct care workers. A possible strategy to reduce the demand for registered nurses is assessment-based or qualifications-based requirements for instructors. These assessments have higher thresholds for passing to confirm that instructor candidates demonstrate high levels of competence. For example, **Arizona** requires instructors to pass a written exam with 92% correct or above and score 100% on a skills demonstration (Leading Age, 2020). Another strategy involves “train-the-trainer” programs, where qualified instructors train care workers with similar qualifications to become direct care workforce instructors, offering an opportunity to earn more and elevate their professional profile. (LeadingAge 2020).

### ***Class Size***

**Class size can influence student experience, outcomes, and instructor effectiveness.** Small classes enable more time for student-instructor interaction, boost perceptions of course content, increase class discussion, and build positive relationships among and between students and instructors (He et al.,

2020). In smaller online class sizes, instructor participation and student discussion rates via posts and comments were higher than in larger online classes (Parks-Stamm et al., 2019). Where class size is bigger, smaller groups led by a group discussion instructor were more effective in delivering learning materials and content (Sorenson, 2015). Most studies, cases, and states settled with a clinical training class size of around 1 instructor to 10 students and an optimal classroom-based learning size of around 13-15 students to one instructor (Sorenson, 2015; LeadingAge, 2020).

### **Language**

**Effective workforce development programs must be designed to linguistically accommodate the needs and preferences of workforce populations, as most direct care workers are minority non-native English speakers** (PHI, 2020). Incorporating multi-linguistic accommodations and supports in workforce training programs increases training effectiveness. In **Massachusetts**, which provides training materials in Spanish, Haitian Creole, and Brazilian Portuguese, English-speaking students showed an average percent gain in knowledge of 14%; non-English speakers showed a 38% change. Early in **Washington** state’s program, training was poorly translated. The programs lacked interpreters and multi-lingual trainers, contributing to about half of the direct care workforce certification candidates failing their tests. In response, the state expanded the certification deadline by 60 days, created more interactive tests that included videos, animated scenarios, true or false questions, basic wording, and an oral component, enhanced the quality of foreign language materials by funding better translation services, and provided interpreters to assist people in exams. **These interventions led to a program attrition rate of less than one percent** (LeadingAge, 2020).

## **6. ADULT-CENTERED LEARNING**

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The average age of an employed direct care worker in California is 47 years (PHI, 2021). Tailoring the design and delivery of training for adult learner populations is critical to training success. Across peer-reviewed literature and practices in the field, adult-centered learning was raised as the most effective method for training direct care workers (PHI, 2020; LeadingAge, 2020). This approach is effective because it increases knowledge retention, peer discussion, and learner engagement, as well as incorporates learners’ knowledge into class materials (Reed et al., 2014). It also informs learners of the content’s purpose. It promotes critical thinking, which is essential to care settings that are often unpredictable because of medical interventions required, the individual being cared for, and the issues faced by the direct care worker (LeadingAge, 2020). Adult-centered learning involves visual, auditory, and experiential modes of learning that should be engaged either individually or simultaneously (Rasmussen, 2015). Methods corresponding to adult-centered learning modalities are outlined in the table below.

LEARNING STYLE	PURPOSE	EXAMPLES OF CLASS ACTIVITIES
<b>Visual Learning</b>	Visualize taught concepts, skills, and knowledge.	Handouts, graphs, diagrams, videos, illustrations, slide decks, and whiteboard writings.
<b>Auditory Learning</b>	Retain and recall information, experiences, and content.	Stories, group discussions, case studies, question and answer sessions, lectures, and presentations.

<b>Kinesthetic, Tactile, Experiential Learning</b>	Involved or simulated experiences that enhance understanding.	Supervised group demonstrations, scenarios and simulations, clinical experience, and role-playing.
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## 7. STIPENDS, BONUSES, and ASSISTANCE

In California, it is estimated that 49% of direct care workers rely on either food, nutrition, Medi-Cal, or cash assistance, while 12% of direct care workers are uninsured (PHI, 2021). These hardships can cause direct care workers to drop out of training, which affects their career prospects in the long term by reducing their ability to gain the necessary skills to obtain better-paying direct care roles. Many workers also drop out of training due to scheduling challenges, as direct care professionals work unpredictable hours and lack benefits, paid leave, and a fixed salary (PHI, 2020; LeadingAge, 2020). Furthermore, their limited household income means that they may be experiencing or very close to experiencing financial crises that can add additional challenges and barriers, including transportation (gas, access to reliable private transportation), family caregiving obligations, and other career ambitions (schooling and higher education pursuits) (Luz, 2015).

### KEY TERMS & CONCEPTS

**Stipends** are fixed sums of money often structured to offset expenses such as housing, travel, and food. For example, a monthly \$300 public transportation stipend is provided to employees (Indeed, 2021a). Other stipends and financial assistance can include tuition and professional development expenses, gas, and grocery gift cards (Indeed 2021b).

**Bonuses** are often one-off payments that are added to the normal wage of a recipient, usually awarded as an incentive designed to reward good performance (Bloomenthal, 2021).

**Stipends, bonuses, and other financial incentives can assist direct care workers in completing training, reimburse them for time spent in training, and reward them for building core competencies.** Despite the critical importance of stipends, bonuses, and assistance, previous efforts to provide stipends have been limited to several efforts by states or the federal government, and evidence of their measurable impact has been lacking (New America, 2021). In 2011, the **Center for Medicare & Medicaid Innovation (CMMI)** provided \$11 million to train home care workers to reduce hospitalizations and emergency room use but only offered a \$1-per-hour stipend during training, with no wage increases. An effort from the **Center for Caregiver Advancement** provides a single \$300 stipend per IHSS worker for ten weeks of training (one 3.5-hour class per week) in LA and Alameda counties (New America, 2021). According to the Center for Caregiver Advancement, these training programs have proven to “enhance care, reduce emergency room visits and inpatient stays, and reduce caregiver isolation, loneliness, and depression” (Center for Caregiver Advancement, 2022).

There is some evidence of bonuses being used to retain direct care workers; however, evidence is limited regarding the connection between these bonuses, training, and outcomes. Retention bonuses were tied to staying at a job for at least six months. In 2020, **Wisconsin** mandated that nursing home employers provide a \$500 retention bonus to certified nursing assistants who stay on the job for at least six months. The state provided educational resources and webinars to help employers recruit and retain staff (NGA, 2021). Enhanced rates and guaranteed wage increases were also tied to the completion of training. **Tennessee's** Direct-Service Provider apprenticeship program provides a \$3.50 per hour wage increase after a year-long apprenticeship where apprentices receive mentorship and competency-based training while they serve as in-home support providers for adults with developmental disabilities (QuILTSS, 2022).

#### TYPES OF BONUSES

Types of bonuses used in direct care workforce training and development programs include:

- Hiring Bonus
- Employee Referral Bonus
- Years of Service Bonus
- Performance Recognition Bonus
- Training Completion Bonus

Other examples of incentives to direct care workers include **Minnesota's** and **Rhode Island's** provision of both enhanced pay rates and bonuses. Minnesota increased hourly rates by 7.5% and provided up to \$500 in stipends to direct care workers who complete qualifying training and provide services to qualifying beneficiaries (Roman and Graham, 2022). Meanwhile, Rhode Island disbursed \$100,000 to home health agencies, assisted living residences, adult day care centers, and consumer-direct programs that paid \$500 per direct care worker for completing its online 30-hour Behavioral Health Certificate Training program. For workers completing this certificate, the state guaranteed a \$0.39 rate increase per 15-minute unit for direct care workers, provided their employers provided at least 30 percent of staff completing the certificate program (Roman et al., 2022). Despite these promising emerging efforts, evidence of their impact is lacking.

## 8. TRAINING PROGRAM EVALUATIONS

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Most workforce training curricula and programs have not been rigorously evaluated for their impact on client quality of care, health care costs, or care experiences (LeadingAge, 2020). Our research did not locate any evaluations on the efficacy of stipend programs on direct care workforce development. Based on our review of training initiatives, most direct care workforce training programs use pre- and post-training survey data and interviewing to obtain insights into the following performance areas:

- |   |  |
|---|--|
| 1. Trainee completion and attrition rates     | 5. Trainee job satisfaction                      |
| 2. Trainee knowledge                          | 6. Trainee desire to remain a direct care worker |
| 3. Trainee satisfaction                       | 7. Consumer satisfaction                         |
| 4. Trainee desire to seek additional training | 8. Trainee employment status                     |

These measures, which were utilized by programs such as the Home Care Aide Workforce Initiative in **New York** and the **Massachusetts** state program, were cited as short-term worker outcomes and do not examine whether the training allowed direct-care workers to perform more effectively or if they impacted client quality of care, health care costs, or care experiences (LeadingAge, 2020). **Evaluations at the**

**state level were also not rigorous or conclusive.** For example, a qualitative evaluation of the **Washington** state training program only evaluated consumer perceptions of direct-care workers' competency to assist with activities of daily living. The same evaluation recorded favorable perceptions of the training, measured by confidence in the instructors' knowledge of the taught material, the use of learning strategies, and the qualifications of instructors. The evaluation recorded workers affirming the utility of the training with additional caregiving skills, including boundary setting, self-care, and effective communication. However, the evaluation delivered inconclusive results on the perceived impact of the certification on caregiving quality (LeadingAge, 2020).

A promising and novel approach to evaluation was found in the **California** Long-Term Care Education Center, now the **Center for Caregiver Advancement** program on care integration. In addition to measures of attrition, consumer satisfaction, pre-, and post-training knowledge, and self-efficacy, the program collected and compared survey and hospital utilization data of health plan members with an In-Home Supportive Services (IHSS) provider trained by the program versus an untrained baseline. This comparison demonstrated that clients receiving support from a trained direct care worker experienced lower rates of repeat emergency room visits and rehospitalizations and, as an indirect consequence of these reductions, experienced a lower cost of care (CLTCEC, 2016).

## 9. CONCLUSION

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A centralized statewide training and stipends program for direct care workers that can result in increased worker satisfaction, improved retention, and better outcomes for care recipients will have the greatest chances of success if it incorporates the following promising practices:

- **Stakeholder partnerships** incorporate meaningful stakeholder engagement and involvement in the design, planning, development, delivery, financing, and evaluation of a career pathways program.
- **Career lattices** take a systems-level, latticed approach to designing and deploying workforce development solutions; consider vertical, lateral, and diagonal career pathways that can include peripheral programs, fields, industries, and more advanced roles.
- **Core competencies** define what competencies and knowledge are needed, then identify the training assets or gaps to establish, build, and sustain those competencies.
- **Flexible training design** involves developing semi-standardized competency-driven training instead of standardized curricula to allow training providers to tailor training to suit trainee needs and preferences.
- **Intentional training design** incorporates adult learner-centered practices, continuing education, and trainee competency and skills tests in the design of training; determine what types of training could best be delivered and accessed online (live and/or prerecorded) and which should be in person.

- **Program evaluations** incorporate metrics, monitoring, and evaluation into the design of the training initiative; consider evaluated performance in other state programs as benchmarks until a baseline is established in California.
- **Sustainability** is an essential factor missing in many workforce development initiatives: most of the demonstration programs we studied were pilots that did not continue beyond their grant funding, indicating a lack of building longer-term sustainability strategies.

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## APPENDIX A: COMPARISON OF REVIEWED TRAINING PROGRAMS

We identified many examples of direct care workforce training programs that contributed to improving workforce and care recipient outcomes. Most studies on the development, delivery, and impact of direct care workforce training have been conducted after the establishment of the Affordable Care Act (HRSA, 2015). A recent catalyst of direct care workforce program development has been the American Rescue Plan Act (ARPA) funding. More than 30 states have used matching funds through ARPA to plan and launch initiatives to improve the support, training, recruitment, and retention of direct care workers (NASHP, 2022).

Evaluation methods varied across the literature we reviewed. Many studies supported the positive effects of training for direct care workers in terms of increased job satisfaction, retention, and improved care outcomes, but it was not always clear what evidence was used to validate the approach.

The DCW training programs reviewed are profiled below. These profiles highlight training development and delivery design components, as well as outcomes where available.

Alaska Core Competencies for Direct Care Workers in Health and Human Services	
Component	Description
<b>Design &amp; Development</b>	Alaskan government sponsored two organizations, the Western Interstate Commission for Higher Education, and the Annapolis Coalition on the Behavioral Health Workforce, in a multi-phase research and validation program that scoped national core competencies, refined them based on input of expert Alaskan raters, and validated them through a multi-stakeholder state committee process.
<b>Promising Practices</b>	Example of a multi-phase process to developing and piloting competencies and curricula with direct care workers and employers.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Working with others</li> <li>• Assessing strengths and needs</li> <li>• Planning services</li> <li>• Providing services</li> <li>• Linking to resources</li> <li>• Advocating</li> <li>• Individualizing care</li> <li>• Documenting</li> <li>• Behaving professionally and ethically</li> <li>• Developing professionally</li> </ul>
<b>Training Hour Requirements</b>	40 hours
<b>Continuing Education Requirements</b>	None
<b>Training Modality</b>	In-person & online
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	Registered Nurses (RNs) with educational experience, usually community trainers or educators
<b>Class Size</b>	1:20 in the classroom, 1:10 in clinical settings

<b>Stackability / Portability</b>	Can be used for home health aide and nursing assistant training
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment. Standardized test.
<b>Observed Outcomes</b>	N/A

<b>Arizona Caregiver Career Pathway Program</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	A Citizens Workgroup on the Long-Term Workforce was created by the Governor in 2004, which helped produce a state-led curriculum on core principles of caregiving. They received input from more than 58 organizations for the 31-member committee. Then the curriculum was piloted, upon which 95% of participants were satisfied with the training. A Direct Care Workforce Committee hosted workshops to prepare trainers for the program implementation, which began in 2012.
<b>Promising Practices</b>	Multi-stakeholder design and implementation of core competencies.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Overview of position</li> <li>• Legal and ethical issues</li> <li>• Communication</li> <li>• Cultural competency</li> <li>• Job management skills</li> <li>• Observing, reporting, and documenting</li> <li>• Infection control</li> <li>• Nutrition and food preparation</li> <li>• Fire, safety, and emergency procedure</li> <li>• Home environment maintenance</li> </ul>
<b>Aging and Physical Disabilities Module Competencies</b>	<ul style="list-style-type: none"> <li>• Body systems</li> <li>• Physical disabilities and conditions</li> <li>• Psychological and emotional conditions</li> <li>• Personal Care</li> <li>• Transfers and positioning</li> <li>• Sexuality issues</li> <li>• Activity planning</li> <li>• Dementia specific Care</li> <li>• Grief and end-of-life issues</li> </ul>
<b>Developmental Disabilities Module Competencies</b>	<ul style="list-style-type: none"> <li>• Knowledge of developmental disabilities</li> <li>• Working with people with disabilities</li> <li>• Role of the Division of Developmental Disabilities</li> <li>• Support planning</li> <li>• Abuse and neglect</li> <li>• Incident reporting</li> <li>• Daily living</li> <li>• Positive behavior support</li> </ul>
<b>Training Hour Requirements</b>	40-80 hours

<b>Continuing Education Requirements</b>	6 hours
<b>Training Modality</b>	Hybrid in-person and online, with in-person skills training
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	Anyone who passed all tests on a training module's competencies (92% and above) and 100% on skills tests for modules.
<b>Class Size</b>	N/A
<b>Stackability / Portability</b>	Portable from assisted living and from one employer to another
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment.
<b>Observed Outcomes</b>	N/A

### Arkansas Certified Nursing Assistant Program

Component	Description
<b>Design &amp; Development</b>	Unclear; state announced the program as part of direct care restructuring efforts.
<b>Promising Practices</b>	The only program we reviewed that requires direct care workers to certify as Certified Nursing Aides.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Body functions</li> <li>• Body mechanics and safety precautions</li> <li>• Communication skills</li> <li>• Dementia and Alzheimer's diseases</li> <li>• Emergency situations, recognizing conditions and proper procedures</li> <li>• Household safety and fire prevention</li> <li>• Infection control and prevention, including maintaining a safe and clean working environment</li> <li>• Ethical considerations and state law regarding delegation of nursing tasks to unlicensed personnel</li> <li>• Nutrition</li> </ul>
<b>40% of the hours (16/40 hours) are dedicated to these competencies</b>	<ul style="list-style-type: none"> <li>• Ambulation</li> <li>• Basic housekeeping procedures, including laundry skills</li> <li>• Bathing, shampooing, and shaving</li> <li>• Dressing and undressing</li> <li>• Meal preparation and clean up</li> <li>• Oral hygiene</li> <li>• Range of motion</li> <li>• Toileting</li> <li>• Transfer techniques</li> <li>• Recordkeeping and documentation of activities</li> <li>• Role of caregiver in the healthcare team</li> </ul>

	<ul style="list-style-type: none"> <li>• Nail and Skin Care</li> </ul>
<b>Training Hour Requirements</b>	40 hours
<b>Continuing Education Requirements</b>	None, save for transition to the certified nursing assistant (CAN) system
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	Provided through the state's 5 Human Development Centers
<b>Class Size</b>	1:24 in the classroom, 1:12 in clinical settings
<b>Stackability / Portability</b>	Free CNA training and testing for all new hires in direct care positions
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	N/A

### Care Team Integration of the Home-Based Workforce (California)

Component	Description
<b>Design &amp; Development</b>	Multi-stakeholder committee process with perspectives from consumers and providers.
<b>Promising Practices</b>	Comprehensive adult-centered learning intervention with language and physical location accommodations. Evaluation of the program included consumer experiences; this is also the only training program we found that included health outcomes in the evaluation.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Infection control and standard precautions: tracheostomy and nasogastric tubes, PPEs, catheters, and colostomy</li> <li>• Oral care and dental care</li> <li>• Grooming and personal hygiene</li> <li>• Body mechanics in lifting objects</li> <li>• Body mechanics in transferring individuals</li> <li>• Body systems and most common diseases: arthritis, cancer, kidney disease, multiple sclerosis, Parkinson's, stroke</li> <li>• Fall and fire prevention</li> <li>• Diet and nutrition</li> <li>• Medication management and introduction to vital signs: measure or record vitals, but no diagnoses</li> <li>• Communication and working relationship with patient's health care providers on chronic conditions including heart disease, diabetes, behavioral health conditions, and dementia</li> </ul>
<b>Training Hour Requirements</b>	60.5 hours with 18 modules
<b>Continuing Education Requirements</b>	None (pilot only)
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Training series into 17 modules with 13 hours of at-home assignments. Practical, instructional, skill, and knowledge-based training based on an adult-centered learning approach.

<b>Instructor Requirements</b>	California Long Term Care Education Center (CLTCEC) staff
<b>Class Size</b>	Approximately 25 students
<b>Stackability / Portability</b>	N/A
<b>Trainee Assessments</b>	Hands-on competency assessments in the middle and end of the program.
<b>Observed Outcomes</b>	86% of workers completed training, of which 80% passed competency checks; 99% of providers felt better prepared while 86% reported more confidence in their communication skills and role as part of a care team; two-year evaluation reported a 43% decline in emergency room visits and a 41% decline in the average rate of rehospitalizations, leading to some savings.

### CARES Dementia-Related Behavior Online Program

Component	Description
<b>Design &amp; Development</b>	Alaskan government sponsored two organizations. The Curriculum was created by a committee chosen by investigators with feedback from selected direct care workers. The main content guides were previous reports by the Alzheimer's Association and an Alzheimer's expert, Bowlby Sifton.
<b>Promising Practices</b>	Most extensive and longest, in terms of hourly requirements, of all identified curricula.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Introduction to dementia-related behavior</li> <li>• Connecting with the Person, Assessing Behavior, Responding Appropriately, Evaluating What Works, and Sharing with Others (the CARES approach)</li> <li>• Breaking down the CARES approach for dementia-related behavior</li> <li>• Key responses to dementia-related behavior</li> </ul>
<b>Training Hour Requirements</b>	4 hours
<b>Continuing Education Requirements</b>	None (pilot only)
<b>Training Modality</b>	Online
<b>Training Approach</b>	Online training with 17 interactive activities and 83 videos conducted asynchronously. 25-question multiple choice test at the beginning and end of training.
<b>Instructor Requirements</b>	N/A, conducted online asynchronously
<b>Class Size</b>	N/A, conducted online asynchronously
<b>Stackability / Portability</b>	None
<b>Trainee Assessments</b>	Post-test online survey of knowledge
<b>Observed Outcomes</b>	Increase in knowledge of Alzheimer's and dementia; validated usefulness of online training in disseminating knowledge and building competencies.

### Homecare Aide Worker Initiative (HAWI), New York

Component	Description
<b>Design &amp; Development</b>	PHI designed the curriculum and materials and trained the trainers in the program.

<b>Promising Practices</b>	A robust online-only training.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Welcome and team building</li> <li>• Respecting differences</li> <li>• Communication skills</li> <li>• Managing stress</li> <li>• Exploring options and approaches to solving problems</li> <li>• Introduction to home care</li> <li>• Key concepts of home care</li> <li>• Infection control</li> <li>• Body mechanics</li> <li>• Body systems and common diseases</li> <li>• Working with elders</li> <li>• Introduction to mental illness and developmental disabilities</li> <li>• Working with families</li> <li>• Working with children</li> <li>• Providing Care in the client's home</li> <li>• Assisting with self-administered medications</li> <li>• Safety for the client and the worker</li> <li>• Assisting with ambulation and transfers; making a bed</li> <li>• Supporting clients' dignity while providing personal Care</li> <li>• Bathing and Personal Care</li> <li>• Working with clients with physical disabilities</li> <li>• Managing pain</li> <li>• Dressing and toileting</li> <li>• All about food: spending and budgeting</li> <li>• Beyond personal Care: health-related responsibilities of the home health aide</li> <li>• Assisting with complex modified diets</li> <li>• Performing simple measurements and tests</li> <li>• Assisting with prescribed exercises</li> <li>• Assisting with prescribed medical equipment, supplies, and devices</li> <li>• Assisting with special skincare</li> <li>• Assisting with dressing changes</li> </ul>
<b>Training Hour Requirements</b>	120 hours w/ 32 modules
<b>Continuing Education Requirements</b>	None (pilot only)
<b>Training Modality</b>	In-person
<b>Training Approach</b>	12-week in-person training with adult-centered techniques, including small-group work, role-playing, case studies, and interactive presentations.
<b>Instructor Requirements</b>	N/A
<b>Class Size</b>	N/A

<b>Stackability / Portability</b>	None
<b>Trainee Assessments</b>	N/A
<b>Observed Outcomes</b>	Increased worker satisfaction and feelings of knowledge and competence; slowed attrition rate from the workforce; 55% of 600 workers were still working as DC workers 12 months after intervention.

### Home Health Aides Health Coaching Program (New York)

Component	Description
<b>Design &amp; Development</b>	California-based Partners in Care created and implemented this program in New York. This pilot program was funded by New York State as a grant.
<b>Promising Practices</b>	Training direct-care workers as health coaches
<b>Core Competencies</b>	N/A
<b>Training Hour Requirements</b>	N/A
<b>Continuing Education Requirements</b>	None (pilot only)
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Week-long in-person classroom curriculum on health care coaching, including theories of change for all interventions, promoting understanding and adherence to medication prescriptions, and motivational interviewing.
<b>Instructor Requirements</b>	Experienced health coach or a registered nurse
<b>Class Size</b>	N/A
<b>Stackability / Portability</b>	None
<b>Trainee Assessments</b>	None
<b>Observed Outcomes</b>	Increased confidence as health coaches with greater awareness of chronic conditions and the potential for behavior change; increased knowledge of health management activities, navigating health check-ups and appointments, and other medical interventions (e.g., checking for blood pressure).

### IHSS Alzheimer's Disease and Related Disorders Training Curriculum (California)

Component	Description
<b>Design &amp; Development</b>	Investigators utilized the California Long-Term Care Education Center (CLTCEC) curriculum as a starting point and then added Alzheimer's disease and related dementia-relevant content.
<b>Promising Practices</b>	Example of adapting the CLTCEC curriculum for a dementia-specific use case.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• How to complete a documentation form</li> <li>• Recognizing the signs of Alzheimer's disease and dementia</li> <li>• Managing repetitive questions and behaviors</li> <li>• Dressing and undressing</li> </ul>

	<ul style="list-style-type: none"> <li>• Oral Care</li> <li>• Making the home safe</li> <li>• Helping to manage hallucinations</li> <li>• Assisting with sleep</li> <li>• Medication safety</li> <li>• Avoiding caregiver burnout</li> </ul>
<b>Training Hour Requirements</b>	35 hours over 10 weeks
<b>Continuing Education Requirements</b>	None (pilot only)
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Incorporation of lived experiences, lectures, small group and pair activities, and Socratic methods (adult-centered learning approach).
<b>Instructor Requirements</b>	Incorporation of lived experiences, lectures, small group and pair activities, and Socratic methods (adult-centered learning approach). Two cohorts: one is receiving instruction in Spanish and the other in English.
<b>Class Size</b>	One 27-person cohort and one 35-person cohort
<b>Stackability / Portability</b>	None
<b>Trainee Assessments</b>	Written and competency-based assessments
<b>Observed Outcomes</b>	Significant improvements in overall confidence in skills and knowledge

<b>Iowa Prepare to Care</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Direct Care Worker Task Force, which consisted of direct care professionals, educators, employers, and associations, was established to develop a curriculum in 2006 and involved multiple stakeholders, including direct care workers, consumers, family members, health care providers, long-term care providers, disability providers, mental health providers, and all state agencies impacted by these issues. Feedback was received through outreach activities in the form of focus groups and surveys.
<b>Promising Practices</b>	Standardized job titles linked to competencies and training. Example of a multi-year and multi-phase competency and curriculum development process.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Introduction to profession</li> <li>• Professionalism</li> <li>• Person-centered approach</li> <li>• Communication and interpersonal skills</li> <li>• Infection control</li> <li>• Documentation</li> <li>• Mobility Assistance and Worker Safety</li> </ul>
<b>Needed to qualify as the Lowest-Tier Community Living Professional</b>	<b>Home and Community Living (13 hours)</b> <ul style="list-style-type: none"> <li>• Home &amp; community-based living principles &amp; services</li> <li>• Building &amp; maintaining friendships &amp; relationships</li> </ul>

	<ul style="list-style-type: none"> <li>• Cultural competence</li> <li>• Development &amp; disabilities across the lifespan</li> <li>• Behavioral support, crisis prevention &amp; intervention</li> <li>• Individualized support plans, outcome-based philosophy, documentation</li> </ul> <p><b>Instrumental Activities of Daily Living (11 hours)</b></p> <ul style="list-style-type: none"> <li>• Infection control</li> <li>• Laundry support</li> <li>• Light housekeeping</li> <li>• Home Safety</li> <li>• Nutritional support</li> <li>• Financial management support</li> <li>• Emergency Preparedness</li> </ul> <p><b>Personal Supports (9 hours)</b></p> <ul style="list-style-type: none"> <li>• Person-centered support, maximizing independence</li> <li>• Community integration, developing partners</li> <li>• Communication</li> <li>• Principles of teaching and learning</li> </ul>
<p><b>Additional Training Modules Needed to Qualify for Personal Support Professional or Health Support Professional</b></p>	<p><b>Personal Activities of Daily Living (48 hours)</b></p> <ul style="list-style-type: none"> <li>• Professionalism, reporting &amp; documentation, legal &amp; regulatory guidelines</li> <li>• Person-centered approach, cultural considerations, special populations</li> <li>• Safety, infection control</li> <li>• Personal hygiene support</li> <li>• Functional support, safe patient handling, mobility assistance</li> <li>• Vital signs</li> <li>• Nutritional support</li> <li>• Elimination support</li> </ul> <p><b>Health Monitoring and Maintenance (27 hours)</b></p> <ul style="list-style-type: none"> <li>• Aging process</li> <li>• Support for persons with sensory, musculoskeletal, gastrointestinal, cardiovascular, respiratory, skin, urinary &amp; reproductive conditions</li> <li>• Diabetes-mellitus</li> <li>• neurologic &amp; nervous disorders</li> <li>• Mental illness &amp; substance abuse disorders</li> <li>• Pain management</li> <li>• Cancer management</li> <li>• Intellectual &amp; developmental disabilities</li> <li>• End of life</li> </ul>
<p><b>Training Hour Requirements</b></p>	<p>40 hours for Community Living Professionals, 75 hours for Personal Support Professionals, and 80 hours for Health Support Professionals.</p>
<p><b>Continuing Education Requirements</b></p>	<p>12 hours annually</p>
<p><b>Training Modality</b></p>	<p>In-person</p>

<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	Must be a personal care worker who has passed "Prepare to Care" or has an undergraduate degree or higher in any field. Must possess one year of field experience related to modules and experience in multiple settings/contexts; specialty instructors must qualify and then take a separate course provided by "Prepare to Care."
<b>Class Size</b>	N/A, 1:10 in clinical settings
<b>Stackability / Portability</b>	Different modules in specialty training after basic 6-hour training can be combined to certify for: <ul style="list-style-type: none"> <li>• Community Living Professional</li> <li>• Personal Support Professional</li> <li>• Health Support Professional</li> </ul>
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	N/A

### Maine Personal Support Specialist Student Training Program

Component	Description
<b>Design &amp; Development</b>	Drawn from experience with the PHCAST program and a partnership with the University of Southern Maine's School of Public Service.
<b>Promising Practices</b>	Example of state-mandated curriculum and training.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Entering the health care field</li> <li>• Legal and ethical aspects of health</li> <li>• Basic infection control</li> <li>• Professionalism in the workplace</li> <li>• Basic human needs</li> <li>• Death and dying</li> <li>• Communication</li> <li>• Special considerations (special populations)</li> <li>• The human body</li> <li>• ADLs and IADLs</li> <li>• Ergonomics, transferring and repositioning a consumer</li> <li>• Accidents, incident reports, falls, and restraints</li> <li>• Safety procedures</li> </ul>
<b>Training Hour Requirements</b>	50 hours (10 hours must be clinical)
<b>Continuing Education Requirements</b>	Unclear, though a 1-4 hour continuing education program is offered
<b>Training Modality</b>	Hybrid with online modules and in-person clinical training hours
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning

<b>Instructor Requirements</b>	Certified Nursing Aides or RNs
<b>Class Size</b>	N/A in the classroom, 1:10 in clinical settings
<b>Stackability / Portability</b>	Can be applied to certified nursing assistant training if started within two years; PCAs receive 20 credit hours of 180 hours required.
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	N/A

### Massachusetts Acquiring Basic Core Competencies for Direct Care Workers Program (ABCs)

Component	Description
<b>Design &amp; Development</b>	Massachusetts developed its curriculum through the PHCAST grant from the U.S. Department of Health and Human Services, Health Resources and Services Administration; the program was managed by the University of Massachusetts Medical School through the MassAHEC Network. The MassAHEC Network led the development of the curriculum along with representatives from PHI, Bristol Community College, Commonwealth Corporation, Massachusetts Home Care Aide Council, and the Massachusetts Personal Care Attendant Quality Workforce Council.
<b>Promising Practices</b>	Well-defined career lattice with job titles, hourly and annual pay. Accommodations for non-English speakers.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Roles &amp; responsibilities</li> <li>• Health care support</li> <li>• Infection control</li> <li>• Basic restorative care</li> <li>• Personal care</li> <li>• Nutrition</li> <li>• Consumer needs</li> <li>• Safety and emergency</li> <li>• Consumer rights, ethics, and confidentiality</li> <li>• Communication</li> <li>• Culture and diversity</li> <li>• Housekeeping</li> <li>• Life skills</li> </ul>
<b>Training Hour Requirements</b>	60 hours (In-home services: 40 hours, and clinical settings: 20 hours)
<b>Continuing Education Requirements</b>	Up to 4 hours for those who complete the ABC program
<b>Training Modality</b>	In-person (online orientation)
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	RNs or social workers; RNs must deliver clinical modules in the curriculum; a registered physical therapist is recommended for the mobility training module.
<b>Class Size</b>	1:18
<b>Stackability / Portability</b>	Workers can apply their personal care aide training hours towards CNA and home health aide training (PCA bridge to CNA/HHA).
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment

<b>Observed Outcomes</b>	An attrition rate of less than 1%. English-speaking students showed an average individual gain in knowledge of 14%, non-English speakers showed 38% gain; 90% of trainees surveyed between 6 months and 2 years post-training indicated high job satisfaction; PHCAST-trained workers required less supervisor assistance.
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<b>New York Home Care Curriculum</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Revised in 2007 with staff and representatives from the New York State Department of Health, New York Licensed Home Care Service Agencies (LHCSA), and New York Certified Home Health Agencies (CHHA).
<b>Promising Practices</b>	Publicly available curriculum developed solely by the state government.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Introduction to home care</li> <li>• Working effectively with home care clients</li> <li>• Working with elderly</li> <li>• Working with children</li> <li>• Working with people who are mentally ill</li> <li>• Working with people with developmental disabilities</li> <li>• Working with people with physical disabilities</li> <li>• Food nutrition and meal preparation</li> <li>• Family spending and budgeting</li> <li>• Care of the home and personal belongings</li> <li>• Safety and injury prevention</li> <li>• Personal care skills</li> </ul>
<b>Training Hour Requirements</b>	40 hours
<b>Continuing Education Requirements</b>	6 hours annually
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning with lectures
<b>Instructor Requirements</b>	RN, social worker, or health economist with a bachelor's degree in a field related to human services or education; personal skills training is taught by a RN.
<b>Class Size</b>	1:20
<b>Stackability / Portability</b>	Can be applied to home health aide certification by participating in 35 hours of health-related tasks training.
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	N/A

<b>Taiwan Mobile E-Learning and Support Dementia Training</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Researchers/investigators created the curriculum.
<b>Promising Practices</b>	Smartphone app-based online training.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Psycho-behavioral symptom management skills</li> <li>• Communication skills</li> <li>• Cognitive and emotional assessment</li> </ul>

	<ul style="list-style-type: none"> <li>• Common dementia care problems and care skills</li> <li>• Needs assessment &amp; health education for families with dementia</li> <li>• Overview of therapeutic activities</li> <li>• Care skills for various stages of dementia</li> <li>• Oral Care for older adults with dementia</li> </ul>
<b>Training Hour Requirements</b>	6 hours with 3 hours of training and 3 hours of in-person mentorship; additional time for mentorship on the LINE app.
<b>Continuing Education Requirements</b>	None (pilot only)
<b>Training Modality</b>	Online training with in-person mentorship training
<b>Training Approach</b>	Online training on supporting dementia with interactive videos and modules. Real-time support via the LINE app from an experienced direct-care worker, along with monthly in-person mentorship sessions with other program participants.
<b>Instructor Requirements</b>	N/A, online
<b>Class Size</b>	N/A, online
<b>Stackability / Portability</b>	None
<b>Trainee Assessments</b>	Post-test online survey of knowledge
<b>Observed Outcomes</b>	Improved knowledge, attitude, and competence of home care workers on dementia care; effects remained significant even 24 weeks after the end of the intervention; validated usefulness of online training in disseminating knowledge and competencies.

### Tennessee Quality Improvement in Long-Term Services and Supports (QuILTSS) Workforce Strategy

Component	Description
<b>Design &amp; Development</b>	Multi-stakeholder research and design process in partnership with community colleges and colleges of applied technology. The state used SIM funds to finance the program.
<b>Promising Practice</b>	Workforce strategy developed within a broader value-based payment program for LTSS providers: aligned direct service worker training and degree attainment with LTSS quality measures, rewarding providers that employ a well-trained workforce. The workforce training program has an online portal with highly stackable credentialing with enhanced hourly rates for some program graduates and detailed organizational self-assessment tool for benchmarking workforce performance.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Person-centered practices</li> <li>• Professionalism and ethics</li> <li>• Communication</li> <li>• Evaluation and observation</li> <li>• Community living skills &amp; supports</li> <li>• Community inclusion &amp; networking</li> <li>• Empowerment &amp; Advocacy</li> <li>• Health &amp; wellness</li> <li>• Cultural competency</li> <li>• Crisis prevention &amp; intervention</li> <li>• Safety</li> </ul>

	<ul style="list-style-type: none"> <li>• Education, training &amp; self-development</li> </ul>
<b>Training Hour Requirements</b>	N/A
<b>Continuing Education Requirements</b>	N/A
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	N/A, online
<b>Class Size</b>	N/A, online
<b>Stackability / Portability</b>	Yes, towards a post-secondary LTSS certificate.
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	N/A

### Virginia Assisted Living Facility Direct Care Staff Training

Component	Description
<b>Design &amp; Development</b>	Virginia Department of Social Services developed the curriculum in 2002 but has since revised it three times, the latest in 2018.
<b>Promising Practice</b>	Statewide publicly available curriculum; the only state reviewed that requires training completion and certification before providing any services.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Introduction (expectations and requirements)</li> <li>• The elderly</li> <li>• Personal Care and rehabilitative services</li> <li>• Home management</li> <li>• Safety and accident prevention</li> <li>• Food, nutrition, and meal preparation</li> <li>• Documentation requirements for Medicaid recipients</li> </ul>
<b>Training Hour Requirements</b>	40 hours
<b>Continuing Education Requirements</b>	12 hours annually
<b>Training Modality</b>	In-person
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	RNs with at least two years of clinical experience
<b>Class Size</b>	1:10
<b>Stackability / Portability</b>	None, only recognized by the Virginia government
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	N/A

<b>Washington Fundamentals of Caregiving</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	<p>Established a 50% employer and 50% union board of trustees of a Training Partnership. The board:</p> <ul style="list-style-type: none"> <li>• Conducted a needs assessment with stakeholders</li> <li>• Established panels consisting of personal care aides, employers, consumers, and other representatives to develop each training course</li> <li>• Consulted with experts in areas such as ergonomics, cultural congruence, mental health, psychometrics, aging, disabilities, and other specialized areas to design and develop courses.</li> </ul>
<b>Promising Practices</b>	Most rigorous hourly requirements set by a state for direct-care workers.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Client and client rights</li> <li>• The caregiver</li> <li>• Infection control</li> <li>• Mobility</li> <li>• Basic communication</li> <li>• Skin and body care</li> <li>• Nutrition and food handling</li> <li>• The process of elimination</li> <li>• Medications and other treatments</li> <li>• Self-care and the caregiver</li> </ul>
<b>Training Hour Requirements</b>	75 hours in total, with 70 hours of training per the modules and a pre-training 3-hour orientation and 2-hour safety training.
<b>Continuing Education Requirements</b>	12 hours annually
<b>Training Modality</b>	In-person traditionally, but some online due to COVID-19
<b>Training Approach</b>	Competency-Based, Adult-Centered Learning
<b>Instructor Requirements</b>	<p>Licensed, either:</p> <ul style="list-style-type: none"> <li>• Community Instructors, including RNs and qualified care aides</li> <li>• Licensed home care agency staff</li> <li>• Licensed Medicaid Home Care Agency staff</li> </ul>
<b>Class Size</b>	N/A
<b>Stackability / Portability</b>	Counts toward 2-hour training bridge certification programs for home health aides or nursing assistants.
<b>Trainee Assessments</b>	Knowledge exams and in-person skills assessment
<b>Observed Outcomes</b>	<p>Personal care aides had favorable perceptions of the training, including confidence in instructor knowledge and the quality of instructors and instruction materials. The training was perceived to have provided them with additional caregiving skills. Identified boundary setting, self-care, and effective communication modules as being the most useful. More information on catheter care and maintenance, bowel and bladder care, safe lifting and transferring techniques for wheelchair users, and other physical disability support trainings.</p>

***Below are competencies that public and private organizations have developed to guide the design and development of direct care workforce career pathways programs.***

<b>Centers for Medicare and Medicaid Services Direct Service Workforce Core Competencies</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Inventory of competency initiatives developed in the U.S. followed by a systematic review and validation from stakeholders to reach consensus on the final set of core competencies for DCWs.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Person-centered practice</li> <li>• Evaluation and observation</li> <li>• Crisis prevention and intervention safety</li> <li>• Professionalism and ethics</li> <li>• Empowerment and advocacy</li> <li>• Health and wellness</li> <li>• Community living skills and supports</li> <li>• Community inclusion and networking</li> <li>• Cultural competency</li> <li>• Education, training, and self-development</li> </ul>

<b>Health Resources and Services Administration Personal and Home Care Aide State Training (PHCAST)</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Adapted the PHI Competencies for Direct Care Workers; later influenced the creation of the Maine and Massachusetts curriculum.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Role of personal &amp; home care aide</li> <li>• Consumer rights, ethics, and confidentiality</li> <li>• Communication</li> <li>• Personal care skills</li> <li>• Health care support</li> <li>• Nutritional support</li> <li>• Infection control</li> <li>• Safety and emergency training</li> <li>• Consumer needs/specific support</li> <li>• Self-care</li> </ul>

<b>LeadingAge's Personal Care Attendant Competency Model</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Developed via a Commission through a two-year process in which they gathered evidence and decided upon core competencies.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Technical Skills (ADL, IADL care, infection control, role of the direct care worker)</li> <li>• Applied Understanding (dementia, end-of-life care, professionalism, and ethics)</li> <li>• Interpersonal Skills (relationship skills, teamwork, communication, accountability)</li> <li>• Self-Directed Care (cultural competency, individualizing Care)</li> </ul>

<b>National Alliance for Direct Support Professionals (NADSP) Direct Support Professionals Competencies</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	Derived from Community Support Skill Standards (CSSS): Tools for Managing Change and Achieving. The CSSS standards were developed and validated by a national coalition of key stakeholders led by the Human Services Research Institute with support from the Departments of Labor and Education.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Participant empowerment</li> <li>• Communication</li> <li>• Assessment</li> <li>• Community and service networking</li> <li>• Facilitation of services</li> <li>• Community living skills and supports</li> <li>• Education, training, and self-development</li> <li>• Advocacy</li> <li>• Vocational, educational, and career support</li> <li>• Crisis prevention and intervention</li> <li>• Organizational participation</li> <li>• Documentation</li> <li>• Building and maintaining relationships</li> <li>• Provide person-centered supports</li> <li>• Supporting health and wellness</li> </ul>

<b>PHI Competencies for Direct Care Workers</b>	
<b>Component</b>	<b>Description</b>
<b>Design &amp; Development</b>	PHI developed.
<b>Core Competencies</b>	<ul style="list-style-type: none"> <li>• Role of the direct care worker</li> <li>• Consumer rights, ethics, confidentiality communication, problem-solving, and relationship skills</li> <li>• Personal care skills</li> <li>• Health care support</li> <li>• In-home and nutritional support</li> <li>• Infection control</li> <li>• Safety and emergencies</li> <li>• Apply knowledge to the needs of specific consumers</li> <li>• Self-care</li> </ul>

## **APPENDIX B. ADDITIONAL CASE STUDIES**

### **Personal & Home Care Aide State Training (PHCAST) Demonstration Program**

A \$5 million appropriation through the Affordable Care Act, the Personal and Home Care Aide State Training (PHCAST) Demonstration Program was implemented in California, Iowa, Maine, Massachusetts, Michigan, and North Carolina and trained 4,579 personal and home care aides. The program required states to cover ten competencies that the federal government developed in partnership with the PHI, including communication, infection control, and self-care (see PHI in curriculum table). Delivery of training varied

except for the curriculum competency requirements and adult-centered learning strategies. These differences are described in Table 2 below.

Overall, across PHCAST settings, results were inconsistent due to a variation in program design, delivery, and evaluation methods along with state context and demographics. Attrition rates were lower than average, between 1 to 12 percent across all states. The high passage rates were attributed to high levels of support in terms of stipends, scholarships, case management, transportation, childcare, mentoring, and assistance from local social service providers. However, state-specific information on the support provided was lacking. Direct care workers reported extremely high satisfaction with training, ranging from 92 percent to 100 percent. Employment rates in direct care work in California increased 27 percent at six months post-training and 26 percent in Massachusetts at three months post-trainings. In Michigan, the unemployment rate among trainees dropped from 58 percent to 38 percent.

State	Training Hour Requirements	Training Format(s)	Size / Ratio	Unique Supports	Program Outcomes
CA	100 hours	In-person Online	1:15 or 2:40	Provided reading and literacy assessment and remedial support classes, if needed.	<ul style="list-style-type: none"> <li>Participants in online training had less than a 30% completion rate compared to 85% for in-person (which could be due to internet access issues).</li> <li>Increased provider knowledge of topic areas; felt better prepared.</li> <li>The majority reported meaningful work and found a real purpose in their job.</li> </ul>
IA	114 hours	In-person	N/A	Trainings are provided in community colleges and in work settings.	<ul style="list-style-type: none"> <li>Increased average knowledge scores.</li> <li>92-100% of service recipients reported that PHCAST-trained workers treated them with respect, listened to them, were trained to meet their needs, and/or enjoyed working with the direct care worker.</li> </ul>
ME	50 hours	In-person Online	N/A	Online education modules are available 24/7 for all workers enrolled across the program.	<ul style="list-style-type: none"> <li>20% of trainees earned at least one credential.</li> <li>Increased perceived provider knowledge of topic areas or felt better prepared.</li> </ul>
MA	60 hours	In-person and online	1:18	Participant materials were translated into Spanish, Haitian Creole, and Brazilian Portuguese.	<ul style="list-style-type: none"> <li>English-speaking students showed an average gain in knowledge of 14%, and non-English speakers showed a 38% gain.</li> <li>90% of trainees surveyed between 6 months and two years post-training indicated high job satisfaction.</li> <li>PHCAST-trained workers required less supervisor assistance.</li> </ul>
MI	50 hours	In-person	1:12	Orientation with strict outlining of attendance and participation requirements.	<ul style="list-style-type: none"> <li>27% increase in average knowledge scores.</li> <li>77% of participants reported improved job satisfaction levels.</li> <li>PHCAST-trained workers were 20% more likely to remain in their jobs.</li> </ul>

NC	75 hours or more, depending on the career track	In-person	1:16	Integration into high schools to boost recruitment; includes resume writing, interviewing skills, workplace tech, and communications skills.	<ul style="list-style-type: none"> <li>• Increased average knowledge scores.</li> <li>• Improvements in the ability of PHCAST-trained workers to provide pertinent and relevant information as part of an integrated care team.</li> </ul>
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Table 2: PHCAST State Training Design and Outcome Comparisons

### Care Team Integration of The Home-Based Workforce (CA)

This pilot program through the California Long-Term Care Education Center (now the Center for Caregiver Advancement) trained 6,000 In-Home Supportive Services (IHSS) homecare workers. It delivered results connecting training to job satisfaction, retention, care outcomes, and cost savings.

Training modules adopted an adult-centered learning approach and were designed around five caregiver roles: Communicator, Health and Medication Adherence Monitor, Health Coach, Care Aide, and Healthcare System Navigator. The program included training on the signs and symptoms of common health conditions, basic knowledge of body systems function, workplace health and safety, and emergency response. An anchoring activity allowed attendees to reflect and share their lived experiences, followed by longer activities involving discussion, practice, problem-based learning, and scenario-based role-play where content could be practiced. Finally, a learning circle was used for all trainees to reflect on.

The program was delivered in convenient locations for workers, including churches, community centers, offices, libraries, and an Armenian restaurant. Training content was offered in six languages based on the demographics of the workforce: Spanish, English, Armenian, Mandarin, Cantonese, and Korean. The program was assessed via reviewing homework assignments and evaluating role-plays in each module. The program also conducted competency checks at the middle and end of the course. However, there was no minimum passing mark; each participant was assessed qualitatively.

86% of workers completed the entire training, of which all were CPR/First Aid trained, and passed at least 80% of their competency checks. 99% of surveyed care providers felt better prepared by learning skills useful in their work and care integration. 86% of care recipients reported better confidence in their care provider in communicating with their care team following the training program. The two-year evaluation of the effort reported a 43% decline in emergency room visits and a 41% decline in the average rate of rehospitalizations for beneficiaries whose care provider had completed the training. In one health plan, the reduced hospitalizations resulted in an estimated savings of \$12,000 per trained worker.

### Homecare Aide Worker Initiative (New York)

A PHI program in three New York City home care agencies from 2013-2014, the Home Care Aide Workforce Initiative (HAWI), included four components designed. The program began with a recruitment process for 599 new home health aides. For all hired HAWI workers, a 12-week training with a 32-module, 120-hour training was designed with adult learner-centered techniques that included small-group work, role-playing, case studies, case scenarios, and interactive presentations that engage participant's past experiences and critical thinking skills while promoting reflection, problem-solving skills, and communication. In addition to the training, the program paid experienced home health aides to assist new workers in transitioning to their new

professions. A case management service was set up to enable workers to address work-related and personal challenges pre- and post-employment as home health aides.

Around 78% of the 599 recruited home health aides completed the entire intervention. A post-intervention outcome survey of the involved home health aides found that 90% of providers reported being "very satisfied" or "somewhat satisfied" with the job. This result contrasted with the satisfaction with pay, with only 64% of participants reporting being either "somewhat satisfied" or "very satisfied" with their wages. 57% reported they were "not at all likely" to leave their job in the coming year.

While 79% of workers remained on the job three months after hire and 69% were retained at six months, only 55% were retained after 12 months. The investigators noted that participants who reported being satisfied with their wages were roughly three times as likely to stay on the job. Finally, the investigators said that providers receiving HAWI training were 43% more likely to be retained in the home health care workforce than providers who did not receive HAWI training in these home care agencies.

### **Mobile E-Learning and Support Dementia Training (Taiwan)**

To build an evidence-based e-learning program to train workers in an increasingly aging society, researchers in Taiwan conducted a cohort study to evaluate a 12-week mobile e-learning dementia care training with mentoring support and social networking. The cohort study involved 140 home care workers from two home care agencies in eastern Taiwan. These workers were selected for Taiwanese citizenship, had 3 months of experience as home care workers providing care for individuals with dementia and cognitive impairment, and had a device that could access the internet. The 140 workers were evenly divided and assessed between a control and intervention group.

The control group exclusively received an 8-hour lecture-based training. Meanwhile, the intervention group received a 2–3-hour, 8-module mobile e-learning module developed by investigators around dementia-related care competencies. These modules included behavioral management skills, common dementia care problems and care skills, needs assessment and health education for families of people with dementia, and oral care for older people with dementia. Each module was designed to be completed in 15 to 20 minutes through an e-book app with downloadable training for offline access. Intervention mentors used weekly reminders and a module checklist to nudge direct care workers to complete the course.

The second component of the intervention group was a 1:8 mentorship network support program provided online via the social networking application LINE, which is commonly used in Asian countries. The mentors offered daily support where workers could discuss care problems, receive advice, and share up-to-date knowledge on dementia care. Finally, the third component was an hour-long monthly meeting between mentors and the home care workers to discuss the abovementioned issues. This session was tailored to provide more comprehensive management strategies, encouragement, and support and improve the workers' psychological safety and support.

The intervention and control groups were assessed before and after the study for knowledge of dementia-related care through a written test. They were also measured for their attitudes towards people with dementia and their perceived competence. The study showed that the intervention group developed and maintained

increased knowledge of care for and positive attitudes toward people with dementia 12 and 24 weeks after the end of the intervention.

With a 100% completion rate, facilitators included tailored e-learning materials that involved colloquial writing styles, a simple technological interface, lively animations, images over text, and videos. Participants noted that the mobile e-learning materials were easy to understand and attracted their attention to reading and learning over traditional lecture-based courses. However, several older workers indicated that internet connection and a lack of technological skills impeded their satisfaction with the platform. Additional facilitators included reminders via the LINE app, providing small gifts and snacks at each meeting, and the provision of continuing education credits for attendance.

### **IHSS Alzheimer's Disease and Related Disorders Training Curriculum (California)**

A pilot partnership between researchers at the University of California, Los Angeles, Geriatrics Workforce Enhancement Program, and the CLTCEC studied the effectiveness of competency-based training for IHSS providers delivering care to people with Alzheimer's Disease and Related Disorders. The 10-week, 35-hour program was delivered to 57 individuals, with one 27-person cohort receiving the program in English and the other 33-person cohort receiving the program in Spanish.

The program was delivered through an adult-centered learning approach, incorporating participants' lived experiences, lectures, small groups, pair activities, and Socratic methods. The program included modules such as the roles and rights of the provider, recognizing Alzheimer's and dementia, communication skills, and assisting with sleep and aggressive behaviors. These modules were assessed through competency demonstrations at the mid and end points of the program. The training program reported a completion of 90%.

Using descriptive statistics and paired sample t-tests (a statistical technique) from pre-and post-training assessments, the training improved overall confidence in caregiving skills and knowledge. However, it was unclear whether stipends, reimbursements, or compensation were provided to the participants. The study cited challenges for adult learning in completing the training, including unreliable transportation, inconsistent access to the internet, frequent changes in phone numbers and addresses, and an inability to obtain alternate care for their consumers during the training period.

### **Home Health Aides Health Coaching Program (New York)**

As part of the New York State Health Workforce Retraining Initiative, two pilot programs to train home health aides as health coaches were developed: 1) Transitioning home health aides to serve as health coaches for older, chronically ill home care beneficiaries with heart failure, and 2) Integrating traditional home health aide responsibilities with health coaching for Medicare and Medicaid "dual eligible" beneficiaries. Both programs received a week-long classroom-based curriculum that included self-management strategies for chronic conditions, theories of change based on service models and interventions, patient motivation, symptoms of chronic illness, and motivational interviewing. The training included supportive training for coaches, including strategies to schedule follow-up physician appointments, promoting understanding and adherence to medication prescriptions, and maintaining personal health records. Following the training, five home health aides were selected to coach post-acute heart failure patients, and 34 home health aides were chosen to provide coaching and home health aide services to dually eligible beneficiaries.

The heart failure program added a health coach to a standard post-acute home care model. They made a home visit and conducted weekly phone calls during a 30-day posthospitalization period. They also conducted motivational interviewing to uncover facilitators and barriers to disease self-management and setting patient goals. In the dual eligible program, beneficiaries received services from a home health aide who also served as a health coach. The health coaches provided in-person home visits and standard home health aide practices, e.g., assistance with daily activities. The intervention also included motivational interviewing and goal setting.

As a result of the training, workers reported increased self-efficacy and confidence in their roles as health coaches, in addition to having greater awareness of chronic conditions and the potential to assist clients in achieving health goals. Workers also recognized the ability of health coaching as helping to personalize care and build stronger relationships with their care recipients.

### **CARES Dementia-Related Behavior Online Program**

The University of Minnesota CARES study recruited 40 direct care workers from 7 states to complete a 4-module training to introduce, treat, and respond to dementia-related behavior in beneficiaries with Alzheimer's disease and related dementias (ADRD). There were 17 interactive online activities and 83 videos in the curriculum. The training was conducted asynchronously; participants could log on and off and return to their stopping point throughout the training. The videos included footage in which caregivers and recipients demonstrate scenarios and context surrounding dementia-related behaviors and the experience of people with ADRD. The impact of the study was overwhelmingly positive. Participant knowledge increased by 15%, relating to key terminology and identifying dementia. A vast majority of participants (85%+) indicated that: 1) They agreed that the online program was an engaging way to learn, 2) They gained knowledge on ADRD, caring for people with ADRD, as well as care and communication skills, and 3) They would recommend it to other professionals. However, the study did not determine whether the training directly affected the quality of care for people with ADRD.