

Best Practices and Innovative Models for Stabilizing Colorado Direct Care

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Executive Summary

Personal care aides (PCA) provide most of the paid hands-on, home care received by millions of frail older adults living in their own homes, assisted living and other non-institutional settings. The demand for the PCA workforce grows as the older adult population increases and federal and state policies and funding shift from nursing homes into home and community-based settings.

Between 2016 and 2026, the PCA workforce in Colorado is projected to grow 45% and create 56,500 job openings due to occupational growth and separation. The challenges to build the capacity and stability of the PCA workforce has led to legislative bills in Colorado to increase wages and established a workgroup to review and recommend initial and ongoing training for agency-based PCAs.

The LeadingAge LTSS Center @UMass Boston conducted a literature review and key stakeholder interviews to identify and describe promising practices of state-sponsored, entry-level training and career advancement opportunities for PCAs. The focus is on agency-based PCAs because there are no federally-required minimum training standards for PCAs employed in Medicaid-funded programs providing personal care services. Colorado currently has limited training requirements for this workforce.

Training requirements for PCAs regarding training hours, competencies, curriculum content, and testing vary widely across and within states, if they exist at all. This can lead to significant differences in the skill level and preparedness of these workers and their ability to provide high-quality care. States can play a valuable role in establishing standardized training for PCAs to prepare them to care for complex clients. Seven states highlighted in the report—Alaska, Arizona, Maine, Massachusetts, New York, Virginia, and Washington—have adopted and promoted comprehensive PCA training curriculum through their state regulations that have consistency and some level of rigor in the training (i.e., hours, exam, competencies, curriculum, and certification). The training programs have not been evaluated to determine the preparation of the workforce and the impact on worker or client outcomes. Some key features of the training programs are the following:

- A stakeholder coalition informed the development of the curricula and implementation of the training. Stakeholders represented different populations and sometimes settings. The stakeholders included consumer groups, state agencies, educational institutions, workers, home care provider associations, and home care agencies.
- One state required training providers to exclusively use the state-sponsored curriculum. In the other states training providers can develop their own curriculum, but it must align with the content established in the state-sponsored training program.
- Minimum training hours ranged from 40 to 75 hours. Home care agencies, vocational schools, and community colleges provided the training. The instructor was often an RN who met specified criteria, such as teaching or caregiving experience. Several states

approved the instructors and/or training organizations and listed them on the state website.

- Portability of PCA training across settings and direct care worker positions enhances career mobility and workforce flexibility.
- It is estimated one full-time equivalent staff person to write the curriculum or facilitate a stakeholder process to agree on the competencies and training modules and work with a consultant to write the content. The state incurs costs in the implementation if they have a role in oversight and monitoring, maintaining a database of approved instructors or training providers, and/or certification.
- Home care agencies generally do not charge a fee for their employees to take the training, though employees may be required to reimburse the agency if they leave before a specified time period. Vocational schools and community colleges typically charge a fee or credit hours that is determined by the school (\$200 to \$1400).

Career paths for PCAs through advanced roles, such as specialized or senior aide positions, peer mentors, and health coaches can improve retention in the long term and allow employees to grow and progress in their careers. PCAs also can be part of interdisciplinary healthcare teams either as full members or through regular reporting structures to allow for more informed decision making about client care based on the PCAs' knowledge of the client's condition. These opportunities enable PCAs to take on more expansive and satisfying roles, which can reduce turnover and make the job more competitive. The PCAs require advanced training and extensive supervision. Most of these programs are pilot demonstrations with promising outcomes; however, the demonstrations struggle to continue beyond the grant funding and lack formal evaluations to provide an evidence-base on the effectiveness.

One impediment to the expansion of the PCA role is the degree states are willing to modify their nurse practice regulations and allow aides to perform paramedical tasks. States should have guiding principles to facilitate and standardize nurse delegation, such as delegation algorithms and protocols to determine client eligibility and competence of the PCA, training, and supervision.

Apprenticeships have been difficult to implement and sustain in LTSS because of lack of sustainable funding, ability of employers to pay wage increases and cover costs of financial and time resources, lack of awareness, and challenges in program development and administration. Washington state serves as a model for providing PCA apprenticeship opportunities. Apprentices have peer mentoring and support, competency-based training and assessments, and they receive an increase in their wages upon completion of the training and passing the exam.

Colorado is considering reforms to their programs aimed at improving the quality of training standards and career paths for PCAs. Recommendations include the following:

- Designate specific competencies but provided latitude for training providers. This allows trainers to customize and accommodate the training based on the abilities of the trainees and the populations being served. To ensure quality, the state should provide initial and ongoing oversight and monitoring of the training providers.
- Engage stakeholders representing different settings and population in the curriculum development process.
- Outline core competencies that cut across different settings and populations for the core training. A universal worker training program can break down the silos, prevent duplicative training for PCAs and allow them to build upon existing skills with further training. The Centers for Medicare and Medicaid Services' identified competencies for direct care workers and common modules and topics across state programs and those recommended by the Training Advisory Committee can be a starting point to build the curriculum. Population-specific knowledge can be added to the core training.
- Assess competencies through knowledge exams and in-person skills demonstration. Create alternative options to written exams to accommodate all learners. Also, have the training and exam available in multiple languages and be culturally competent.
- Incorporate an adult learner-centered approach in delivery of the training. This approach is possible for in-person training and eLearning platforms. Provide guidelines or training for the instructors in how to deliver the curriculum for this workforce and fidelity to the model.
- Training hours varied from 40 to 75 hours. It is difficult to recommend a specific number of hours for training PCAs. The number of hours should be based on the competencies defined for the workers and the time needed to train the workers in the knowledge and skills required to demonstrate each competency. We recommend working to create logical career ladders or lattices for PCA trainings that work in concert with their certified nursing assistant or certified home health aide programs and regulations.
- Review the laws and regulations that might affect implementation of the enhanced role model(s) for any limitations on the role of PCAs. These may include Medicaid rules and regulations, Nurse Practice Acts, licensing requirements, legal liability issues, and other laws and regulations relating to the delivery of healthcare that would need to be examined and taken into consideration in any area where this concept is developed.
- One challenge is employer's willingness to adopt advanced or enhanced roles for PCAs and integrate them into interdisciplinary healthcare teams. The advanced roles need to be acknowledged as a different job category with more advanced tasks and responsibilities. It is important to understand how it gets implemented at the agency and to receive buy-in from the end users or employers. Employers should be engaged when developing these roles or thinking about integrating PCAs into home-based care teams with discussions about supervision, training on advanced skills, ability to pay increased wages for the PCA and supervisor, performance evaluations, and employer's assessment of using a PCA in an advanced role or part of a home-based care team and having the clientele requiring an advanced PCA position.

- Scale up and test the advanced role models to make an evidence-based case for sustained investment.
- Build training and advanced role costs into Medicaid or managed care programs so there is continued funding for training, support for the aide, and increased compensation for the enhanced position. Explore how to use Medicaid reimbursement strategies to incentive providers to create more professional development opportunities for their PCAs. Build on the pay-for-performance to target dollars to successful programs in home settings that specifically provide advancement opportunities for PCAs or build reimbursement for additional services provided by PCAs when they are part of a coordinated care system.

Introduction

Among society's most pressing question with the aging of the population is who will care for the growing numbers of older adults who need assistance with routine tasks, such as bathing, dressing, and cooking. Home health and personal care aides (PCA) provide most of the paid hands-on care received by millions of frail older adults living in their own homes, assisted living and other non-institutional settings. Nursing assistants and certified nursing aides provide the majority of care to residents in facilities.

The personal care aide workforce delivers personal care (eating, bathing, dressing, toileting) and assistance with daily activities such as housekeeping, meal preparation and laundry to help care recipients function as well as possible in their homes. However, the personal care aide workforce is not a monolithic occupation category. Under strict registered nurse (RN) supervision, home health aides typically provide assistance to individuals receiving post-acute care and/or rehabilitation covered by Medicare or Medicaid following a hospitalization, a short stay in a skilled nursing facility or an acute episode in the home. Although there is some overlap between home health and personal care aides, personal care aides are more likely to be caring for individuals who need LTSS due to chronic conditions and physical and/or cognitive functional disabilities. Personal care aides can be employed by an agency or directly employed by a consumer who hires, supervises, and pays personal care aides directly. States have different titles for the personal care aide workforce. In this report we refer to the aides as personal care aides.

The personal care aide workforce is growing as the delivery of Medicaid-funded LTSS has shifted from nursing homes into home and community-based settings. Federal and state policies are also providing incentives for hospitals and health systems to rapidly move people with serious illness from acute care settings into the home (Enquist, Johnson, Lind, & Barnette, 2010; Landers, et al., 2016).

Overview of Colorado on Direct Care Worker Issues

While Colorado recognizes the need to create a stable, high-quality personal care aid workforce to meet the demands of individuals requiring LTSS in their own homes, the state has limited mandated training for personal care aides. Agency-employed personal care aides are only required to receive an orientation in six broad topics within 45 days of hire. Those under Medicaid programs are required to complete 20 hours of training in 19 broad topics before providing services. However, a proof of competency is not required. Personal care aides are exempt from the training by passing a skills validation test (PHI, 2019). Colorado has taken steps to address the personal care aide workforce issue.

In 2012, the Office of Community Living was created within the Colorado Department of Health Care Policy and Financing (CHCPF) to meet the needs of individuals who require LTSS. In 2015, the legislature created the Strategic Action Planning Group on Aging to examine the impact of

shifting demographics for older adults and the state.

Colorado House and Senate passed two bills to help build the capacity and stability of the personal care aide workforce. House Bill 18-1407 required the CHCPF to seek federal approval for a 6.5% increase in the reimbursement rate to fund enhanced compensation for direct support professionals who provide services to people with intellectual and developmental disabilities starting Fiscal Year 2018-2019 (Colorado 72nd General Assembly, 2018). Senate Bill 19-238 required, among other actions, an 8.1% increased reimbursement rates to providers for Fiscal Year 2019-2020 and the additional reimbursement funding go towards increased compensation for personal care aides. The bill also established a minimum wage for personal care aides employed at home care agencies that receive Medicaid reimbursement. The minimum wage was set at \$12.41 per hour effective July 1, 2020 (Colorado 72nd General Assembly, 2019). In addition, Senate Bill 19-238 required stakeholder-driven recommendations for review and enforcement of initial and ongoing training requirements for personal care aides. The stakeholders included a range of representatives such as consumer advocacy organizations, home care agencies, worker organizations, disability, senior, and children advocacy organizations, and personal care workers. The stakeholder group also was mandated to determine notification requirements for personal care aides about the compensation increases and minimum wage.

Based on the legislative bill requirements to improve and stabilize the direct care workforce, the CHCAP and the Colorado Department of Public Health and Environment (CDPHE) established a Training Advisory Committee (TAC) to review the current state of initial and ongoing training for agency-based personal care aides, enforce the training, and make training and worker notification of pay increase recommendations (Government Performance Solution, Inc., 2019). The TAC held learning sessions to hear from key stakeholders regarding the current and proposed training and notification requirements as well as meetings to understand the issues facing personal care aides, the agencies, and the clients receiving the care. The TAC made the following recommendations:

1. Develop standardized and portable initial training and standardized advanced training requirements for personal care aides. The TAC suggested potential topics and modules for the initial and advanced training of personal care aides. The recommendations also included the following for each training topic:
 - a. Training completed before contact with client **or** within 45 days for initial training. Advanced training was recommended to be optional or as needed.
 - b. Recurrence interval
 - c. Competency test: Yes/No
 - d. Skills demonstration: Yes/No
 - e. Portable: Yes/No
 - f. Training Modes: In-person, video or online, or hybrid (in-person and video/online)

2. Create standards for trainer qualifications.
3. Continuous review and revision of minimum training requirements based on stakeholder feedback and needs of client, workers and agencies.
4. HCPF and TAC publish notification language of wage increases and compensation changes to be used by agencies with at least two notification methods and verify compliance with compensation notifications.
5. HCPF and CDPHE (as needed) establish rules requiring agencies to provide state-required minimum training to employees, documentation in each employee's record, and provide oversight and monitoring. HCPF and CDPHE examine evidence of compliance with training requirements by the agencies.

HCPF, in collaboration with other state agencies, is building on this work to continue examining the challenges facing Colorado's direct care workforce and the solutions to meet the challenges. As part of this effort, the LeadingAge LTSS Center @UMass Boston (the Center) conducted a study to identify and describe potential strategies that address the goal to develop a stable and high-quality PCA workforce to prepare and plan for the growing demand of LTSS. This includes best or promising practices for entry-level training, career advancement opportunities, scope of work and supervision, and apprenticeships as well as recommendations and the applicability and feasibility to implement the promising practices. A second component of the project was data analysis of the Colorado direct care workforce to describe the landscape. The variables of interest were the projected population of older adults, demographics, wage earnings, educational attainment, foreign-born workers, poverty rates, participation in public assistance programs, hours of work, employment status, stability of the workforce, current supply and demand of workers and future projections, and the care gap. The research team found during its review that other organizations had already conducted these analyses at the state level and were being conducted at the county-level. Therefore, the decision was made to not duplicate this work. The report summarizes the findings from a comprehensive review of the literature on state-sponsored entry-level training programs, nurse delegation, advanced roles, and apprenticeships. It also highlights the key findings from interviews with representatives of state agencies—Alaska, Arizona, Massachusetts, Virginia, and Washington—to discuss their state-sponsored training programs. These findings are integrated into the report. The recommendations can provide guidance to Colorado as the state evaluates options for standardized personal care aide training and creating sustainable advanced role opportunities for personal care aides.

The focus of the study is on registered personal care aides employed by home care organizations, home health agencies, hospice agencies or other organizations. It does not include nursing assistants in nursing homes or home health aides, independent personal care aides, unregistered personal care aides, or in-home support service providers who are hired by the consumer. While certified home health aides and certified nursing assistants are required to have at least 75 hours of training, including at least 16 hours of supervised clinical training, personal care aides do not have required training and the state determines the training

requirements. Training requirements for agency-employed personal care aides vary by state—content, training mode and transferability of training—and states differ in whether training is required and monitored versus recommended. Training for personal care aides in Colorado is limited and lack enforcement from the state. This is why the report focuses on agency-employed personal care aides training programs. It builds on the recommendations from TAC on the training requirements for this workforce. The section on advanced roles for personal care aides include models targeted at independent providers and home health aides. The literature had few examples of these opportunities for personal care aides. We included these programs for the home health aides and independent providers as the training topics and responsibilities of the aides overlap with the potential tasks for a personal care aide.

Methodology

The project was a secondary analysis of published and grey literature. As a first step, the research team conducted a comprehensive literature review of the entry-level training and certification programs for personal care aides as well as specialized skills training, state efforts to expand nurse delegation laws to allow for more tasks and job responsibilities, apprenticeships, and advanced personal care aide models.

The research team identified areas where there is literature currently in place. Search criteria were organized by specific topic areas:

- State-sponsored training curricula for personal care aides;
- Advanced roles for personal care aides;
- Career lattices for personal care aides and home health aides;
- Nurse delegation;
- Evaluation of personal care aide advanced roles;
- Continuing education for personal care aides;
- Integrating direct care workers into home-based care teams; and
- Long-term care apprenticeships.

The primary focus was on peer-reviewed publications. However, other documents such as trade magazine studies/reports, summary documents of training programs, such as PHI series on state-sponsored curricula, state regulations and legislation, review of websites, and presentations were included.

The search strategy protocol included the combination of search terms to be queried for each database. The databases reviewed included Cochrane Library; Academic Search Complete; ERIC; Google Scholar; Social Sciences Index; PubMed; PsycINFO; Social Science Search; and AgeLine. The research team searched for published, peer-reviewed evidence and grey literature that could best answer the central topic areas. Per the literature search and findings, an outline was developed to synthesize the literature by topic areas. The research team complied and synthesized all of the findings.

The research team also conducted interviews with representatives from state agencies involved in the development and/or implementation of the training program. The team was able to conduct interviews with stakeholders in Alaska, Arizona, Massachusetts, Virginia, and Washington to gain more insights about the training programs not available in the literature. While the research team reached out to individuals in New York and Maine, we were not able to schedule interviews.

Background on Colorado Direct Care Workforce

Older Adult Population and Projected Growth

The Colorado older adult population is increasing and growing faster than most other states. In 2017, approximately 714,000 people in Colorado were 65 and older and the number is expected to double to 1.7 million older adults by 2050. This will represent approximately 20 percent of the population. The growth in Colorado primarily comes from residents aging in place. (Gomez, 2019). The U.S. older adult population will be more ethnically and racially diverse and Colorado is projected to see a similar change. In 2015, 16 percent of older adults in Colorado were minorities and that percentage is expected to increase to 28 percent by 2040 (Colorado Department of Public Health and Environment, 2015).

In 2013, 91 percent of adults 65 and older in Colorado had at least one chronic condition and 70 percent had two or more chronic conditions (Colorado Department of Public Health and Environment, 2015). Estimates suggest that nearly 70 percent of U.S. adults aged 65 and older will need some level of long term services and supports (at home with paid or informal caregivers or at nursing homes or assisted living facilities) due to physical, cognitive, development, and/or behavioral conditions. They will use these services for an average of three years (LongTermCare.gov, 2017). Adults 85 and older are four times more likely to need LTSS compared to people 65 to 84. Among individuals receiving services, most live in the community (PHI, 2020a).

Colorado Supply and Demand

As Colorado ages, the demand for the direct care workers (personal care aides and nursing assistants) who provide more than 80% of the hands-on-care is growing. The projected growth of the personal care aide workforce in Colorado due to demand in industry and employment trends is 11,760 jobs or 45% growth between 2016 through 2026 (Kuwik, 2020; PHI, 2020b). The anticipated number of separations during the same period is 44,740, which are caused by workers leaving the labor force through retirement, disability or other reasons or moving into a new occupation. This results in a total of 56,500 job openings for personal care aides due to occupational growth and separation (PHI, 2019). Personal care aides have a higher number of total job openings between 2016 through 2026 compared to nursing assistants (33,000) and home health aides (26,300).

Workforce Demographics

Colorado's direct care workforce is primarily women (85%) and disproportionately black (10%) and Hispanic (25%) compared to the overall Colorado workforce (Kuwik, 2020). More than half (58%) of the Colorado workforce identifies as white. The Colorado direct care workforce is slightly older and more educated than the state's workforce as a whole. Forty-five percent of the direct care workforce in Colorado is 45 years and older and 64% has some college or an associate's/bachelor's degree or higher. Over 90% of the personal care aides in Colorado are U.S. citizens by birth.

Similar to personal care aides across the country, they earn low wages in Colorado (Kuwik, 2020; PHI, 2020b). Colorado personal care aides earn an hourly wage of \$11.68, which is the lowest among the direct care workforce: Home health aides earn an average hourly wage of \$12.14/hour and nursing assistants \$14.19/hour. One reason for the lower wages among PCAs is a smaller percentage worked full-time in 2018. Half of PCAs worked full-time while 45% worked part-time for non-economic reasons (personal or family obligations and health problems) and six percent were part-time for economic reasons (business conditions at the organization or in the broader labor market). This compares to 84% of aides who worked full-time in nursing homes and 97% in residential care homes. Low incomes mean higher poverty rates. In 2017, 17% of the PCA workforce lived in households below the federal poverty line. Because poverty rates are high among personal care aides, over half rely on some form of public assistance—22% relied on food or nutrition assistance and 34% relied on Medicaid. The uninsured rate was 16% and 46% relied on public health care coverage, most often Medicaid or Medicare (PHI, 2020b).

Given the increasing demand for long-term services and supports and the limited supply of workers, it is important to understand how to recruit and retain personal care aides to provide care to older adults and younger people with disabilities. Colorado has taken action to prepare serving aging communities. This report highlights promising practices in state-sponsored entry-level training programs, nurse delegation, advanced roles, and apprenticeship opportunities that can serve as potential strategies to address the PCA workforce crisis in Colorado. Information on the state-sponsored training programs can build on the work of the Training Advisory Committee that recommended standardized training and specific training modules/topics for personal care aides.

Personal Care Aide Landscape

Personal care aides do not have federal training requirements and it is up to the states to determine what, if any, training for PCAs. PHI examined the personal care aide training requirements across the country to collect information about PCA training standards in Medicaid programs (PHI, 2019). A large proportion of the PCA workforce serves consumers in state Medicaid programs — Medicaid State Plan Personal Care Options, Medicaid Home and Community-Based Services (HCBS) waiver programs, and under Medicaid 1116 Demonstration waiver programs. The study found the training requirements regarding hours of training, competencies or skills required, curriculum content, and testing vary widely across and within states, where they exist at all. This

can potentially lead to significant differences in the skill level and preparedness of these workers across the country and their ability to provide high-quality care. The findings of training requirements, hours of training, competency assessments, and instruction methods for PCAs were the following.

- **Training Requirements**
 - 14 states have consistent training requirements for all agency-employed PCAs. This means the state has a set of regulations that specify training content and/or duration.
 - 7 states do not regulate training for PCAs.
 - 29 states and the District of Columbia (DC) have varying requirements for agency-employed PCAs, depending on whether the PCAs are employed in an agency that has specific Medicaid programs or private-pay home care agencies.
- **Training Hours:** 26 states require a minimum number of training hours for PCAs in at least one set of training requirements. 15 states and DC require 40 or more hours of training.
- **Competency Assessment:** 34 states and DC require PCAs to complete a competency assessment after training in at least one set of training regulations.
- **Instruction Methods:** 17 states require instruction methods in at least one set of regulations. This includes 11 states and DC that require trainers to use a state-sponsored curriculum or curriculum outline.

State-Sponsored Training Curricula for Personal Care Aides: Promising Practices

States can play a valuable role in establishing and disseminating best practices for preparing personal care aides to care for older adults and provide complex care. While many training requirements for PCAs are minimal, seven states have adopted and promoted comprehensive PCA training curriculum through state regulations that have consistency and some level of rigor in the training—Alaska, Arizona, Maine, Massachusetts, New York, Virginia, and Washington.¹ State-sponsored curriculum is defined as a curriculum that was created by the state or for the state and is intended to be either a model for training or act as the required training for personal care assistants. The curricula share similarities in terms of content but can differ in how the content is organized, delivery of the training, and robustness of the training.

The seven states have variation as to whether the curricula is required or simply recommended. One state requires trainers to use the standard curricula but the trainers can add topics and materials to the training program. This provides the state greater control and fidelity to the model. The other states do not mandate use of the curricula and allow provider agencies or

¹ It is not clear whether Virginia continues to mandate training for personal care aides and the use of the personal care aide curriculum/manual developed by the Virginia Medicaid office. The interviewees indicated the regulations changed and there is no longer a state-sponsored curriculum. However, they were not able to provide specifics and we attempted to follow-up with the Medicaid office to get clarity but have not been able to talk with them to get more information.

training entities to create their own training. However, most of these states do require that the training cover the same competencies outlined in the state-sponsored curricula. The basic core training for personal care aides in the state of Washington allow trainers to create their own curriculum but the training has to follow the teaching methods prescribed in the state-sponsored training (Washington Administrative Code [WAC], 2019). The states have varying degrees in the endorsement of adult learner-centered teaching methods and competency-based content. See Appendix A for a summary of the key components of each state training program and a detailed description.

Collaborative Process for Developing Training Models/Curricula

States with state-sponsored curricula for personal care aides typically created a stakeholder coalition and/or advisory committee to inform the development and implementation of the training. Common partners included consumer groups, state agencies, educational institutions, and home care provider associations and agencies. These groups provided recommendations on training hours, content, and certification requirements for personal care aides. In a few states, they also had an ongoing role in supporting implementation of new training requirements. This process was essential for buy-in to both implementation and sustainability of the training programs and models. While essential, these groups also faced challenges related to communication across stakeholder groups and consensus-building on skills and knowledge that should be addressed in training (Campbell, 2018; Campbell 2017a; Campbell, 2017b; Campbell, 2017c).

Arizona's advisory committee helped sustain and maintain fidelity to the model. The committee also moved from voluntary adoption of the training to having the requirements included in the Medicaid contracting standards. This was to help address provider reluctance to expand or amend existing training programs voluntarily and help reach many of the providers as Medicaid is the largest payer of personal care services. In addition, the advisory committee initially hosted train-the-trainer workshops to familiarize trainers with teaching the curriculum (Campbell, 2017a).

The Alaska Mental Health Trust Authority sponsored the development of core competencies for direct care workers that cut across multiple sectors of long-term services and supports. The group developed recommended schedules for organizing the content into training sessions for workers, handouts, self-assessment tool for workers to rate their skills after learning each competency, and guidance on how to adapt the curriculum to specific settings or jobs. While Alaska Department of Health and Social Services (DHSS) has yet to mandate the use of the competencies developed through this effort, it does endorse their use for updating training programs or as a foundational source for new training curricula (Hoge & McFaul, 2016).

Massachusetts developed its curriculum through a grant from U.S. Department of Health and Human Services, Health Resources and Services Administration. The grant 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 (MassAHEC Network – UMass Medical School, 2015).

Washington passed legislation that changed the personal care aides training system (Dawson, 2016). The legislation required a minimum of 75 hours of entry-level training and 12 hours of continuing education. The Training Partnership, governed by labor-management partnership with 50 percent employer-designated representation and 50 percent union-designated representation on the board of trustees, created the statewide system for training personal care aides. The Training Partnership conducted a needs assessment with stakeholders and established panels for each training course, which included personal care aides, employers, consumers or their representatives, and the state of Washington, to align competencies needed in the workplace. They also consulted with subject-matter experts in areas such as ergonomics, cultural congruence, mental health, psychometrics, aging, disabilities and other specialized areas to provide their expertise to training design and course development.

Curricula Content

The curricula for the seven state-sponsored training programs all begin with an introductory module which identifies the roles and responsibilities of the personal care aide, and sometimes provides an overview of working within the agency setting or the relevant state agency. Other topics that were covered to some extent across the curricula include:

- Legal and ethical issues;
- Aging process;
- Communication;
- Infection control and standard precautions;
- Safety and body mechanics;
- Positioning, transfers, and ambulation;
- Personal care skills, such as activities of daily living (ADLs) and instrumental activities of daily living (IADLs) ;
- Rehabilitation and restorative care;
- Home management; and
- Nutrition and food preparation (Alaska Administrative Code, 2018; Alaska Department of Health and Social Services [DHSS], 2019; Arizona Health Care Cost Containment System [AHCCCS], 2014; Arizona Direct Care Initiative , 2011; Maine Department of Health and Human Services [DHHS], 2019; MassAHEC Network/UMass Medical School [MAN/UMMS], 2015; New York State Department of Health [DoH], 2007; Virginia Department of Medical Assistance [DMAS], 2003; Washington State Department of Social and Health Services [DSHS], 2015).

While these topics were seen across the board, the depth that each curriculum delves into certain topics varies. For example, Maine and Arizona's curricula have entire modules on communication while Virginia's curriculum does not have a specific module dedicated to communication, even though effective communication is the first task on the skills checklist (Maine DHHS, 2019; Arizona Direct Care Initiative, 2011; Virginia DMMS, 2003).

The Centers for Medicare and Medicaid Services (CMS) generated a list of competencies for frontline staff through a comprehensive inventory of common competency lists from across settings in LTSS and input from key stakeholder groups—consumers, family members, direct services workers, state representatives, provider agencies, and training development experts (National Direct Service Workforce Research Center, 2014). The CMS core competencies include:

- Communication,
- Person-centered care,
- Evaluation and observation,
- Crisis prevention and intervention,
- Safety,
- Professionalism and ethics,
- Empowerment and advocacy,
- Health and wellness,
- Community living skills and supports,
- Community inclusion and networking,
- Cultural competency, and
- Education, training and self-development.

In reviewing these competencies compared to the key topics covered across the state-sponsored curricula, we found less emphasis on empowerment and advocacy, community inclusion and networking, and education, training, and self-development, with the exception of Washington and to some extent Arizona. Most of the states touched upon cultural competency but the depth of the coverage varied across the states and tended to not be addressed as extensively as other topics.

Two states also have a separate, population-specific training curriculum in addition to the core basic training. Most workers in Arizona are required to complete specialty training on the population they will serve. One covers older adults and people with physical disabilities and the other specialty training addresses people with developmental and intellectual disabilities. Washington offers population-specific training on mental health, dementia, aging, and development disabilities. The population-specific training can be integrated with the basic core training.

Training Hours

Arizona was the only state not to require a minimum number of training hours for personal care aides. The Arizona Direct Care Workforce Committee tasked with developing the curriculum had concerns about potential costs associated with implementing this type of requirement and decided the quality of the program would be evident through standardized test results (Arizona Department of Economic Security [DES], 2007). The training hours for the remaining states ranged from 40 hours to 75 hours. Alaska, New York and Virginia required 40 hours for the training, Maine requires 50 hours, and Massachusetts requires 60 hours (Alaska Administrative Code, 2018; Virginia DMMS, 2003; New York State DoH, 2007; Maine DHHS, n.d.). Washington's training hours were the highest at 75 total hours. Some of the programs go further by designating how much time should be spent in certain modules. For example, New York specifies how much time should be spent in each module (New York State DoH, 2007). Washington's training is segmented into three separate curricula: a three-hour safety training, a two-hour orientation, and the 70-hour basic training (WAC, 2012).

Not all the training programs specified the number of clinical hours within the training requirements. The range of clinical hours among those reported were 10 to 16 hours.

Training Methods

The review found a range of requirements for teaching methods in the state-sponsored PCA training (Alaska Administrative Code, 2018; Alaska Department of Health and Social Services [DHSS], 2019; Arizona Direct Care Initiative, 2011; Maine Department of Health and Human Services [DHHS], 2019; New York State Department of Health [DoH], 2007; Virginia Department of Medical Assistance [DMAS], 2003; Washington State Department of Social and Health Services [DSHS], 2015). The state-sponsored curricula reviewed utilized either in-person or hybrid methods to deliver training. The hybrid learning includes videos and e-learning and can be interactive. The states often require that the skills training be provided in-person and to be hands-on. Training entities in Massachusetts and Washington must adhere to the adult learner-centered methods described in the curricula. For example, Massachusetts modes of instruction include case scenarios, role playing, small group work, interactive presentations, and participants are encouraged to ask questions and facilitators provide concrete examples of how the material being taught is relevant to the particular situations that participants may encounter. Washington State has simulated classrooms that help adults learn by doing and immerse trainees into a home-like environment. The training program also contextualizes basic skills, such as problem solving and effective communication, to the context of personal care services. The other state-sponsored curricula also require or recommend that trainers incorporate diverse learning activities into their curricula, such as skill demonstrations, groups discussions, and case studies. However, the specification of these activities varies widely across the curricula.

The curriculum in a couple of states references a textbook as the primary resource for the training. For example, in Maine the curriculum outlines the learning objectives for each module that is covered in the textbook *Providing Home care – A Textbook for Home Health Aides*. Since the textbook is for training HHAs and CNAs, not all the content in the book is covered in the PCA

training. Most training programs in New York use *Mosby's Textbook for the Home Care Aide* to teach the core content. New York training sites also can bring in expert speakers to present on specific topics (e.g., a nutritionist lectures on special diets or a hospice nurse lectures on caring for dying patients).

A unique aspect to the Washington state program is the Training Partnership designed a peer mentoring program to provide personal care aides with advice, assistance, and support from experienced and trained mentors. It helps aides with their understanding of the training material and the job. The peer mentors support aides to analyze and solve problems, improve their understanding of communication styles and the role of communication in delivering quality care, and increase their ability to demonstrate professionalism and sensitivity toward individual and cultural differences. New aides are paired with an experienced mentor who speaks the same language and who lives in the same geographic region for a 12-hour engagement. Mentors must meet specific requirements such as at least one year of experience as a personal care aide and participate in 12 hours of training. Peer mentors may mentor multiple personal care aides at the same time. The peer mentoring programs provides a professional development opportunity for the mentors and they are paid an extra \$1 per hour for their time spent as a mentor.

Trainers

Most states list approved entities and/or instructors to provide the training. These include private vocational programs, provider agencies, and educational institutions (e.g., high schools, community colleges). One requirement for many states is the instructor is a registered nurse (RN) as well as social workers and physical therapists for specific components of the training. States require that instructors meet specified criteria, such as work and/or teaching experience and being in good standing, and/or pass tests on the competencies they will be teaching. For example, Arizona requires the instructor to pass the written exam (92% to pass) and skills demonstration (100%). Most states provide limited guidance or training for the instructors. Arizona initially provided train-the-trainer workshops to build a cadre of trainers but no longer offers any guidance or training for the instructors. The workgroup revising the training curriculum is considering developing guidance for the instructors as they look to improve them. Massachusetts provides train-the-trainer workshops to familiarize new trainers with the teaching of the curriculum and to help ensure fidelity to the model.

Arizona Health Care Cost Containment System (AHCCCS), the Medicaid agency in Arizona, conducts audits of its approved training entities and subsequent onsite annual audits. This is to ensure they have qualified instructors, space and materials for the training. Audits are moving from being conducted within the first 180 days of approval to prior to receiving approval. Arizona is making this change because they found from the onset the organizations did not always follow the guidelines for training outlined in the policy. By having the audit before approval, they can address the issues upfront. Training organizations that do not receive any deficiencies at their annual audit, then the next audit is not for another two years (AHCCCS, 2014; D. Johnson & B. Kennard, personal communication, June 18, 2020).

Assessment

All state training programs lead to a certification of completion after completing the training and passing a written or oral exam and skills demonstration of the competencies outlined in the curriculum. The certification provides the worker documented proof they have completed and passed the training. This allows the worker to more easily change employers while also professionalizing the role of the PCA.

States require a minimum score on the written or oral knowledge exam, ranging from 70% to 80%. Some states offer the exam in multiple languages. Alaska also allows students to demonstrate skills and is in the process of assessing other alternative formats for the exam to accommodate all students. Students typically must receive a perfect score on the return demonstration skills test. The demonstration of competency involves a checklist of skills and trainees are observed in demonstrating their technical competencies. New York allows some flexibility in the assessment of skills. Trainers are required to assess 12 mandatory skills and they can test two other optional procedures of their choosing, which should be related to the typical caseload or other needs of the agency.

Time Requirement to Complete Training

The state-sponsored training programs varied in the time requirement to complete the training and certification, unless otherwise exempt from the training and testing requirements. It ranged from approximately three months to six months from the hire date. Several of these states do not allow PCAs to provide direct care until they receive the certification and they have to complete some portion of the training and/or orientation upon hire. For example, Maine requires PCAs who have not met the training and examination requirements to take an eight-hour orientation by the employing agency that covers the roles and responsibilities for the position. Washington state requires the orientation and safety training (5 hours total of the 75 hours of training) to be completed before providing services and specifies supervision of aides who have not received the certificate for completion of the basic training. While PCAs in Arizona have 90 days to complete the certification, they are required to complete the basic training upon hire and cannot provide direct care until they have their certification. Virginia was the only state that required that PCAs complete the training and receive the certification before providing any services.

Washington trainees who are not English-proficient are provided an additional 60 days to obtain the training and certification.

Exemptions for Training

States also have created an option for workers who have specified experience to be exempted from the training. This can include prior caregiving work experience, workers who are already certified as nursing assistants, licensed practical or vocational nurses, and registered nurses since

their previous training exceeds the PCA training requirements. Also some states exempt existing workers hired prior to the implementation of the required training. States such as Arizona, New York and Washington require individuals to pass a challenge test or competency evaluation, which evaluates a student to determine if they can demonstrate the required level of skill, knowledge, and behavior with respect to the identified learning objectives of the course. Workers who do not pass the challenge test may not retake it and must go through the mandatory training.

Portability of Training

The state training programs generally allow workers to transfer and build on recognized competencies from one role or setting to another. This is important because it enhances career mobility among the personal care aide workforce. Maine, Massachusetts, New York, and Washington allow PCAs to complete an abbreviated training program, or bridge program, to become a home health aide or nursing assistant. One challenge has been the lack of programs to receive the abbreviated training and some personal care aides have to repeat training in areas they have already mastered. PCAs in Maine are also able to work across multiple settings including the home, residential settings, assisted living centers, adult day programs, and hospitals and other healthcare settings. In Arizona PCAs receive credit for the training to be transferred to other settings, such as assisted living, but it does not count towards the CNA or HHA training and certification.

Virginia does not allow PCA training credentials to be transferred to other direct care positions or settings or toward training or certification for home health aides or nursing assistants. The training and testing records only are portable and transferable from one employer to another, which is available through the state's database.

State Training Costs

There is little information on what it costs to develop, implement and sustain a state training program for PCAs. In 2015, Washington expected to spend \$13.1 million on training and support for its students. The state is in the unique position that contributions of participating employers for SEIU 775 members through a collective bargaining agreement provide the majority of the revenue, which is not common for most personal care aide training programs (Choitz, Helmer, & Conway, 2015). The estimated cost of state certification for personal care aides is \$1.5 million and approximately \$1.8 million covers administrative costs.

The literature did not have valid costs for New York's personal care aid training program but the estimated costs of the home health aide training ranges from \$500 to \$1,200 per person (Rodat, 2014). This depended on the number of home health aides in the training class, length of the training, number of trainings, and other considerations such as accessibility of the required setting for the clinical supervision component of the training. Additional costs include state oversight via the survey and certification and training program approval processes.

Interviews with state representatives provided some insights into the costs to develop and implement the program. However, states could not provide a dollar amount for the costs. The estimated cost to develop the curriculum was one full-time equivalent staff person to either develop the curriculum or facilitate the stakeholder process to identify the competencies, modules and topics and work with a consultant to write the curriculum.

States varied in the level of oversight and monitoring of the training program once it was implemented. Some states provided little oversight and therefore did not have costs in the implementation of the training. They also did not pay organizations to provide the training or pay the instructors. Other states incurred costs in their role to monitor the training programs, approve the instructors or training organizations and maintain a database, and certification of the PCAs. This ranged from $\frac{1}{2}$ to one full-time equivalent to provide the oversight once the training program was developed.

Employer and Employee Costs

The costs of training for the student often depends on the training program model. Agencies are mixed on whether they charge employees a fee for the training, though interviewees across states believed most agencies do not charge their own employees for the training. Agencies that cover the costs may require the employee to work at the organization for a specified period of time or reimburse the agency for the training costs (B. Rector, C. Morris, & C. Plante, personal communication, June 1, 2020; K. Thrasher-Livingston & C. Lynche, personal communication, June 9, 2020; L. Gurgone, personal communication, June 8, 2020; D. Johnson & B. Kennard, personal communication, June 18, 2020; L. Gurgone, personal communication, June 8, 2020). Proprietary schools and community colleges often charge a fee for the training. They can determine the fee and the state generally doesn't have a limit. States provided ranges from \$200 to \$1,400 for the training. Community colleges charge credit hours for the training.

Employers across the states, for the most part, pay their employees for their training time. In general, this is not a requirement of the state and is usually at the discretion of the employer agency.

Challenges/Lessons Learned

The literature is limited on the challenges with development, implementation and sustainability of the state training programs. Interviews with representatives from various state agencies gleaned some insights into their lessons learned in the development and implementation of their training programs. These include the following:

- Members of the advisory groups did not always agree on the key competencies and differences sometimes emerged based on the clientele served by the workers. Alaska addressed this by involving a large number of stakeholders representing varied health and human service sectors, creating a transparent development process, and having multiple opportunities for input into final content of the competencies to help with buy-in.

- Agencies are plagued by low reimbursement rates and small operating margins with few resources to spend on training. High turnover rates create a continuous need to train new workers, which increases costs. In addition, state governments can be reluctant to directly fund the costs associated with training or create unfunded mandates that require training, certification, or credentialing. As a result, employers may be hesitant to widely adopt the use of competencies to train workers. State agencies may want to develop a financial model to identify the cost to an employer to adopt the core competencies and explore various options for incentivizing employers to train the workers in the competencies.
- Washington examined its certification rates and found that three in five trainees completed the certification requirements. One reason was issues with the non-English written test. Over half of those who took the test in languages other than English failed the test, while one in six who took it in English failed. Lawmakers took steps to address the low certification rates among individuals who are not English-proficient. It extended the certification deadline 60 days, from 200 days within time of hire to 260 days, for those with limited English proficiency. It also partnered with providers to improve the foreign language materials and funded translation services for people who speak languages currently used in the testing materials. Finally, the testing company that administers the certification exam statewide developed a more culturally competent exam by incorporating videos, animated scenarios, true or false questions, basic wording and an oral component designed to assess learning rather than test taking (Ordway, et al., 2019, B. Rector, C. Morris, & C. Plante, personal communication, June 1, 2020).
- The state's policy goals for the personal care aide workforce will dictate their competencies and training hours based on the skills and knowledge expected of the workers. For example, Washington initially only required PCAs to have 28 hours of training because the state's policy goal was a base knowledge for the PCA workforce. When the state moved towards professionalizing the PCA workforce they increased the hours to 75 to more closely match the training requirements of CNAs and to still have a separate certification. One consideration when increasing the training hours is that it may dissuade people from entering the field and impact the availability of workers. Washington attempted to overcome this barrier by allowing people to work during the training and having a longer time requirement to complete the certification (B. Rector, C. Morris, & C. Plante, personal communication, June 1, 2020).
- Accessibility to the training and certification exams and ability to complete the course in the allotted time requirements by the state can be difficult when they are offered at multiple locations. The travel costs to various training locations (e.g., mileage, gas, parking) and the certification application fees can strain already tight budgets (Ordway, et al., 2019). One recommendation is to integrate the training and certification processes so PCAs can take the test at the conclusion of the training at the same location. This can help with costs and overcome the challenges associated with forgetting the information

during long lag times between initial training and certification and needing refresher courses.

- It can be difficult to transfer PCA training hours towards CNA certification so workers can take an abbreviated training. Nursing homes and home care often are in silos and this makes it hard to bridge the training to licensed nursing homes. This has been an issue in Massachusetts. The Department of Public Health, which licenses the nursing homes, was not actively involved in the development or implementation of the training program. The bridge program from the PCA training towards the CNA certification has had problems. It has worked well for the home health aide training, which may be because home health care is through the Executive Office of Elder Affairs and it was involved with the development of the PCA curriculum and oversees personal care services. One consideration is to involve all relevant stakeholders across settings when developing and implementing the training program and create a universal worker training program that breaks down the silos (L. Gurgone, personal communication, June 8, 2020).
- Instructors for personal care aide training may not have to be RNs. CNAs have significant caregiving experience and knowledge of the work environment and it is possible they could deliver the training (K. Thrasher-Livingston & C. Lynche, personal communication, June 9, 2020).
- When developing and implementing training programs for personal care aides, the state should have oversight and monitor the quality of the training to ensure it meets the regulations and criteria. They also should assess the care PCAs provide in the homes after completing the training (K. Thrasher-Livingston & C. Lynche, personal communication, June 9, 2020).
- Personal care aides should be trained every few years. States, such as Alaska, do not require continuing education for PCAs. Agencies determine what, if any, in-services are provided to the PCAs. States should have a requirement that PCAs are retrained and receive in-services every couple of years and demonstrate the ability to perform the skills for recertification. Professionalizing the personal care aide workforce and having it as a licensed category would help with the requirement for recertification (K. Thrasher-Livingston & C. Lynche, personal communication, June 9, 2020).
- When developing the curriculum and exam, it is important to receive input from educators. In Alaska, the involvement of educators led to the development of alternative exams, which allowed people in rural communities to get trained and receive the certification (K. Thrasher-Livingston & C. Lynche, personal communication, June 9, 2020).
- One challenge for the PCA workforce is the high turnover of staff. Instead of having potential individuals go through the entire training program and then decide it is not a right fit, a state could have a shorter, introductory training to the field. Less time is invested if it turns out that being a PCA is not the right job (D. Johnson & B. Kennard, personal communication, June 18, 2020).

- Initially can have pushback in having mandated, standardized training for PCAs, even when those working in the industry are involved in developing the curriculum. Agencies can have the perception that the state is forcing them to provide the training. Also concerns among employers about training employees who then leave and that the training requirements can reduce the pipeline of workers. However, quality, standardized training can create a more competent workforce and agencies will see the positive results of the training (though there hasn't been an evaluation). Also, standardized training ensures workers who come to an agency from another home care employer have the necessary training to care for the clients (D. Johnson & B. Kennard, personal communication, June 18, 2020).

Evaluations of State-Sponsored Training Programs

None of the state-sponsored training programs have been evaluated to assess the effectiveness regarding worker satisfaction, retention, injury rates, and consumer outcomes and satisfaction with worker training. A couple training programs have had limited evaluations primarily on perceptions of the training and preparation for the job. They were not rigorous evaluations and did not examine whether the training allowed PCAs to do their jobs more effectively or if it impacted client quality of care and quality of life.

A qualitative evaluation of the Washington State training program found that consumers perceived the PCAs to be well prepared for the job, particularly with assistance with ADLs. However, there was inconclusive results on the perceived impact of the certification program on client quality of care. The study also assessed worker outcomes. The key findings among trainees were the following:

- Personal care aides had favorable perceptions of the training. They reported confidence in the instructors' knowledge of the training material and the quality of the instructors in their use of a variety of teaching strategies.
- PCAs believed the training related to their work and provided them with additional skills for caregiving. They identified the boundary setting, self-care and effective communication modules and topics as having the most practical value.
- Several PCAs wanted more information on individuals with physical disabilities as they felt the training content focused almost exclusively on working with older adults. Suggestions for additional topics were catheter care and maintenance, bowel and bladder care, and safe lifting and transferring techniques for wheelchair users (Ordway, et al., 2019).

Massachusetts' *ABCs for Direct Care Workers* training program was developed through the Personal and Home Care Aide State Training (PHCAST) Demonstration Program. This program was authorized under the Social Security Act (SSA section 2008(b), 42 U.S.S 1927g(b)) to address

the need for personal care aide competency-based training and certification. Massachusetts was one of six states to receive a three-year grant to develop, implement and evaluate competency-based curricula and certification for personal and home care aides. The U.S. Department of Health and Human Services, Health Resources and Services Administration funded the demonstration program.

The evaluation primarily focused on short-term worker outcomes. The key findings were the following:

- A low attrition rate, less than one percent. Massachusetts adopted innovative methods to reduce attrition, including extra support for workers through wrap-around services or case management in areas such as childcare or transportation.
- Trainees showed statistically significant improvements in pre- and post-test knowledge performance across Year 2 and Year 3 of the program. Pre- and post-test findings for trainees completing bilingual trainings showed greater significant improvement between Years 2 and Years 3.
- Approximately 80% of trainees reported a desire to attain additional training to become home health aides or practical nurses.
- Most (93%) reported current employment in the LTSS field and nearly all reported being hired within a month of completing the training.
- 90% of trainees who completed the survey indicated high levels of job satisfaction, 11% planned to remain as PCAs, 46% were seeking CNA/HHA positions, and 32% sought additional training to become nurses (MassAHEC Network/UMass Boston Medical School, 2015).

An evaluation of 40 trainees who completed the training after the demonstration during a six-month period found that upon completion of the training 78% had been placed in a position, and 97% remained in their position six months after being hired (MassAHEC Network/UMass Boston Medical School, 2015).

A qualitative study with clients and their paid caregivers from an ongoing randomized controlled trial of home-based primary care in New York City examined the range of health-related tasks that paid caregivers performed in the home and whether the tasks were taught in the New York State personal care aide curriculum (Reckrey, et al., 2019). Personal care aides reported that they primarily perform functional tasks, such as bathing, cooking, and providing reminders to take medications, and a broad range of health-related tasks. The health-related tasks fell into four categories: 1) Address acute medical needs; 2) Assist with chronic condition management; 3) Promote general health; and 4) Promote mental health and well-being. Personal care aides also assisted with the management of multiple chronic conditions, promoted clients' general health and advocated to have their needs met, and supported clients' mental health and well-being. The study found most of the health-related tasks most frequently described by respondents were covered in the New York State personal care aide curriculum. However, several tasks were not

covered including monitoring chronic health conditions, keeping the family informed about health status, advocating to have health needs met, and encouraging physical activity. Personal care aides often went beyond the tasks covered in their formal training and instead individualized and expanded their roles to perform health-related tasks that they and their clients perceived as necessary and appropriate. The study recommended that training should spend more time on health-related tasks as well as interpersonal skills and good health literacy. Given that personal care aides perform tasks specific to the needs of the client, another recommendation is to offer continuing education as well as ongoing supervision, mentoring, monitoring for quality, and evaluation of competency attainment.

Home Care Aide Workforce Initiative

A demonstration program has shown some promising results in training entry-level home health care aides. While not a state-sponsored training program or for personal care aides, lessons can be learned that would be applicable to a state training program for personal care aide. The Home Care Aide Workforce Initiative (HAWI) was a multi-year, foundation-funded training and employment initiative in New York City (Feldman, Ryvicker, Evans & Barron, 2019). The program was designed and implemented by PHI in three New York City home care agencies from 2013 through 2014. The goal was to improve the skills, job satisfaction and retention of entry-level home health aides and the quality of care provided to their clients. The multifaceted program included four components:

- Recruitment and screening procedures to select potential trainees from low-income communities and tools to screen applicants prior to training enrollment.
- Entry-level, 120-hour training with a curriculum focused on health care content, clinical and personal care skills, critical thinking, communication, and problem-solving. The training used adult learner-centered techniques such as interactive, hands-on team learning.
- Peer mentoring for the newly hired aides where experienced home health aides assisted new workers in transitioning to home care work. This component of the program provided career advancement and development opportunity for the experienced home health aides.
- Supportive services and case management for the home health aides both prior to and after employment. These services included individual case management and group sessions to address both work-related and personal challenges, such as childcare.

A qualitative and quantitative evaluation examined whether home health aides trained under the HAWI model would have higher job retention than home health aides who received their certification through a conventional training program.

More than 90% of the home health aides reported three-month job satisfaction, with 29% who reported being very satisfied with their jobs. Forty percent of the HAWI trainees agreed that their supervisor treated them with respect and 57% reported they were not at all likely to leave their

job in the next year. The HAWI trained aides also had higher retention rates at three, six and 12 months after hire compared to the HHAs who did not complete the training either because they were hired before the HAWI implementation or during the implementation but were already certified as HHAs: HAWI-trained HHAs were 43% more likely to be retained at 12 months after hire compared to pre-HAWI hires.

The evaluation also assessed how the program was implemented across the three home care agencies. The findings for each component of the program were the following:

- **Recruitment:** This was inconsistent across the agencies. Only one agency used most of the recommended recruitment and screening processes.
- **Training:** Training was the most consistently implemented component of the program across the three agencies.
- **Peer Mentoring:** All three agencies had prior experience using experienced HHAs in some type of mentoring role and adapted their peer mentoring procedures and policies to HAWI's approach. All three agencies had challenges finding outside grant funds to sustain the mentoring function.
- **Case management:** Case management was implemented variably across the sites. The sites had a range of positions serve as the case managers for the HHAs, including social workers, human resource staffers, and former home health aides. Not all the case managers had the time, skills or information to accurately assess the challenges faced by trainees or new employees or to help them access the right resources.

The study identified several reasons for the uneven implementation of peer mentoring and case management, which included:

- Complexity of the model with multiple components and the agencies' variable managerial resources available to implement them.
- Institution of new approaches required extensive modification of long-standing practices and reallocation of scarce resources.
- Those responsible for implementing the program had varying perspectives on the added value of HAWI components compared to the agency's existing practices.

Continuing Education

Requirements for continuing education (CE) varied by state. The regulations in terms of required continuing education for PCAs were not clear in the literature for two states—Massachusetts and Maine. Four states—Arizona, New York, Virginia, and Washington—require PCAs to complete six to 12 hours of CE each year, typically based on the anniversary of hire. Alaska does not require CE for PCAs and it up to the employer to provide any in-services (K. Thrasher-Livingston & C. Lynche, personal communication, June 9, 2020). States varied in the specificity of the continuing education requirements regarding topics, modality, and settings and often provide latitude to

the trainers. It is often the responsibility of the provider agency to issue and monitor the CE for their employees.

Washington requires to take 12 hours of PCA continuing education courses annually, which is the same number of CEs required by nursing assistants and home health aides in the state. DSHS must approve the CE curricula and instructors. The training should be relevant to the care setting, the needs of the clients, and the development of workers. In Washington State, CEs serve as a way for workers to obtain more condition-specific and specialty training. Examples of CE topics are medication assistance, food preparation, disaster preparedness, abuse and neglect, mental illness, dementia, development disabilities, deescalating challenging behaviors, and medical conditions (WAC, 2019). Agency-employed PCAs can receive CEs through provider agencies or other community entities. The CE courses can be led by an online instructor, such as a live webinar, or in-person classroom training, or online class that has activities to measure the caregiver's understanding, a final exam, and access to an instructor for questions.

New York mandates PCAs complete six hours of in-service training each year. It is the responsibility of the agency to provide the in-service training for employees on either a calendar year basis or employment anniversary basis. New York does not identify the topics to be addressed but the topics must be relevant to the PCA's responsibilities. Trainers have flexibility in terms of the setting and modality of the training. Training may occur in a patient's home while the PCA is providing care, at the agency, or another relevant setting. It can be provided through a presentation, lecture, demonstration, videotape, webinar, and online training (New York DoH, 2017).

Arizona's requirement of six hours of CE annually is based on the anniversary date of hire. It is the responsibility of the agency to issue and monitor the CEs of employees. The regulations do not define the CE topics but suggest the additional curriculum models be relevant to the work and the same topics are not repeated each year. One suggestion for the CE is the *Principles of Caregiving, Alzheimer's Disease and Other Dementias* module and test. The CE can be offered in different modalities, including in-service, video/Digital Video Disk, written material, and attendance at class or conference (AHCCCS, 2014).

Virginia requires PCAs to receive 12 hours of additional training annually, and the agency employing the PCA is required to provide the training. It is not clear from the literature what topics must be covered in annual training (Virginia Administrative Code, 2017).

Nurse Delegation

One major impediment to the expansion of the PCA role and inclusion of these aides in team-based care is the degree to which states are willing to modify their nurse practice regulations to allow aides to perform certain tasks, such as administering medication, caring for wounds, and changing catheters (Stone & Wiener, 2001). Nurse practice acts vary by state and the regulations determine which nursing services, including health maintenance tasks, can only be

performed by or under the direct supervision of a licensed nurse (Reinhard, 2010). In some states the tasks that can be delegated to a personal care aide are wide-ranging, including medication administration, assisting with insulin pumps, and other nursing-related tasks. However, in other states PCAs are prohibited from performing services such as placing pills in a client's mouth or administering over-the-counter eye drops. Agency-employed workers are subject to delegation rules in nurse practice acts, while family caregivers and independent providers are often exempt from nurse practice acts.

In 2016, 16 states allowed RNs to delegate 16 health maintenance tasks (including medication administration, blood glucose monitoring and wound care) to aides (AARP Foundation, The Commonwealth Fund, The Scan Foundation, & AARP Public Policy Institute, 2017). Colorado was identified as one of the states that allowed RNs to delegate all 16 health maintenance tasks. On the other end of the spectrum, nine states permitted delegation of two or fewer tasks, and Florida, Indiana, Pennsylvania, and Rhode Island allowed delegation of none of the tasks.

The National Council of State Boards of Nurses and the American Nurses Association have acknowledged the potential for nurse delegation by developing principles and competencies to facilitate and standardize the nursing delegation process for safe delegation of nursing responsibilities (American Nurses Association, 2012; National Council of State Boards of Nursing, 2016). The groups have outlined the responsibilities of the employer/nurse leader, licensed nurse, and the worker to whom the task is delegated and created delegation decision trees for RNs to decide on whether and to whom to delegate a task or tasks and what to delegate based on the client's needs and conditions. (American Nurses Association, 2012; National Council of State Boards of Nursing, 2016). RNs supervise the aides and are accountable for the client outcomes.

The following criteria must be met in order for the RN to delegate a task to the aide:

- RN conducted assessment of client's needs.
- Task is within delegating RNs scope of practice.
- Statutes and regulations support delegation.
- Organization or agency permits the delegation.
- Nurse is competent to make delegating decisions.
- Task is consistent with recommended criteria for delegation, which includes all of the following:
 - Within the caregiver range of functions;
 - Frequently recurs in the daily care of the client;
 - Performed according to an established sequence of steps;
 - Involves little or no modification from one care situation to another;
 - Performed with a predictable outcome;

- No ongoing assessment, interpretation, or decision-making that cannot be logically separated from the procedure itself; and
- Does not endanger a client's life or well-being.
- Caregiver has the appropriate knowledge, skills and ability to accept the delegation and ability matches the care needs of the client.
- The organization or agency has policies, procedures, and/or protocols in place for the task.
- RN supervision is available.

Evaluation of Nurse Delegation Pilot Programs

A few studies have examined the factors that contribute to successful delegation. Evidence demonstrates that successful delegation is influenced by effective communication and a collaborative relationship between the nurse supervisor and the aide and the level of competence and knowledge of the aide. In addition, it is important to have role clarity and understand the state's scope of practice related to delegation across the RN and licensed practical nurse/licensed vocational nurse (LPN/LVN) licensure levels and the scope of practice and employment across states with the roles and responsibilities of the aides (National Council of State Boards of Nursing, 2016). Increased delegation requires a more sophisticated and educated frontline workforce and creative strategies to supervise staff working alone in private homes (Reinhard, 2010).

A study of nurse delegation to unlicensed workers in multiple settings found positive outcomes were associated when the RN regularly monitored the worker. Negative outcomes were more likely to occur when nurses had five years or less experience delegating care and when unlicensed workers had less than one year of experience in their current setting (Anthony, Standing & Hertz, 2000).

There is little research on the impact of nurse delegation regulations on quality of care or its effect on the ability of people to live in the community instead of relying on institutional care (Corazzini, et al., 2010). Some evidence indicates that the expansion of home health and personal care aide scope of practice, particularly in the administration of medication and other treatment plans, would allow them to provide a more well-rounded care while reducing the workload of nurses (Hewko, et al, 2015). There is no research that demonstrates restrictive regulations improve client safety or outcomes.

Two nurse delegation pilot projects highlight the expansion of nurse practice acts and the impact on client and worker outcomes. New Jersey is a notable example of the expansion of nurse practice acts and the use of evidence to drive changes in delegation. New Jersey faced two barriers to the expansion of home and community-based services: the New Jersey Board of Nursing did not permit delegation of medication administration to home health aides and agencies were reluctant to delegate other tasks due to fears of liability (Young, Farnham& Reinhard, 2016; Farnham, et al., 2011). The New Jersey Board of

Nursing granted permission to pilot a demonstration project implemented from 2008 to 2010 to test the impact of allowing nurses to delegate a range of nursing services to home health aides, including medication administration. The program involved an orientation for the nurses to educate them on an algorithm to help them determine if the home health aide or client could participate in the program. Nurses prepared the home health aides to perform the delegated tasks by reviewing procedures and medical instructions, watched home health aides complete the tasks, and evaluated them.

The pilot project demonstrated positive outcomes: nurses, home health aides and consumers were satisfied with the program and consumers reported more timely medication administration (Farnham, Young, & Reinhard, 2016; Farnham, et al., 2011). The home health aides helped supplement family care and provided respite for family members. The evaluation also found that delegation helped address unmet need because prior to delegation the delegated task was not provided to the client or the task was performed irregularly or without authorization. The evaluation found no reports of medication errors and no issues with completed tasks. Finally, some suggested that delegation helped reduce the risk of future health complications and medical visits and clients moving to nursing home care.

The evaluation identified challenges from the demonstration program. One challenge was a shortage of home health aides to complete the delegated tasks and managing the requirement of one-nurse-one-home health aide-one-client ratio. In addition, the home health aides and nurses had additional responsibilities without increased compensation.

Several factors facilitated the success of nurse delegation expansion, which included:

- Logistical support in the form of the Board of Nursing delegation algorithms and protocols to determine client eligibility and competence of the home health aide to perform the tasks as well as orientation forms and task record forms.
- Communication among the family members, consumers, nurses, and home health aides to address any issues.
- The infrastructure and cooperation from different stakeholder groups, including state government staff, researchers, nurses, home health aides, and agency staff.

Given the success of the pilot demonstration, in 2016 the New Jersey Board of Nurses adopted new regulations that allowed nurse discretion over delegation, including medication administration (Farnham, et al., 2011; McDermott, 2011).

Oregon has been a pioneer in promoting home and community-based services and has made reform of the nurse practice act and regulations a core part of the strategy to promote HCBS care. State policymakers from Oregon's State Board of Nursing and Oregon's Department of Health and Human Services synchronized policies to support older adults and people with disabilities to live in the community. It was one of the first

states to revise its statutes to allow RN delegation of skilled nursing care tasks to “unlicensed persons” (Reinhard & Quinn, 2004).

One key component of Oregon’s RN delegation is its distinction between teaching and delegating. Nurses can teach groups of unlicensed persons or personal care aides how to assist a group of consumers with activities of daily living and the administration of non-injectable medications. They can delegate more complex tasks to a specific worker for a specific client. The worker cannot administer the same delegated task to another consumer unless they are specifically trained to do so by the nurse. The nurse can only delegate tasks to the number of workers who can be safely supervised by the nurse. The nurse is solely responsible for deciding to delegate nursing tasks to the personal care aide. Oregon nursing law gives the RN discretion in what nursing services can be considered for delegation to the personal care aide. Nurses are contracted with the government agency and work with consumers who receive Medicaid-funded services. They assess the client and ability of the personal care aide to perform a specific task, teach the task, and ensure on-going assessment of the client and re-evaluation/supervision of the personal care aide. Nurses provide written instructions with step-by-step administration of task, signs and symptoms to be observed, and guidelines of what to do if signs and symptoms occur. The nurse has many documentation requirements such as the assessment of the client’s condition, the rationale for deciding that a specific task could be safely delegated to the worker, the skills and willingness of the worker, the care task taught to the worker, and a record of what written instructions were left for the worker (Reinhard & Quinn, 2004; Oregon Department of Health and Human Services, 2018).

Oregon with its decades of experience with nurse delegation has learned factors that contribute to its success. One is to distinguish teaching from delegating and limiting teaching and delegating scope of practice to settings where a nurse is not regularly scheduled and available to provide direct supervision. Oregon officials were intentional in not defining specific settings for nurse delegation but started with the premise that they wanted to bring more nursing experience into settings where nurses were not present “round the clock.” The state chose a flexible model of nurses training workers where they are giving the care.

Oregon’s model of hiring nurses as independent contractors to assess, teach, delegate and monitor care tasks is a strategic method for promoting HCBS and monitoring quality. The nurses receive orientation to the delegation processes and policies, including learning how to train and monitor aides.

Finally, Oregon state officials engaged all stakeholders in policy development and implementation processes. State officials communicated amongst each other and adapted their policies based on their feedback from key stakeholder groups on how to best meet the concerns of nurses and the needs of consumers.

A pilot project in Australia examined the impact of expanding the medication administration authority of community care aides, who have similar training as home health aides in the U.S. The home health aides received competency-based training in medicines support and guidelines to assist them in problem solving potential scenarios that might occur in the home. RNs and LPNs participated in self-directed learning modules and in-person training to enhance their knowledge on the new workforce model, the assessment of medicine management and delegation, and supervision of medicine support tasks to the home health aides (Lee, et al., 2015).

The results were increased medicine support by the home health aides (Lee, et al., 2015). Both nurses and home health aides had positive perceptions of the program. Nurses reported higher levels of trust and confidence in the home health aides, more effective communication, and reduced need for duplicate visits which allowed more time for them to spend with clients with complex needs. Home health aides reported positive experiences with the expanded role and good communication. The program attributed its success to the time and support nurses provided the home health aides, the use of experienced home health aides for delegation, educating clients and workers about the extended role of the home health aides, and having a champion senior nurse who regularly met with the home health aides and allocated clients to them for medicine support.

Specialized Training and Advanced Roles

Recruiting and retaining a high-quality personal care aide workforce requires more than competency-based entry-level training to adequately prepare workers to care for older adults and younger people with disabilities. PCAs also need career paths and growth opportunities through advanced roles. PCAs can advance into specialized positions or become a senior aide, peer mentor or health coach. They can have a care coordinator role and be part of multidisciplinary care teams with regular communication with care managers and provided an expanded range of services beyond ADLs and IADLs (PHI and SEIU, 2012). These opportunities enable workers to take on more expansive and satisfying roles and help to empower PCAs, which can reduce turnover and make the job more competitive with other comparable industries. Maximizing PCAs' effectiveness through upskilling typically entails enhanced training in a set of core competencies and workflow innovation.

Given PCA engagement with clients they develop familiarity, trust and understanding of a person's health and well-being. In combination with upskilling training, bringing PCAs onto interdisciplinary care teams, either as full members or through a regular reporting structure, allows for more informed decision making about client care (Drake, 2019). Workers have the potential to:

- Contribute their observations from the home to other practitioners on a care team.

- Improve understanding of resident health conditions and their ability to attend to a care plan.
- Navigate transition in care.
- Support health-promoting behaviors.
- Identify the signs and symptoms of emerging or worsening conditions among clients, such as changes in sleep patterns, difficulty breathing, or weight gain.
- Track clients' medical appointments.
- Assist clients with the management of and adherence to medications and other home therapies.
- Contribute to the social and environmental conditions that shape a person's health, such as observing stressors in the home (e.g., pollution, risk for falls, social isolation).
- Help other providers connect clients with community supports (Drake, 2019).

The literature review identified several specialized training and advanced roles either through the state or a grant-funded demonstration/pilot program. While the literature is limited, we highlight below the key components of the programs and the lessons learned. Many of these programs were with home health aides as the literature had limited articles on advanced or specialized roles for PCAs. Given the similarity in tasks, the components can be applied to career advancement opportunities for PCAs.

State-Sponsored Advanced Roles and Specialty Training

New York Advanced Home Health Aide Program

In 2016, New York State signed into law the Advanced Home Health Aide (AHHA) program. AHHAs are home health aides who are authorized to perform advanced tasks under nurse delegation and supervision to consumers who are medically stable (New York State DoH, 2019, Advanced Home Health Advisory Group, 2015). The advanced tasks include nursing tasks commonly performed by LPNs/LVNs in a client's home such as administering medications that are routinely taken by the client, administering injections of low molecular weight heparin and diabetes medications, and administering pre-filled auto injectors of epinephrine, naloxone, or glucagon in an emergency.

New York State had to amend its nurse practice acts to permit AHHAs to perform the advanced tasks with appropriate training and supervision (Breslin, 2018). The amendment allows nurses to delegate certain health-related tasks to home health aides who meet the new training requirements.

The AHHA receives 80 hours of didactic classroom and skills laboratory training and at least 45 hours of RN supervised practical training in a home care setting. The curriculum covers a variety of topics and must include:

- Assignment of advanced tasks;
- Working with supervising RNs;

- Medication administration;
- Injections and injection safety;
- Infection control;
- Documenting care; and
- Preparation to take the New York Medication Aide Certification Exam.

The training must be completed within 90 days from the start of the AHHA training program. Trainees take a competency test after each module and must pass the New York Medication Aide Certification Examination within 180 days from the start of class. Successful completion of the program and passage of the exam results in a certification and listing on the Home Care Worker Registry as a certified AHHA. The training is not transferable to academic requirements to become an LPN or RN. The AHHA is required to take 18 hours of in-service training annually.

The regulations specify requirements for the supervising nurses of the AHHAs. They are responsible for training and assessing the performance of the advanced tasks by the AHHAs, determining the advanced tasks to be performed, and initial and ongoing assessments of the client's needs, and providing written instructions to the AHHA on how to perform the task and criteria for identifying, responding and reporting problems, and directly supervising the AHHA. Onsite RN supervision is every 14 days to observe, evaluate, and oversee services provided by the AHHA.

Some expressed concerns about the uptake among workers and employers given the lack of designated funding for AHHAs' increased wages (Breslin, 2018). The workgroup that informed the development of the AHHA role expressed concerns about the legislation because it did not include funding to support curriculum development, training program costs, increased wages for AHHAs, increased nurse supervision costs, and other expenses without increased reimbursement rates.

Washington State Advanced Home Care Aide Specialist Program and Nurse Delegation Training

The Washington State Advanced Home Care Aide Specialist (AHCAS) is an advanced role and federally approved registered apprenticeship program that was developed in 2012. It was originally funded through the Department of Labor but it is now sustained with funds from the negotiated employer contributions. AHCASs, who work with clients who require a more complex level of care, complete an eight-week, 70-hour advanced skills training program. Trainees have one in-person, four to six hour skills lab and online training that ranges from three to five hours a week. The training covers the following topics: Person-centered care; Problem-solving; Motivational interviewing; De-escalation; Treatment and care plans; Monitoring, observation & reporting; Medication management; Health literacy and client engagement; and Organizing care activities. Aides receive pay for their time attending the training program.

Apprentices are required to work with a peer mentor while in the apprenticeship program to support on-the-job learning. The competency-based apprenticeship differs from more traditional time-based apprenticeship programs. Instead of tracking the 2,000-hour on-the-job-learning requirement for federal registered apprenticeships, the students complete knowledge checks at different point in the apprenticeship to assess competencies. Once they demonstrate mastery of all competencies, students take a final written exam at the end of the program. Most complete the program within one year. Completion of the training and passing the exam results in a certification as an Advance Home Care Aide Specialist and a \$.50/hour raise (WAC, 2019; Choitz, Helmer & Conway, 2015).

Washington also offers personal care aides additional training to become certified to administer some medications to consumers. The RN teaches and supervises the personal care aides and provides assessments of the client's condition. Washington State allows RNs to delegate the following tasks to personal care aides:

- Administer medications;
- Non-sterile dressing changes;
- Urinary catheterization using clean technique;
- Ostomy care in established and healed condition;
- Blood glucose monitoring; and
- Gastrostomy feedings in established and healed condition (Washington State DSHS, 2019).

The RNs can only delegate a specific task for an individual client. This means that the personal care aide cannot perform the same task on another client and cannot perform a different task on the one client unless the RN does a separate delegation with complete instructions for the different task or client. RNs can contract with DSHS and be paid for Nurse Delegation services.

The Training Partnership offers two types of Nurse Delegation Training: Nurse Delegation Core (NDC) training and Nurse Delegation Diabetes (NDD) training. The NDC training is nine-hours of self-study training and trainees must pass an exam administered by an RN. The curriculum covers what is nurse delegation and the role of the aide, client care and body systems, medication administration, and recommended way to perform common treatments that may be delegated. If the personal care aide needs to administer injection such as insulin, an additional three hours of self-study training covering diabetes and insulin and a separate examination is required (the NDD curriculum). DSHS developed both the NDC and NDD curricula that is a requirement for each training. DSHS also approves the instructors for the training. Employers pay their personal care aides to attend both nurse delegation trainings. They must pass a competency exam (80% or higher for NDC training and 90% or higher for NDD training) to receive the certification and to be able to perform the nurse delegation tasks. The training can be used toward the continuing education requirement for PCAs (WAC, 2019; Choitz, Helmer & Conway, 2015; Washington State DSHS, 2019).

Massachusetts Supportive Home Care Aides

Massachusetts Supportive Home Care Aides specialize in mental health or Alzheimer's disease (Scales, et al., 2018). Supportive Home Care Aides serve the personal care and emotional and behavioral health needs of clients who have difficult and complex conditions. They also increase clients' socialization and self-care skills, offer sensory stimulation, provide emotional support, and teach coping skills. In addition to the 75 hours of required training for home health aides, Supportive Home Care Aides receive 12 hours of training on their specialty topic and are required a minimum of 12 hours of in-service training per year. The Supportive Home Care Aides:

- Receive weekly support training/in-services or team meetings either in-home, by telephone, or in-person.
- Participate in quarterly team meetings to receive additional training, group supervision, case reviews or interdisciplinary case conferences, and any additional support.
- Have weekly contact with their supervisor and supervision once every three months.

The supervisors of the Supportive Home Care Aides receive three hours of supervisory training, called *Partners in Care*, to help supervisors develop the complementary competencies.

Supportive Home Care Aides receive an increase in pay (Home Care Aide Council, 2016).

The Mental Health Supportive Home Care Aide curriculum was developed through a literature review of best practices on mental health training and interviews and focus groups with personal care aides, agency supervisors, and key industry stakeholders (Gleason & Coyle, 2016).

The training covers the following topics:

- Overview of behavioral health.
- Role of the specialized home care worker.
- Working with depression and suicidal behaviors.
- Working with anxiety behaviors.
- Working with hoarding behaviors.
- Working with psychotic behaviors.
- Working with substance abuse.
- Working with medications.
- Dual diagnoses.
- Setting boundaries and practicing self-care.

Extended Care Career Ladder Initiative

Massachusetts initiated the Extended Care Career Ladder Initiative (ECCLI) as part of a broader Nursing Home Quality Initiative, adopted by the Legislature in 2000. This legislation was in response to high turnover and vacancies among home health aides and certified nursing

assistants in LTSS. ECCLI's primary goal was to enhance resident/client care quality and outcomes while simultaneously addressing the problems of recruiting and retaining skilled HHS and CNA workers. This was one of the first state-initiated efforts in the United States to address the issue of frontline workforce quality improvement in LTSS (Heineman, Washko, Gottlieb, Wilson, 2008). ECCLI required that all participating nursing homes and home health organizations create career ladders for CNAs and HHAs and include modest hourly wage increases linked to completion of one or more learning modules (\$.25 to \$1.00 per hour wage increase). Career ladder steps focused on clinical (e.g. nutrition, skin assessment, transferring) and soft skills training. However, multiple-step career ladders were less common among home health agencies than nursing homes. The home health agencies trained HHAs in advanced clinical skills without developing a hierarchy of aides so their job titles and responsibilities remained essentially the same.

An evaluation of ECCLI found improvements or increases in the following areas:

- Communication among staff and with co-workers, upper management and sharing of resident information between shifts and inter-shifts. Cultural diversity training helped supervisors, management and native English speaking frontline staff understand the challenges experienced by those with limited English proficiency.
- Clinical skills with greater competence in providing targeted care among CNAs and HHAs. For example, being able to take vital signs. Agencies developed a bridge to nursing capabilities.
- Teamwork. Soft skills and leadership training helped shift employees' focus from their individual work to the group goal of client-centered care.
- Self-esteem and self-confidence among CNAs and HHAs.
- Recognition, respect and trust from supervisors and management (Heineman, Washko, Gottlieb, & Wilson, 2008).

In addition, organizations experienced varying levels of improvement with recruitment and retention. One home health agency reported its turnover rate went from an average of 40% to 5% after ECCLI.

Organizations experienced various challenges to implementing ECCLI programs and activities. Nearly all organizations experienced difficulty providing adequate coverage for client care when employees were attending ECCLI training classes. The logistics of juggling workers' schedules was extremely challenging, particularly for home health agencies. Home health agency workers are in the field, and there is no equivalent to an on-floor employee who can assist in providing staff coverage while others are in training. To address these challenges, some organizations chose to offer longer training sessions off-site, which were less disruptive to workers' schedules, increased staff motivation and focus and facilitated arranging staff coverage.

Agencies also had challenges in translating training into practice. For example, some supervisors felt threatened by the changing roles of advanced CNAs and HHAs and thus discouraged them from taking on new responsibilities traditionally done by nurses. It was sometimes difficult to match employees with their newly acquired clinical skills with appropriate set of clients to use those skills. The organizations could not always support or utilize the senior level skills of all its ECCLI-trained CNAs and HHAs, and supporting the higher salaries of senior aides began to strain the organization's already tight budget.

Finally, some sites felt a lack of support from the state for their ECCCLI efforts and a continual fight to preserve funds because of tight state budgets (Heineman, Washko, Gottlieb, Wilson, 2008). Unfortunately, the program was not sustained after the state funding ended.

Pilot Programs for Advanced Roles/Specialty Training

St. John's Enhanced Home Care Pilot Program

The St. John's Enhanced Home Care Pilot program was a pilot program run by The St. John's Well Child and Family Center, an independent network of Federally Qualified Health Centers in central and south Los Angeles. The model was funded by the Tides Foundation-Community Clinics Initiative in 2012 to improve integration of care and health outcomes for older adults and younger people with disabilities who use LTSS (St. John's Well Child and Family Center, ULTCW SEIU, & United Long-Term Care Workers, 2014). The pilot included 97 participant-California In-Home supportive Services (IHSS) home care provider pairs. IHSS is a California consumer directed program that provides in-home care to individuals. The pilot project enhanced the training of IHSS workers and their role within integrated care coordination teams via communication, coordination, and delivery of enhanced services.

The IHSS workers received 25 hours of training over a six-week period to improve their skills in the areas of team-based communication with the participant's care coordinator and medical provider, coordinating certain health care and related services, and performing paramedical tasks and chronic disease management. The training included modules on the IHSS system, life quality for participants, activities of daily living, home safety and fall prevention, paramedical services, mobility and transferring, nutrition, strategies for medication adherence and medication compliance, and mental health. The California Long Term Education Center instructors conducted the training.

The pilot included a care coordinator who served as the primary contact for the home care provider and supported the coordination of clinic services and integrating these services with home-based services. The care coordinator and IHSS worker had weekly

check-in meetings to discuss the health status, treatment progress, need for additional medical and/or other services, medical appointments, and other issues as necessary.

An evaluation of the program shows promising results in improved health and perceived quality of care and potentially lower costs. The evaluation found:

- 67 percent of consumers reported better health-related quality of life.
- Consumers' satisfaction and overall quality of care increased 13 percent.
- Participants increased the average number of "healthy days" from 4.7 healthy days per month to 14.4 healthy day per month.
- Decreased hospitalization (from an average of 4.3 to 2.0 per consumer per month) and emergency department visits (from 7.0 to 3.3 per month) as well as a 40 percent improvement in medication compliance (St. John's Well Child and Family Center, ULTCW SEIU, & United Long-Term Care Workers, 2015).

The pilot also demonstrated a very high level of provider integration between the clinic and home-based services. This was attributed to expansion of providers' health-related knowledge and skills, performance of enhanced tasks in the home, and integration into their participants' larger medical and social care teams. The training program ended when grant funding ceased.

The Care Team Integration of the Home-Based Workforce Pilot Program

Funded through a three-year, \$12 million Health Care Innovations Award from the Centers for Medicare and Medicaid Services grant to the California Long-Term Care Education Center, the program integrated IHSS providers into consumers' care teams and assisted workers to identify a problem and communicate with the care team (Coffman & Chapman, 2012; California Long-Term Care Education Center, 2016). The project included 6,375 older adults and younger persons with disabilities and their IHSS providers. IHSS providers were trained to serve in an enhanced caregiving role and to be members of consumers' care teams by bridging quality in-home care with the health care delivery system. As part of the care team, home care providers helped implement care plans and monitored and communicated changes in clients' health conditions. Their key roles in clients' health were to provide care and monitor them, coach the clients, communicate with others in the health care system, and help clients navigate the system.

A 17-module, 75-hour program trained the IHSS workers on chronic disease management. The training focused on disease education and how to monitor health conditions, care coordination, communication with clients and team members, and how to coach and navigate the health system as well as medication adherence, providing care for common and specific diseases, nutritional information, and caregiver safety.

The training used an adult learner-centered approach. Each module contained an integration activity and providers practiced identifying a problem and communicating

their observations to the care team through role plays and discussions as well as hands-on demonstrations. Trainers assessed the workers' competencies through hands-on competency checks, a review of at-home assignments, and evaluation of role-playing. IHSS workers were recorded as part of the care team in their clients' electronic medical records and all participating health plans and medical groups were educated about the training program and the goal of integrating IHSS workers into team-based care. After completion of the training program, IHSS workers and their clients received one-day session on how to more effectively access health services and better understand a home health physician's orders. The physicians who participated in the program learned how to more effectively use the IHSS system and coordinate with the workers.

The Care Team Integration of the Home-Based Workforce program evaluation found that trainees felt the training increased their knowledge and skills about how to care for a person (Scales, et al., 2018; California Long-Term Care Education Center, 2016). Trainees reported that the training increased their confidence which helped improve communication with both consumers and primary care physicians. The most prevalent communication topics were making an appointment, refilling a prescription, reporting or discussing the client's health condition or well-being, and nutrition. The program also was associated with improved health outcomes: average rate of repeat emergency department visits declined 41 percent and the average rate of rehospitalization declined 43 percent by the second year after the training. The evaluation estimated that the cost savings associated with training participation could be as high as \$12,000 per trainee due to reduced emergency room visits and hospital stays for the consumers. The evaluation also found improved recruitment and retention among the trainees (Scales, et al., 2018).

Care Connections Project

PHI, a training and advocacy organization for direct care workers, and Independent Care System (ICS), a Medicaid managed care plan in New York City, received a \$1.9 million grant to pilot in three ICS provider network home care agencies an advanced role and enhanced training for personal care aides (Misiorski, 2018). The program was designed to improve care transitions for consumers, with the goal of reducing emergency department use and preventing re-hospitalizations. The senior personal care aides provided coaching and support for other personal care aides and family caregivers, and served on the interdisciplinary team. It also incorporated a telehealth program using customized software on mobile devices to facilitate communication about changes in a client's condition between personal care aides and clinical supervisors in a timely fashion. Fourteen personal care aides were trained and eight full-time Care Connection Senior Aides (CCSA) were deployed (with six back-ups) among the three home care agencies. Three RNs were trained to oversee the CCSAs.

The training—six weeks of classroom training and seven weeks of on-the-job training—strengthened the CCSAs' observation, documentation and reporting skills, prepared them

to educate and mentor other personal care aides, and deepened their knowledge of the chronic conditions most likely to lead to a preventable hospitalization (Estela, 2014; Larson, 2015; PHI, 2017). The CCSAs coached and supported ICS members' PCAs in attending to and reporting unusual signs and symptoms, conducted medication reviews, and worked with PCAs and clients to address "destabilizing" circumstances.

An internal evaluation of the eight full-time CCSAs and three RN supervisors conducted by PHI found that 1,400 clients benefited from the pilot in its first 18 months (PHI, 2017). There was an eight percent reduction in the rate of emergency department visits among clients served in the last 12 months of the project period compared to those receiving care in the year prior to program implementation. CCSAs received a 60 percent wage increase and reported improvements in job satisfaction, greater inclusion in care team activities, better relationships with families and clients, and improved communication with clinical managers. Furthermore, caregiver strain appeared to improve for at least half the family caregivers involved. After state funding ended, five CCSAs remained in the advanced position and continued to receive higher wages from their agencies through incentives provided by ICS.

Health Coaching Pilot Program

Another opportunity for PCAs in an advanced role is a health coach who "assists clients with setting goals and gaining the knowledge, skills, tools, and confidence they need to participate in their own care" (Russell, et al., 2017). Given PCAs are the "eyes and ears of the clients" they are well positioned to understand their needs, preferences, and barriers to disease self-management. The health coach role is a promotional opportunity for the PCA and lower-cost method for health care providers to offer additional self-management support to their clients.

In 2014 Partners in Care, Visiting Nurse Service of New York's licensed home care agency, pilot-tested health coaching as a senior aide role through funding from the New York State Health Workforce Retraining Initiative, as part of a larger performance improvement effort (Russell, et al., 2017). Two pilot programs were conducted for HHAs to provide health coaching to older, chronically ill home care clients: (1) Self-management and emotional support to high-risk post-acute heart failure clients and (2) Health coaching practices and personal care to clients who were dually eligible for Medicare and Medicaid and enrolled in Fully Integrated Duals Advantage or Managed Long-Term Care health plans. Home health aides who worked for the agency for at least one year and received positive supervisory evaluations were eligible for the role.

HHAs participated in a one-week training on health coaching, which covered key concepts such as health coaching and its role in the community, symptom identification, self-management strategies for common chronic conditions, readiness to change, goal setting, and motivational interviewing techniques. The training also covered additional supportive efforts for clients: 1) Assistance with scheduling follow-up physician appointments; 2) Promoting understanding and

adherence to prescription medication regimens; and 3) Encouraging the maintenance of a personal health record.

The health coaches in the heart failure program visited clients in their homes 30 days following the hospital discharge. They conducted weekly phone calls to work with the clients on their goals, review their health concerns, assess medication adherence, and identify facilitators and challenges to disease self-management.

The health coaches in the chronic illness program used motivational interviewing to set health-related goals with their clients, review what the client knew about their chronic condition(s), and encourage medication adherence and self-management strategies. The health coaches in both programs participated in weekly case conferences with supervisors who provided support to the health coaches through the pilot demonstration and supported them in their work. They provided feedback about their client engagement strategies and motivational interviewing techniques.

An evaluation of the two pilot programs found improvements in self-care maintenance practices and in the chronic illness program, improved quality of life among participants (Russell, et al., 2017; Scales, et al., 2018). Home health aide participants reported many positives about their participation in the program, including:

- Positive perceptions of their role as a health coach and interest in pursuing health coaching as a career opportunity.
- Greater awareness of chronic conditions and assisting clients to achieve their goals.
- Understanding how the role and activities of the health coach helped develop relationships with the clients among those working in the chronic illness program.
- Benefits to their personal lives in the use of health coaching to engage their own family members and friends in conversations about health.
- Use of self-management activities with their clients such as exercise, eating a healthy diet and cooking healthy meals, keeping physician appointments, taking medications on time, and checking their weight and blood pressure.

Clients in the heart failure program and chronic illness program significantly improved their self-care maintenance practices (e.g., exercising, eating a healthy diet) and participants in the chronic illness program demonstrated improvements in self-rated health.

The study identified several lessons learned about integrating health coaching programs into the health care organizations. These include:

- Experienced administrators supporting the health coaches in their work.
- Establishment of job titles and job descriptions of health coaching roles that specify required training and skills.
- Payment reforms that promote health coaching as a mechanisms for improving care among those living with chronic illness in the community.

- Coordination of federal and state funds to support training and implementation initiatives, including support for job shadowing, observation by experienced health coaches, and ongoing assessment of knowledge and skills.
- Ongoing support and feedback on PCAs' motivational interviewing techniques through one-on-one sessions from peer or supervisory mentors who can observe their work. This is to overcome clients who are resistant to making changes in their behaviors.
- Other training opportunities for health coaches for specialized populations such as patients with end-of-life care (i.e., education about advanced directives), physical and occupational rehabilitation (i.e., motivation to complete exercise programs) and disease-specific populations (e.g., diabetes).

Jewish Home Lifecare Peer Mentor Program

PCAs can serve as peer mentors for an advanced role to support both new and incumbent workers. Jewish Home Lifecare created a peer mentor program that provides a career path and higher wages for experienced HHAs and support for newly hired HHAs (Kreiser, Adamski, & Gallagher, 2010). The client service manager or service coordinator of field nurses identified HHAs who had been at the organization for at least one year and demonstrated reliability and clinical competency. Peer mentors received training over two days covering topics such as peer mentoring, communications, cultural diversity, servicing the private pay population, psychiatric and mental health disorders, palliative care, and telehealth. After completing the training and passing a competency test, HHAs received a certification that qualify them as a peer mentor.

The peer mentors assist newly hired HHAs and HHAs who need special assistance or have received disciplinary action. The mentor is paired with a new HHA for one year and with a home health aide who needs special assistance for three months. The mentor provided support on client care issues and ensured the mentee understood the policies and procedures of the organization. Peer mentors received a promotion, hourly wage increase and a monthly cell phone stipend. The program was funded through an external grant that supported the part-time coordinator and staff time to develop the curriculum as well as the training time for the peer mentor and time required to meet with the mentees. The organization's operating budget paid for the hourly wage increase and costs of monthly cell phone stipend.

A limited evaluation showed promise for the peer mentor program. Peer mentors worked an average of 40 hours/week compared to 28 hours/week for other HHAs. They also had a higher retention rate compared to the organization's HHA retention rate (87% compared to 49% in 2007 and 57% in 2008) (Kreiser, Adamski, & Gallagher, 2010). Finally, peer mentors received recognition for their experience and some nurses specifically requested the peer mentor to be assigned to the more challenging clients.

Summary of Advanced Roles/Specialized Training

The advanced role and specialized training models demonstrate the opportunities for PCAs to be part of team-based care, care coordination, serve as peer mentors and health coaches, become specialists, and to have advanced roles that leverage their skills and knowledge given the care they provide, and time spent with the client. Many of the models have been opportunities for home health aides and consumer-directed workers and not agency-based PCAs. However, the models are applicable to the PCAs workforce. The lack of models for enhanced roles for PCAs makes it difficult to predict the impact of these roles on clients' health outcomes, hospitalization and readmissions, and workers' outcomes. Many of these pilot programs, including some of the state-level efforts, have not been rigorously evaluated and they have not been sustained. These promising models of enhanced roles for PCAs need to be scaled-up and tested to make an evidence-based case for sustained investments.

Apprenticeships

Apprenticeships are a career pathway where individuals can receive the knowledge and skills necessary for a trade through paid-work and an education or instructional component. It combines classroom and experiential learning, wage growth, and job ladders. Registered Apprenticeship (RA) programs are proven models of apprenticeship that have been validated by the U.S. Department of Labor or a State Apprenticeship Agency. The key components of RAs include active involvement from businesses, on-the-job training from an experienced mentor, related classroom instruction, increases in wages for skills gains, and a nationally recognized credential. While RAs have long been associated with trades such as construction, their applicability in other fields with high workforce demands, like healthcare, has been recognized (U.S. Department of Labor, n.d.).

Barriers to RA Programs in Healthcare

While more apprenticeships are being developed in healthcare professions, they come with their own unique challenges that make them difficult to implement and sustain. Some of the common barriers to RA programs in healthcare professions are a lack of sustainable funding, professional bias towards RA programs, lack of awareness, and challenges in program development and administration. A study by the U.S. Department of Health and Human Services of five registered apprenticeship programs for direct care workers examined the characteristics of the programs and the challenges. Across the five sites, the Long-Term Care Registered Apprenticeship Programs (LTC RAPs) provided basic and advanced training and mentoring to 26 to 1,150 apprentices at each site over six years. The training ranged from 1,680 hours to 3,232 hours, with the main difference in the length of on-the-job training. The training covered basic core competencies for the direct care workers and advanced or specialty training, including soft skills (e.g., person-centered care, communication, and mentoring). Supervisors, experienced LTSS workers, and nurses all helped train, monitor and test the apprentices. One of the sites, a home care agency, also had apprentices shadow senior staff as they performed tasks during the early training sessions. The maximum wage increase upon completion of the

training was \$1.25/hour, which was constrained by public payer reimbursement. The home care agency that participated in the program provided a \$.20/hour wage increase for each completed competency training for a typical total wage increase of \$1.20/hour and a bonus of \$200 at the completion of the apprenticeship program.

The case studies identified a number of challenges for sustainability of the program. One key challenge is the inability of employers to achieve and document sufficient cost savings or extract sufficient revenue increases from gains in productivity and quality of care that might results from a more highly skilled workforce. Another challenge is the ability of employers to pay wage increases for progressing through and completing an apprenticeship and the additional costs of financial and time resources required to prepare for training resources and implement the apprenticeship. For example, one site estimated the technical instruction costs to be around \$8,000 to \$10,000 per apprentice. Medicaid reimbursement rates are too low to cover the LTC RAP costs and the third-party reimbursement system does not provide higher payments to higher quality providers. Sustainability also requires buy-in from leadership and a champion to implement and continue the program. Other challenges, such as limited knowledge of the approach, limited recognition and portability of credentials, and lack of employer sponsor partnerships with workforce investment systems and educational systems may hinder spread and sustainability of the LTC RAPs. The five programs studied are no longer operational (Koeh, et al., 2011).

Key informant interviews by Bates, Chapman, and Spetz (2018) found additional barriers to implementation of the RAPs. The requirement of licensure in RAs is seen by many in the healthcare field as a barrier to adopting such a program. One of the reasons is the potentially high costs associated with ensuring that an RA program meets the standards for licensure. Another barrier related to the limits to “learn by doing” if an apprentice is unable to perform certain activities without a license. Last, lack of licensure or certification requirements for certain positions, such as PCAs, may take away any incentive for employers to participate in the program (Bates, Chapman, and Spetz, 2018).

RA Programs for PCAs

Four current or recent apprenticeship programs for PCAs were identified in our search. The Washington State apprenticeship program was previously described in the section describing advanced roles for PCAs.

Hawaii Personal and Home Care Aide Registered Apprenticeship Program: Hawaii has a year-long Personal and Home Care Aide Registered Apprenticeship program that requires 2,000 hours of on-the-job training (Hawaii Department of Labor and Industrial Relations, 2018; BrightStar Care, n.d.). The program was created by a home care agency, in partnership with the State of Hawaii Department of Labor and the U.S. Department of Labor/Office of Apprenticeship, to fill the urgent and growing need of well-trained in-home care professionals in Hawaii. The training is a hybrid of classroom instruction, independent online coursework, and

hands-on field study and practice. The curriculum includes mentorship training to help program graduates increase their confidence and to grow as leaders to support future apprentices and caregivers. Participants receive wage increases as they complete portions of their training.

Nevada Personal Care Aide Apprenticeship Certificate Program: The Nevada Personal Care Aide Apprenticeship Certificate Program was a partnership between the University of Nevada, Las Vegas (UNLV) and three agency-based employers. Agencies were responsible for recruiting and screening applicants. Apprentices completed 100 hours of personal care aide education as well as 15 hours training in effective communication and report writing. After completing the classroom requirements, apprentices would complete paid on-the-job training for six months, before transitioning to a regular employee. To ease the costs associated with the apprenticeship, employers were eligible to receive salary reimbursement subsidies of up to 50% during the training time (UNLV Continuing Education, 2017).

Unfortunately, the program was short lived, lasting a year and a half before folding due to lack of enrollment. It is believed that the costs associated with enrollment—roughly \$1,000 for tuition—may have turned off potential applicants from enrolling in the program. Another challenge may have been a lack of incentive to participate in the program due to Nevada’s low requirements for PCAs. Nevada currently only requires 16 hours of training for PCAs under the State Plan and leaves it up to agencies how to evaluate competency (PHI, 2018).

Pennsylvania Home Care Apprenticeship Program: The Pennsylvania Department of Labor & Industry approved an apprenticeship program, the Certified Nursing Assistant in a Home Care Setting (CNA/HCS) apprenticeship, to provide personal care and promote healthy living and safe environments in homes and communities. The apprenticeship was designed and developed by the Central Susquehanna Intermediate Unit (CSIU) WATCH (Work Attributes Toward Careers in Health) Project and includes a combination of on-the-job training and related instruction where workers learn practical and theoretical aspects of nursing (The Daily Item, 2014). CSIU WATCH partnered with the Northcentral Area Health Education Center, Penn College at Wellsboro and local health care employers to create the curriculum. The apprenticeship is a partnership between a provider agency and an educational institution that delivers the curriculum. Apprentices are trained as advanced nursing assistants with a geriatric specialization. The curriculum includes 2,000 hours of on-the-job training and 150 hours of related instruction. Courses are video based and are broadcast via online streaming or provided to the student on a DVD. A provider sponsors the employees as apprentices and a site administrator assesses students’ competency skills and completion of the required course work. A WATCH project apprenticeship instructor reviews coursework and testing and provides support throughout the apprenticeship. Apprentices earn a paycheck while they receive hands-on training and receive incremental pay increases as they advance on the nursing career ladder.

The Pennsylvania Department of Labor & Industry has general guidelines for PA RAPs. Every program has a sponsor and must be a minimum of 2,000 hours or one-year of on-the-job training and supplemented by a minimum of 144 hours of related technical instruction that

should complement the training. The training programs can be time-based, competency-based, or a hybrid of both. The training can be provided in-house or by a third-party trainer such as a career technical center or community college. The supplemental instruction can be provided at a school, at the job site or online. They also must receive incremental wage increases as they progress and complete the training, which is determined by the employer. Program sponsors develop the standards on the plan to train the apprentice to occupational proficiency that is approved by the Pennsylvania Apprenticeship and Training Council. The plan includes work process and an outline of the training instructions. Each apprentice is mentored by experienced workers identified by the employer (Pennsylvania Department of Labor & Industry, 2018).

Recommendations

The report identifies and describes promising practices for state-sponsored entry-level training, specialized training and advanced roles, and apprenticeships for personal care aides. All these models and programs lack a comprehensive evaluation to demonstrate their effectiveness on the worker and impact on client outcomes. A review of the literature yielded limited information on the costs and challenges to develop and implement the state-sponsored training programs, though some insights were gained through stakeholder interviews. Colorado is considering reforms to their programs aimed at improving the quality of training standards and career paths for PCAs. Recommendations on training, advanced roles, apprenticeships and funding are highlighted below.

Training

- Standardized training can help ensure a basic level of PCA preparedness. States took different approaches in the flexibility of the training. Most designated specific competencies and training providers could customize the training instead of outlining more specifically or requiring a curriculum, competencies, and methods for teaching and evaluation. The former provides latitude for training providers while the latter allows the state to exercise greater control. Our recommendation is to provide flexibility for training providers so they can customize and accommodate the training based on the abilities of the trainees and the populations being served.
- Outline core competencies that cut across different settings and populations for the core training. A universal worker training program can break down the silos, prevent duplicative training for PCAs and allow them to build upon existing skills with further training. The Centers for Medicare and Medicaid Services' identified competencies for direct care workers and common modules and topics across state programs and those recommended by the Training Advisory Committee can be a starting point to build the curriculum. Population-specific knowledge can be added to the core training.
- Assess competencies through knowledge exams and in-person skills demonstration. Create multiple versions of the exam, particularly if trainees can retake the exam, and

alternative options to written exams to accommodate all learners. Also, have the training and exam available in multiple languages and be culturally competent.

- Engage a diverse group of stakeholders across different settings and populations in the development and implementation of the training program. It provides different perspectives on the core competencies for workers across settings and can help with buy-in. The representatives can include consumers, state agencies, labor organizations, educational institutions, provider associations, workers, home care agencies, and subject-matter experts.
- A hybrid approach to training is feasible. Online training can be effective for the knowledge component of the training. The skills demonstration should be in-person and hands-on to provide opportunities for students to practice the skills.
- Incorporate the use of an adult learner-centered approach in delivery of the training and focus on the competencies the trainees need to perform well. The learning process is more active and considers the concrete, immediate needs of the worker and builds on the knowledge, attitudes and skills they have gained through their life experience. It uses interactive activities to engage the students and helps with retention of the content. This approach is possible for in-person training and eLearning platforms by incorporating interactive presentations, case scenarios that make the information applicable to real situations in the workplace, and demonstrations.
- Training hours varied from 40 to 75 hours. It is difficult to recommend a specific number of hours for training PCAs. The number of hours should be based on the competencies defined for the workers and the time needed to train the workers in the knowledge and skills required to demonstrate each competency. We recommend working to create logical career ladders or lattices that provide PCA trainings that work in concert with their certified nursing assistant or certified home health aide programs and regulations.
- Offer training through various types of organizations such as home care agencies, vocational schools, and educational institutions. This provides options for the trainees. The advantage of the home care agency is the training is often paid through the employer, while vocational schools and educational institutions typically charge a fee determined by the school. Assess and monitor the quality of instructors and training providers at the onset to ensure they are equipped to provide the training. Conduct ongoing audits every one or two years.
- It is not clear that the instructor must be an RN, though several states have the requirement. LPNs/LVNs and CNAs also may be able to teach the material given their caregiving experience. Criteria should include teaching and clinical experience as well as an understanding of the work of PCAs. Assess instructors understanding of the content by requiring them to pass the knowledge exams and demonstrate competence in the skills they will be teaching. Provide guidelines or training for the instructors in the delivery of the training and fidelity to the model.

- Require personal care aides to have continuing education on topics relevant to the responsibilities of the PCAs and that are condition-specific.

Enhanced or Advanced Roles

- Review the laws and regulations that might affect implementation of the enhanced role model(s) for any limitations on the role of PCAs. These may include Medicaid rules and regulations, Nurse Practice Acts, licensing requirements, legal liability issues, and other laws and regulations relating to the delivery of healthcare that would need to be examined and taken into consideration in any area where this concept is developed (PHI and SEIU, 2012).
- One challenge is providers willingness to adopt advanced or enhanced positions for PCAs and integrating them into home-based care teams. The advanced roles need to be acknowledged as a different job category with more advanced tasks and responsibilities. It is important to understand how it gets implemented at the agency and to receive buy-in from the end users or employers. Employers should be engaged when developing these roles or thinking about integrating PCAs into home-based care teams with discussions about supervision, training on advanced skills, ability to pay increased wages for the PCA and supervisor, performance evaluations, and employer's assessment of using a PCA in an advanced role and having the clientele requiring an advanced PCA. Healthcare team members may have to be educated on the value and role of PCAs for more successful integration and use of their knowledge and skills in home-based care teams.
- Scale up and test the promising models of advanced or enhanced roles for PCAs to make an evidence-based case for sustained investment.

Apprenticeships

- Apprenticeships have unique challenges that make them difficult to implement and sustain. Washington state serves as a model for providing apprenticeship opportunities for personal care aides. Key components include competency-based training instead of time-based training, increased compensation, peer mentors to support on-the-job training, buy-in from leadership team and a champion to implement and continue the apprenticeship program, portability of credentials, and partnerships with workforce investment and educational systems.

Funding

- One challenge is the incentive to invest in this workforce and fund training programs and advanced roles beyond demonstration programs. One option is to build the program costs into Medicaid or managed care programs so there is continued funding for training, support for the aide, and increased compensation for the enhanced position. Explore how to use Medicaid reimbursement strategies to incentive providers

to create more professional development opportunities for their PCAs (Spetz, Stone, Chapman, & Bryant, 2019). Build on pay-for-performance to target dollars towards successful programs in home settings that specifically provide advancement opportunities for PCAs. Build reimbursement for additional services provided by PCAs when they are part of a coordinated care system. This can help with the additional employer costs for training, support and supervision, and increased wages. These advanced roles potentially result in savings associated with reductions in emergency department visits and hospitalizations that would be realized by Medicare and Medicaid programs. Studies are needed to test whether these advanced roles are associated with these savings, including reduced turnover that is related to quality outcomes and potential savings.

Finally, the coronavirus pandemic continues to change the landscape for aging services and the PCA workforce. Some states and the federal government have issued Executive Orders that attempt to increase the emergency supply of direct care workers by relaxing training requirements. Staffing shortages have been mitigated at some agencies and others look to displaced workers as a pipeline for new workers. The extent these changes are temporary versus permanent is not clear. It is important to understand the new landscape and the most effective approach to training and providing advancement opportunities for workers. Waiving already minimal training requirements raises significant job quality concerns for workers and the quality of care for clients is at risk. Any revisions to training regulations or issuing new regulations to grant more flexibility to training providers and employers must be balanced with any compromises to essential skills training.

It is not known when states will be able to hold in-person trainings in the traditional format. Colorado may want to consider funding for online training programs or allow trainers to access adequate space and equipment for safe in-person training.

One of the potential impacts of COVID-19 has been discussions about virtual supervision for home health aides. Colorado can explore the extent that supervision can be built into in-home care programs including non-medical home care. This is an opening for supervision to be conducted virtually, particularly when overseeing delegation of paramedical tasks to PCAs and supervising staff in more advanced roles.

Appendix: State Sponsored Training Programs

The appendix provides a summary of the state-sponsored training programs (Table 1) and a detailed description of each training.

Table 1: Summary of State-Sponsored Training Programs

State	Time Requirement to Complete Training and Assessments	Minimum Training Hours	Curriculum Customization	Training Delivery	Assessments	Portability: Setting and HHA/Nursing Assistant Training	Costs: State and Trainee
Alaska	4 months of hire	40 hours	Statewide curriculum; Flexibility with content but must match requirements in regulations	In-person (use of textbook and experts)	Written (80%) and skills performance assessment (100%)	Training counts toward HHA/nursing assistant training	State: Estimated costs to oversee training: One FTE Trainee: Home care agencies generally do not charge a fee. Community colleges or community instructors charge credit hours or a fee.
Arizona	90 days of hire – Must complete core training and certification before providing	None	Use own training curricula but cover same competencies with state approval	Hybrid – Skills training must be in-person	Written (80%) and skills performance assessment (100%)	Not transferable to other settings or toward CNA/HHA training	State: Estimated costs to develop training: one FTE Cost for oversight and management

	direct care to clients						<p>of database: ½ to ¾ FTE</p> <p>Trainee: Employer determines whether trainee pays for training, though most don't charge. Range: \$200 to \$600 per module</p>
Maine	<p>Enrolled in training program: 60 days of hire</p> <p>Completion: 6 months of hire</p>	50 hours	Curriculum mandatory	Primarily didactic and can be online	Written (70%) and skills performance assessment	<p>Transferable to other settings</p> <p>Introductory course for CNA training</p>	<p>State: No information on development or implementation costs.</p> <p>Trainee: Lack of valid information on trainee costs</p>
Massachusetts	Prior to providing services	60 hours (Homemaker: 40 hours and Clinical: 20 hours)	Use own curricula but recommended to use <i>ABCs for Direct Care Workers</i>	<p>Orientation: Online</p> <p>Training: In-person</p>	Written (78%) and skills performance assessment	Training counts toward CNA/HHA training	<p>State: \$2.2 million grant to develop training</p> <p>Trainee: Proprietary schools and community colleges charge fee: \$400 to \$1400</p>

							Employers generally don't charge a fee
New York	6 months of hire	40 hours	Follow framework and cover same competencies with state approval	In-person - lecture	Written (70%) and skills performance assessment	Transferrable to CNA/HHA training	<p>State: No information but estimated cost for HHA training is \$500-\$1,200 per person</p> <p>Trainee: No fees for training; \$100 for training materials</p> <p>Proprietary or public colleges: May charge fees</p>
Virginia	Before providing services	40 hours	Original curriculum developed recommended but not required; Flexibility for instructor to create own training	In-person	Written (70%) and skills performance assessment	Not transferrable to other settings or toward training requirements for CNA/HHA training	<p>State: No information on costs to develop training. State doesn't provide oversight so no implementation costs.</p> <p>Trainee: Mix of whether agencies require employees to pay for training</p>

Washington	200 days of hire	75 hours	Curriculum not mandatory but must cover same competencies and instruction methods with state approval	Core training in-person; PO	Written and skills performance assessment	Training counts toward HHA/nursing assistant training	<p>State: Cost to develop program: One FTE to develop curriculum, labor time to facilitate stakeholder process, and stipends for subject-matter experts</p> <p>2015 anticipated \$13.1M in training and support</p> <p>Trainees:</p> <p>Training Partnership: Union members – no fee; Non-union members – out-of-pocket or other sources</p> <p>Community instructor: Fee from \$500 to \$700</p> <p>Employer: Determines whether to charge employees, though most cover the cost</p>
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Descriptions of State-Sponsored Programs

Alaska: Agency Based Personal Care Services Training Program

Alaska developed a personal care aide curriculum prior to 2008 with the goal to cross-train direct care workers. The personal care aide training is designed for the workers to eventually become CNAs. The Center for Human Development at the University of Alaska, Anchorage developed the curriculum based on the training program for CNAs, with input from nurses and CNAs. The curriculum content had to match the requirements in the regulations.

Another activity in Alaska was the development of 10 core competency categories for direct care workers across sectors: long-term services and supports, developmental disabilities, addictions, and child development. In 2008, the Alaska Mental Health Trust Authority, in collaboration with the University of Alaska and the State of Alaska Department of Health and Human Services, the Western Interstate Commission for Higher Education, and the Annapolis Coalition on the Behavioral Health Workforce, developed the Alaskan Core Competencies for Direct Care Workers. The competencies were designed to be delivered over four days and in-person with interactive group discussions and exercises. Trainers participated in a two-day education to understand the delivery of the curriculum and best practices in teaching approaches that engage direct care workers. The group also provided guidance on how to adapt the competencies to specific populations and types of direct care workers. These competencies were not mandated by the state for training personal care aides in Medicaid programs. The competencies are endorsed by Alaska to update existing training programs or as a foundational source for training curricula.

Training Hours and Topics: Personal care aides in Medicaid programs are required to complete 40 hours of training. The training must be completed within four months of hire. The state has an approved curriculum that lists the training modules and topics that must be covered in the training, though instructors can add additional topics. It is recommended to use the book, *Providing Home Care: A Textbook for Home Health Aides*. Since the textbook is for training home health aides not all the content is covered in the training. Trainers also incorporate working skills, such as being on time, accountability, etc., into the training. The training modules include the following topics:

1. Legal and Ethical Issues
2. Communication and Cultural Diversity
3. Infection Control and Standard Precautions
4. Safety and Body Mechanics
5. Emergency Care and Disaster Preparation
6. Physical, Psychological, and Social Health
7. Body Systems and Related Conditions
8. Confusion, Dementia, and Alzheimer's Disease
9. Human Development and Aging

10. Positioning, Transfers, and Ambulation
11. Personal Care Skills
12. Core Healthcare Skills
13. Medications and Technology in Home Care
14. Rehabilitation and Restorative Care
15. Clients with Disabilities
16. Mental Health and Mental Illness
17. New Mothers, Infants, and Children
18. Dying, Death, and Hospice
19. Clean, Healthy, and Safe Environments
20. Clients' Nutritional Needs
21. Meal Planning, Shopping, Preparation, and Storage

The training has been revised since 2008 to match the content with changes in the regulations as Alaska moves to have more separation between tasks of nurses and personal care aides.

Training Entities and Delivery: A variety of entities provide the training. These include proprietary schools, community colleges, allied health instructors in addition to the agencies. One training organization, Career Tech, is a vocational technical training center in high schools. Students can complete either PCA or CNA training with a certificate when they graduate high school.

The Alaska Department of Health and Social Services/Senior and Disabilities Services lists state-approved trainers. Trainers are required to be RNs who have educational experience. Most of the nurse instructors are educators. Instructors are a mix of community trainers and those who work in agencies and only train the agency staff. Instructors are not provided any training for the delivery of the curriculum. The state provides guidelines for instructors in packets. Instructors create their own curriculum or modify the state-sponsored curriculum based on the needs of students and knowledge assessed through standardized tests.

The training is in-person and is a combination of hands-on training, experts, and the use of a textbook.

Assessment: The state provides guidelines for the written and skills performance assessment overseen by the instructors. The written exam is 50 multiple choice or true/false questions. The instructor has discretion to provide an oral instead of a written exam for students with cultural and/or learning style differences. Students in special circumstances also can demonstrate their answers. The student must receive a minimum of 80% on the exam. Students who do not pass the exam may retake it once. The students must also pass a functional skills assessment to demonstrate competencies on 50 skills. The skills checklist indicates for each skill whether the student must have at least one, two or three return demonstrations to successfully pass the skill. Students are evaluated by the instructors and must successfully pass all skills.

Alaska is working with the learner community to develop other alternatives to the written exam to have multi-media options. The state recognizes that some individuals would be successful as PCAs but may need other formats than a written or oral exam to pass the test.

Portability/Transferability: While the competencies developed were designed to go across multiple sectors, it is not clear whether the completion of the personal care attendant training goes across settings. The training can be used for an abbreviated home health aide and nursing assistant training.

Exemptions to Meet Training Requirements: Potential personal care aides can be exempted from taking the training if they meet the following requirements:

- Performed duties similar to the personal care aide;
- Satisfactory job performance evaluations from the individual's previous employer;
- Proof of successful completion of at least 16 hours of training in the subjects listed in the state-sponsored training;
- Documentation on the file of successful completion of the required training; and
- Submits proof of enrollment in training not more than four months after beginning employment as a personal care aide.

Training Costs: Alaska recognized a need to strengthen the workforce. It wanted to raise the bar and elevate the profession. The Mental Health Trust, which had money available from a lawsuit of misused lands, provided funding for the development of the curriculum. The interviewees did not know the budgeted amount for the development of the curriculum, only the funder.

The Alaska Department of Health and Social Services does not pay the training organizations or instructors. Representatives from the department estimated that the labor cost is one FTE staff person to oversee the training program.

Home care agencies generally do not charge their own employees a fee for the training. If an agency sends a worker to a training site, then the worker would have to cover the fees. Training sites determine their own fees for the training program. Interviewees did not know the range of the fees or the average cost. Community colleges charge credit hours for the training. Community instructors tend to model their fees after the community colleges. Some community providers have contracts with Native American organizations who cover the fees for those students.

It is believed that most agencies pay their employees during their time taking the training. Some agencies require a commitment of time at the organization or the person has to reimburse the agency for the training fees. This is out of concern that the agency will pay for the training and the worker will leave shortly after the training.

Arizona: Principles of Caregiving: Fundamentals

The comprehensive training requirements in Arizona evolved from a 2005 report by a Governor's Taskforce: Citizens' Workgroup on the Long-Term Care Workforce. The group was established to address the development of a high-quality direct care workforce and retaining workers. The Department of Economic Security led the development of the curriculum. The group advised the state to develop a training systems for all personal care aides that would be uniform, statewide, and state-funded. A sub-committee of the group developed the first state-sponsored PCA training curriculum, "Principles of Caregiving," a fundamentals curriculum for all PCAs. The group was comprised of representatives from education institutions, Alzheimer's Association, and providers. They also created two specialized training modules: 1) Caring for older adults and people with physical disabilities and 2) Caring for people with intellectual and developmental disabilities. The curriculum consists of the fundamental skills training and the two modules. After the group ended, the state created the Direct Care Workforce Committee to help with statewide adoption of the curriculum and developed the written test and skills demonstration assessment. They also initially held train-the-trainer workshops for the instructors. The state incorporated the Direct Care Workforce Committee's recommendations into state Medicaid policy and the required training become effective in 2012.

Training Hours and Topics: All agency-employed personal care aides are required to complete the fundamentals training and most workers are required to complete the specialty training for the populations they serve. They also most pass a standardized competency evaluation. Initially the certification had to be completed before workers could provide any direct care to clients. This proved to be difficult to implement so the state changed the timeframe to within 90 days of hire. Arizona was deliberate in selecting 90 days because agencies felt this is generally the window when workers tend to leave the job. PCAs must complete the fundamentals training before they can see a client and they can't provide direct care until they pass the certification. Most agencies ensure their employees complete the training and certification sooner than the 90 days.

The standards for PCA training do not mandate the number of training hours that a PCA must complete and instead took a competency-based approach. The training is intended to be taught in 40 to 80 hours and it is up to the instructor to determine the number of hours. The committee felt that specifying the number of hours could be restrictive and providers were concerned about the costs associated with the requirement. The committee concluded that the minimum length of training programs was less important and that the effectiveness would be demonstrated through the standardized test results. Internally there has been some confirmation of this approach. The training program for direct care workers in assisted living is considering following a similar approach, with less emphasis on the hours and moving towards a more hands-on, competency-based approach.

If an agency or training entity uses a different curriculum, the training must be approved by the state Medicaid department, Arizona Health Care Cost Containment System (AHCCCS), and the

curriculum must cover the specified competencies. The training is available in English and Spanish. Other language preferences are the responsibility of the employer to make the accommodation. The fundamentals training covers the following topics and competencies:

1. Overview of Position
2. Legal and Ethical Issues
3. Communication
4. Cultural Competency
5. Job Management Skills
6. Observing, Reporting, and Documenting
7. Infection Control
8. Nutrition and Food Preparation
9. Fire, Safety, and Emergency Procedure
10. Home Environment Maintenance

The Aging and Physical Disabilities module covers the following topics:

1. Body systems
2. Physical disabilities and conditions
3. Psychological and emotional conditions
4. Personal care
5. Transfers and positioning
6. Sexuality issues
7. Activity planning
8. Dementia specific care
9. Grief and end-of-life issues

The Developmental Disabilities module covers the following topics:

1. Knowledge of developmental disabilities
2. Working with people with disabilities
3. Role of the Division of Developmental Disabilities
4. Support planning
5. Abuse and neglect
6. Incident reporting
7. Daily living
8. Positive behavior support

Arizona has an initiative for an industry group to revise and update the curriculum. This has been facilitated by a grassroots effort and the members volunteer their time. The group started with 40 or 50 people and is now down to eight core people and a chair who will revise the curriculum. The focus of the revisions is on the interpersonal and engagement skills, such as determining how much care a person can take on for themselves and having the PCA as a facilitator, problem-solving and decision-making, and being respectful and understanding of the

clients. Less emphasis is on revising the physical tasks covered in the curriculum, which haven't changed much over the years. The new content also will be incorporated into the assessments with an emphasis on how PCAs handle different scenarios and situations with clients.

Another possible revision to the training program, though it is not certain it will be implemented, is to not only have criteria for the instructors but also provide training to ensure they have the capabilities to deliver the curriculum. Some have expressed a need for an improvement in the instructors. Guidance for the instructors may be a way to make this happen.

Training Entities and Delivery: AHCCCS approves entities to provide the training and testing of the personal care aides. The approved programs can be an AHCCCS registered agency that provides direct care services, a private vocational program, provider agency, or an educational institution (e.g., high school, college or university). Three-quarters of training programs are agencies who either train their own employees or contract with other agencies to deliver the training. The remaining 25% of training is through private vocational schools or high schools and community colleges.

The workgroup that developed the training built in flexibility for the instructors to deliver the training. They didn't prescribe the number of hours or how the content was taught to the trainees.

Instructors must meet specified requirements to receive approval as an instructor for the personal care aid training. They must pass all tests of the training module competencies they are teaching (92% on knowledge test(s) and 100% on skills test for any module taught) and have one year experience providing direct care and one year experience teaching groups of adults. Anyone can teach the curriculum as long as they meet this criteria, including RNs, LPNs, and CNAs. Individuals who are "experts" or licensed/certified on a training subject (e.g., physical therapist or registered nurse) may provide training on that topic. The instructor is required to conduct two trainings each year.

Early on in the process the majority of instructors were those who developed the curriculum. They conducted train-the-trainer workshops to build a cadre of instructors who would be familiar with the teachings of the curriculum. Arizona no longer trains instructors or provides guidance on how to be trainers in this context.

The training organizations are audited within 180 days of program approval. The audits assess whether the organization has qualified trainers, space and materials for the training. Arizona is moving up the initial audit and training organizations will be audited before being approved to have accountability upfront. They found that once the process is established correctly there are fewer problems down the road. Organizations then have annual audits and if they pass without any deficiencies, the next audit is not for another two years. The health plans, including the Managed Care Organizations (MCOs), conduct the audits for the service providers and AHCCS audits the non-service agencies. The audits for the service providers are part of the MCOs

quality monitoring of the agencies. Some health plans delegate the responsibility but it is completed by groups that have multiple lines and business in the space. AHCCS is advocating that the MCOs conduct their own audits.

The Department of Education conducts the audits of the vocational schools. They have incorporated the auditing tool from AHCCCS into their auditing process and it is typically conducted every two to three years.

The knowledge aspect of the training may be provided through a variety of approaches, including videos and e-learning. Skills training must be in-person and include hands-on training of skills to ensure that student is able to appropriately perform the task.

Assessment: Students are required to pass a standardized written/oral knowledge exam and skills performance assessment. The knowledge test can be administered online but must be proctored by an instructor. The skills demonstrated for the assessment depend on the population the worker will serve. The student must score an 80% on the written knowledge exam and all the skills tests (100%) for module completed. The written test is approximately one to two hours and the skills test takes approximately 45 minutes to one hour. If a student fails to demonstrate competency on any skill, they must retest those skills individually. Failure on the knowledge test means the student must retake the entire test, though there is no limit on the number of times a student can retake the test. Arizona is creating multiple versions of the test because they currently only have one version of the test and students who retake it take the same test.

Portability/Transferability: Legislation forced reciprocity in training methods and testing for the PCA training. The training is portable to assisted living and from one employer to another. For example, a PCA in home-based care who completes the training and then decides to work for an assisted living community is given credit for the training. The only additional training required would be a module on medication administration, which is not covered in the PCA training. AHCCS has a database of the certifications which facilitates this process.

The regulations do not allow the training to be applied toward CNA or HHA training and certification. The PCA would have to complete the entire training to move to those positions. Arizona is interested in the possibility of creating a universal worker training that would extend the training to position of CNAs.

Exemptions to Meet Training Requirements: Employees who have caregiving experience can take a challenge test. If they do not pass the test in one attempt, then they are required to complete the full training. Workers who have education that are at a minimum similar to what is required for a personal care aide (e.g., certified nursing assistant, LPN/LVN, RN) are not required to take the training or challenge test. If they want to be an instructor, then they must pass the written test and skills demonstration.

Training Costs: The cost to develop the original curriculum was split between AHCCCS and the Department of Economic Security to pay for one FTE to facilitate and manage the process and stakeholder group that developed the curriculum. The industry people wrote the curriculum on their own time.

AHCCCS does not provide any money to implement the training. This is one reason why the state is flexible in the requirements for the training program. The cost to the state is the equivalent of ½ to ¾ FTE to approve the training organizations and manage the database of the approved training entities, certification of the PCAs, and auditing process for non-service agencies.

In the past, only training organizations that were approved through the Department of Post-Secondary Education could charge a fee for the training. That has changed in the last few years. Most home care agencies do not charge their employees for the training. The cost among organizations that have a fee is between \$200 to \$600 for each module, the mode is mid- to high \$300s. Some agencies have employees pay for the training but will provide a bonus if they stay with the agency for a specified time that essentially reimburses the training costs.

The employer determines whether or not to pay employees for the training time and it is not a requirement. Representatives from AHCCCS believe most agencies pay their employees.

Maine Personal Support Specialist Student Training Program

Training Hours and Topics: All personal care aides in Maine must complete the state-sponsored training program. The training includes 14 modules and is designed to use the book, *Lippincott Textbook for Nursing Assistants, A Humanistic Approach to Caregiving, Fourth Edition*. The 50-hour training has 40 hours of classroom hours and 10 hours face-to-face clinical component. The instructor may determine to have additional hours of training depending on the number and needs of students, teaching techniques or other learning opportunities. Trainers are required to use the state-sponsored curriculum and cannot develop their own. The training covers the following topics:

1. Entering the Health Care Field
2. Legal and Ethical Aspects of Health
3. Basic Infection Control
4. Professionalism in the Workplace
5. Basic Human Needs
6. Death and Dying
7. Communication
8. Special Considerations (Special Populations)
9. The Human Body
10. ADLs and IADLs

11. Ergonomics, Transferring, and Repositioning a Consumer
12. Accidents, Incident Reports, Falls, and Restraints
13. Safety
14. Procedures

The instructors may train workers to perform additional tasks that are not covered in the training.

The potential personal care aide must be enrolled in a certified training program within 60 days of hire and complete training and exams within six months of hire. A personal care aide who has not met the training and examination requirements is required to take an eight-hour orientation to understand the roles and responsibilities of the personal care aide before delivering services. The regulations state that job shadowing can count for up to two hours of this job training.

Training Entities and Delivery: The training program can only be taught by instructors approved by the Maine Department of Health and Human Services and listed on the website. The instructors must meet one or more of the following criteria: 1) Verified RN in good standing with the Maine State Board of Nursing; 2) Certification or approval as an instructor for CNAs in good standing; or 3) Approval from the Workforce Development Unit within the Division of Licensing and Certification, based on relevant experience as a training.

It appears the training is in-person.

Assessment: Students must pass a written exam for each module and a final written exam as well as demonstration of all required skills and tasks. A student must receive a minimum score of 70% to pass both the module and final exams. Students are allowed to retake each module exam and the final exam two times. Demonstrated competency of skills is documented in the employee's record, which includes the scope of the demonstration and the signature of the instructor certifying competency. When a task or condition of the client warrants specialized skills and knowledge of a health professional, as determined by the medical eligibility assessment, the personal care aide is trained by the health professional and demonstrates competencies of the skill to carry out the specialized tasks.

Portability/Transferability: The training can be applied to certified nursing assistant training, if started within two years. PCAs receive credit for the first six modules of the CNA training, approximately 20 hours of the 180 required hours. Personal care aides who complete the training and receive a certificate are listed on the database of the Division of Licensing and Certification website. The certificate of training completion allows workers to provide support in a variety of settings.

Exemptions to Meet Training Requirements: Workers who received a certificate and completed the training prior to 2003 are not required to take the personal care aide curriculum.

Training Costs: Through our literature review we did not find state costs on the development or implementation of the training program. While not clear, it appears the training entity determines the cost of the training. In most cases, the agency employing the personal care aide covers the costs, but trainees may also pay directly for the training.

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

Massachusetts requires personal care aides to complete 60 hours of training, 40 hours of homemaker training and 20 hours of personal care aide training, prior to providing services. However, the state does not have a mandated curriculum but does recommend the Mass Council's state-sponsored personal care aide training that is based on the *ABCs for Direct Care Workers (ABC)*. State contracts with home care agencies reference the *ABCs for Direct Care Workers* curriculum as the recommend one. *ABCs* curriculum was developed under the PHCAST demonstration program and led by Mass Area Health Education Network. The partners included PHI, Bristol Community College, Commonwealth Corporation, Massachusetts Home Care Aide Council and the Massachusetts Personal Care Attendant Quality Workforce Council

Training Hours and Topics: The *ABCs* is a 60-hour core competency curriculum (40 hours of the homemaker training and 20 hours clinical). The training has 17 hours of class instructions and includes a review and demonstration on universal precautions and a three-hour practicum. The curriculum is divided into 13 stackable modules, ranging from two hours and 30 minutes to nine hours and 30 minutes in length. Each module addresses at least one of the following core competencies:

1. Roles & Responsibilities
2. Health Care Support
3. Infection Control
4. Basic Restorative Care
5. Personal Care
6. Nutrition
7. Consumer Needs
8. Safety and Emergency
9. Consumer Rights, Ethics, and Confidentiality
10. Communication
11. Culture and Diversity
12. Housekeeping
13. Life Skills

The curriculum has skills-based learning objectives for each sector and provides guidance to trainers on how to assess trainees' knowledge, skills, and attitudes through a combination of observation and testing.

Agencies may create their own curriculum and it must align with the competencies outlined by the state and number of hours per subject. While the state doesn't approve the curriculum used by agencies, the Area Agencies on Aging or Aging Service Access Points monitor home care agencies for compliance with state standards. Through this monitoring role they also evaluate the training provided to the PCAs. Most agencies use the *ABCs* training, though franchises often create their own curriculum. Proprietary schools, such as the Red Cross, also tend to have their own curriculum. While community colleges established their own training for personal care aides prior to the development of the *ABCs*, several have adopted their initial training program to the *ABCs* curriculum.

Accompanying the curriculum is a participant's guide that describes the key content for each activity and worksheets. The guide is specifically designed for readers with lower literacy levels and is available in multiple languages: English, Spanish, Brazilian Portuguese, and Haitian Creole.

Under Medicaid programs, agency-employed personal care aides must complete an orientation and the 60 hours of personal care aide training prior to providing services. The orientation is three hours with a half-hour session on communicable disease including AIDS/HIV and Hepatitis B, infection control, and principles of standards precautions.

A *Fundamentals of Home Care* curriculum is an introduction to direct care work for those new to the field, current PCAs unable to complete the 60-hour training, respite volunteers, and informal caregivers. The 10-hour curriculum provides a brief overview of some of the basic skills necessary for direct care workers. The modules include:

- Roles and Responsibilities
- Consumer Rights, Confidentiality, and Ethics
- Overview of Infectious Diseases
- Universal Precautions
- Proper Body Mechanics
- Basics of Communication

Training Entities and Delivery: Community colleges, proprietary schools and home care agencies provide the training to personal care aides. It is a mix of whether agencies, or proprietary schools/community colleges train the workers. When Massachusetts has a shortage of workers, agencies are paying workers to receive the training. When worker shortage is less of an issue during poor economic times, more workers are getting trained at the community colleges or proprietary schools. The proprietary schools have combined the personal care aide and CNA training. They also have partnered with employers, which can be more marketable for potential employees. As a result, some trainees choose to receive training from these schools.

Instructors can be RNs or social workers. RNs must deliver the clinical modules in the curriculum. A registered physical therapist is recommended for the training on mobility.

Instructors take a train-the-trainer workshop offered by UMass Medical Center prior to facilitating the ABCs curriculum. The workshop is one-day, in-person training and is offered twice a year. This model helps maintain the fidelity of the curriculum. Instructors pay a \$125 fee to take the train-the-trainer class.

The curriculum incorporates adult-learner teaching methods to strengthen the skills, knowledge, and values and builds on past experiences of training participants. Across all training modules, participants are encouraged to actively engage in trainings through experiential learning, live lecture, discussion, simulation, group work, written materials, visual aids, hands-on activities, and skills demonstrations. The interactive presentations involve instructors asking participants what they know about the topic and contributing their own experiences and what the experiences taught them about the topic under discussion. They also provide concrete examples of how the material being taught is relevant to the particular situations that participants may encounter. Students are encouraged to ask questions.

The orientation is available online. The core training is in-person. Nine closed-captioned videos were created that demonstrate many major skills assessed in the ABCs curriculum, such as hand-washing, oral care, and consumer transfers. UMass Boston and Massachusetts Executive Office of Elder Affairs are in the process of converting 40 hours of the training online. The clinical training will continue to be in-person. The online training will be free and open access to the public. For the first time this year Massachusetts has a \$1 million training fund budget for the Massachusetts Home Care Aide Council. They will subcontract with agencies for the online skills training beyond the basic training, such as mental health, dementia, and substance abuse. Currently, this is on-hold because of COVID-19 and not sure whether it will be continued.

Assessment: The *ABCs for Direct Care Workers* includes a written knowledge assessment test and a skills demonstration checklist. Participants are expected to pass a written test with of score of 78% or higher and demonstrate the hands-on skills developed by the Massachusetts Home Care Aide Council. Guidance is provided to instructors on how to assess workers' knowledge, skills, and attitudes through observation and testing.

Portability/Transferability: Workers who have successfully completed the training and passed the exams are listed on the state's home care worker registry. The goal is this certificate will be accepted by a variety of care settings that share the same competencies. The state has created a CNA and home health aide bridge program that allows workers to apply their personal care aide training hours towards the training. Interviewees indicated that the bridge program has been more successful with the home health aide training, which is through the MA Executive Office of Elder Affairs, than the certified nursing assistant training, which is licensed through the Department of Public Health. One challenge is a handful of community colleges offer the bridge curriculum. One possibility is because the community colleges have their own CNA/HHA training curriculum and it is not financially beneficial for them to use the bridge program. Another possible barrier is that the same nurse who provided the personal care aide also has to

provide the bridge training, which can be difficult. The bridge program may need changes to make it more widely used and feasible.

Exemptions to Meet Training Requirements: RNs, LPNs, therapists, CNAs, and home health aides who demonstrate successful completion of the relevant approved training program are exempt from the personal care aide training as well as students enrolled in a nursing program. Additionally, homemakers who have successfully completed the Homemaker Training Waiver procedure do not have to complete the personal care aide training. All new employees exempt from any of the training components must receive the three-hour orientation.

Training Costs: The cost to develop the *ABCs for Direct Care Workers* curriculum was covered under the PHCAST grant funded by U.S. Department of Health and Human Services, Health Resources and Services Administration. The state of Massachusetts received a three-year, \$2.2 million grant to develop the competency-based training program for personal care aides. One FTE at the state oversaw the development of the training program.

The proprietary schools and community colleges charge a fee for students to take the personal care aide training and they determine the cost. The state does not have a limit on the fee for the training. The range is from \$400 to \$1,400 to complete the training program, with an average cost of approximately \$900. Students trained through their employers generally do not have to pay to complete the training, though some employers may charge a nominal fee. The agency covers the cost and these are out-of-pocket expenses for the agency. Some agencies have grants to cover the training costs. Due to concerns that an employer will provide the training and the worker will leave the organization within a short period of time, some agencies provide free training but in return the employee must commit to the organization for a specified period of time or they are required to reimburse the employer. Massachusetts discourages agencies from charging a nominal fee or requiring a time commitment from the employee. Workers are paid for their time to complete the training, particularly during the supervision phase.

Massachusetts does not have any costs to implement or oversee the training program. According to one of the interviewees, the state might argue that through the contracts with home care agencies the cost of training is covered in their rate. However, there is no way to quantify how much of the rate is for training costs.

New York: Home Care Curriculum

The State University of New York at Buffalo, under contract with the New York State Department of Social Services, developed the first personal care aide core curriculum in 1992. The curriculum, *the Home Care Curriculum*, was revised and integrated the 16 hours of the basic core curriculum into the modules. The basic core provides the basis for all direct care worker curricula: Personal care aides, home health aides, and certified nurse aides. A

workgroup composed of staff members of the New York State Department of Health, New York State Education Department, county health departments, home care providers, home care provider associations, and representatives of various labor organizations developed the revised curriculum. Trainers have flexibility in the curriculum used to train personal care aides but it must follow the framework and outline of the *Home Care Curriculum* and be approved by the Department of Health or the State Education Department.

Training Hours and Topics: Home care aides complete 40 hours of training, including the 16 hours of basic core topics. They are required to complete the training and pass the examinations within six months of hire. The basic core training covers personal care skills, infection control, and written documentation tasks for all direct care workers, regardless of setting. Personal care aides then complete another 26 hours of training. The curriculum identifies the minimum training requirements for each of the 12 modules. Each module is divided into units with a set of objectives, suggested teaching methods, evaluation methods and the minimum training time required to teach the material. Learning objectives are based on a mix of knowledge and skills. Some sections have knowledge-based objectives paired with measurable performance criteria. The 12 modules include the following:

1. Introduction to Home Care
2. Working Effectively with Home Care Clients
3. Working with Elderly
4. Working with Children
5. Working with People who are Mentally Ill
6. Working with People with Developmental Disabilities
7. Working with People with Physical Disabilities
8. Food Nutrition and Meal Preparation
9. Family Spending and Budgeting
10. Care of the Home and Personal Belongings
11. Safety and Injury Prevention
12. Personal Care Skills

The training is available in Spanish, Russian and Chinese.

Training Entities and Delivery: The New York State Department of Health (DoH) and New York State Department of Education (SED) approve the training entities. DoH licenses the training programs operated by health care providers (e.g., home care agencies) and SED licenses the training programs run by proprietary training schools and by secondary and post-secondary schools (e.g., community colleges). Most of the training programs are through the licensed home care agencies. DoH is responsible for the curriculum requirements of the training programs. The approvals are good for three years.

Instructors can be an RN, a social worker, or a health economist with a bachelor's degree in a field related to human services or education. Personal skills training is taught by the RN. Trainers are not required to have a background or training as educators.

The training organizations must develop their own curriculum and teaching guides based on the modules, learning objectives and specified time in the state curriculum manual. Most programs use a textbook, *Mosby's Textbook for Home Care Aides*, to teach the core content. Training organizations also may create supplemental handouts and bring in expert speakers to present on a specific topic (e.g., nutritionist to discuss special diets or a hospice nurse to cover caring for dying clients).

The primary method for teaching the content is lecture, along with demonstration of personal care skills. Modules also encourage adult learner-centered methods, such as role playing, case scenarios, discussions with trainees, and videos.

Assessment: The *Home Care Curriculum* contains a state-sponsored, standard written tests that must be used in combination with performance checklists to determine the worker's successful completion of each module.

The RN administers the written and oral exams provided by the Department of Health in a classroom setting following each unit of instruction. Students must receive a minimum score of 70%. They also must attend 80% of the classes.

The manual includes a list of the procedures and checklist for evaluation purposes. It is recommended that the student pass 12 required procedures plus at least two other optional procedures of the instructor's choosing. The optional procedures should be related to the typical caseload or other needs of the agency. The RNs observe trainees to demonstrate their ability to perform all personal care skills in a laboratory setting.

Portability/Transferability: Personal care aides are issued a certificate upon successful completion of the 40- hour training program and are listed on the Home Care Registry. The 40 hours can be applied to a home health aide certification by participating in 35 hours of health-related tasks training. The student must demonstrate competency in all the skills areas required for the home health aide, including those required for PCA certification. One challenge has been trainees access to the 35-hour program and at times they are required to repeat training in areas they have already mastered. The basic core of the curriculum is transferable to the nursing assistant training.

Exemptions to Meet Training Requirements: The DoH allows personal care aides to take a challenge test instead of training if they are a nursing assistant with one-year of experience in the last five year, have documented home health aide or nurse aide training and competency evaluation from another state program, completion of home health aide training who has not been employed as a HHA for 2 years, or a nursing student who has completed fundamentals of nursing coursework in nursing school.

Training Costs: Through our literature review we did not find state costs on the development of implementation of the home care aide training program. However, it is estimated that the home health aide training costs approximately \$500 to \$1,200 per person. This depends on the number of aides in the training class, length of the training, number of trainings, accessibility of the required settings for the clinical supervision component of the training. In addition to the costs of training aides, there are the costs of state oversight via the survey and certification and training program approval processes. The more training programs in operation, the greater the number of entities that must be reviewed along with attendant costs.

DoH-licensed programs are not allowed to charge fees for training tuition. The student is only responsible for \$100 for training materials and supplies that become the property of the aide upon completion. Training organizations licensed by SED may charge fees (proprietary programs) or tuition (public colleges).

Virginia: Personal Care Aide Training Curriculum

Virginia's agency that administers Medicaid, Virginia Department of Medical Assistance (DMAS), created a stakeholder workgroup to develop a curriculum for personal care aides. The curriculum outlines the modules and topics to be covered in the training. It provides flexibility for the instructors on how the content is covered. The curriculum was put into the Virginia regulations in 2003. The workgroup consisted of service recipients, advocates and Medicaid officials. The agencies providing the training may adapt these materials to add additional units but it must teach at a minimum the curriculum content. It is not clear how recent changes in the regulations for personal care services has affected the requirement for PCA training and the state-sponsored training program.

Training Hours and Topics: As of 2002, all agency-employed PCAs who provide Medicaid waiver services must complete a 40-hour curriculum, exam and skills checklist provided by the DMAS. PCAs must complete the training before providing personal care services under any Medicaid program. The DMAS established a uniform training curriculum. The curriculum broadly outlines the training topics and describes how workers should perform the tasks. Trainers are responsible for populating most of the training content. The training modules include:

1. Introduction (Expectations and Requirements)
2. The Elderly
3. Personal Care and Rehabilitative Services
4. Home Management
5. Safety and Accident Prevention
6. Food, Nutrition, and Meal Preparation
7. Documentation Requirements for Medicaid Recipients

Training Entities and Delivery: Most of the training is conducted by the home care agencies. Some nurses have also conducted the training on their own. Training organizations and the instructors can develop their own curriculum, which must follow criteria from the DMAS curriculum. However, the state does not approve curricula created by the agencies.

Instructors are required to be RNs with at least two years of related clinical experience, which can include work in an acute care hospital, public health clinic, home health agency, or nursing home. The ratio of instructors to students is 1:10. DMAS used to approve instructors and maintain a registry of authorized individuals and programs for the 40-hour training. However, DMAS discontinued the approval process and registry.

The training is in-person. Instruction includes hands-on and video demonstrations.

Assessment: Students must complete a written test and skills demonstration assessment. The DMAS personal care aide curriculum manual includes a check list of tasks and procedures the student must perform. Students are required to score at least a 70% on the written test.

Portability/Transferability: The personal care aide training does not apply toward training requirements in other direct care occupations or toward home health aide or nursing assistant training. The DMAS Waiver Program is the only agency to recognize the training. It is not recognized by the Virginia Board of Nursing, medical facilities, or other state nursing boards.

Exemptions to Meet Training Requirements: Personal care aides do not have to complete the training if they are certified as a nurse aide or completed an education program that is equivalent or higher than the PCA training program (i.e., nurse aide, nurse education, or home health aide nurse).

Training Costs: Through our literature review and interview we did not find state costs on the development or implementation of the training program. Interviewees believed that since Virginia DMAS does not provide any oversight of the training there is no cost to the state.

Virginia has a mix of whether trainees pay for the training themselves or not. Some agencies do require the employees to pay for the training. If an employee stays with the organization for a specified period of time, the organization will often reimburse the employee for the cost of training. Interviewees also did not believe that employers pay staff for their time during the training. This is because they are not considered employees until they complete the orientation, training and pass the exams and skills demonstration test.

Washington: Home Care Aide Basic Core Training – Revised Fundamentals of Caregiving

Washington State has the most rigorous training requirements for personal care aides. Washington has required training for PCAs since 1995. However, personal care aide leaders and advocates identified challenges with the training requirements for PCAs and recommendations informed a successful ballot initiative in 2012 that created a new training systems for PCAs.

Legislation created the Long-Term Care Worker Training Workgroup to provide recommendations on training hours, training content, and certification requirements for PCAs. The workgroup consisted of providers, PHI, SEIU Local 775 union, state officials, Resident Councils of Washington, Washington State Long-Term Care Ombudsman, and state Developmental Disabilities Council. The legislation also mandated the creation of a Training Partnership to provide training and other supports to individual providers represented by the collective bargaining unit. SEIU 775 established the SEIU Healthcare NW Training Partnership (Training Partnership) to provide high-quality training to the PCA workforce. The Training Partnership is a joint labor-management partnership and includes SEIU 775, the state of Washington, and private industry.

Training Hours and Topics: Personal care aides in Washington are required to complete 75 hours of training that is focused on five hours of job orientation and safety, 56 hours of basic training on the “core” topics, and four modules on population-specific content (3.5 hours for each module). Training entities can use the DSHS developed basic core training or another department approved training that align the training content and instruction methods with the state-sponsored training. The basic core training is built around person-first principles and cultural competencies that help personal care aides tailor the core skills and care delivery to the unique needs of the clients. It also focuses on communication, problem-solving and relationship-building skills, as well as on the self-care needs of the workers. The modules for the core basic training include:

1. Introduction
2. Client and Client Rights
3. The Caregiver
4. Infection Control
5. Mobility
6. Basic Communication
7. Skin and Body Care
8. Nutrition and Food Handling
9. The Process of Elimination
10. Medications and Other Treatments
11. Self-Care and the Caregiver

The population-specific training topics cover dementia, mental health, and developmental disabilities.

The Orientation (3 hours) and Safety (2 hours) training must be completed before PCAs can provide services to clients. PCAs are required to complete the 70 hours core basic training and pass the exams within 200 days of hire. Those with limited English-proficiency who obtain a Department of Health-issued provisional certification have 260 days of hire to complete the training and certification.

Washington is in the process of revising the modules and incorporating more person-centered care into the curriculum. The state will receive input from various stakeholder groups to determine the best way to revise the modules. It is anticipated the revised curriculum will be completed and available in one year.

Training Entities and Delivery: Washington has three models for delivery of the training: 1) Community instructor; 2) Employer; and 3) Medicaid home care.

- **Community Instructor Model:** In this model, the state reviews the credentials and qualifications of proposed instructors to make sure they meet the criteria to teach the training. The criteria includes the instructor must be an RN with work experience in the last five years with clients in the LTSS community or have an associate degree or higher in health or human services and six months of professional or caregiving experience within the last five years in the LTSS community. Those with a high school degree are required to have one-year experience within the last five years in the LTSS community setting. For instructors with teaching experience, the state has criteria on the number of teaching hours for the topics covered in the basic training. Washington has a contract with the community instructors but they are not paid to provide the training. Instructors also are required to attend a webinar for delivery of the curriculum and it provides an opportunity for networking. Washington DSHS has a listing of approved community instructors on its website.
- **Employer:** Home care agencies can become qualified to provide the training to their employees.
- **Medicaid Home Care Agencies:** The state pays the Training Partnership to deliver the training to personal care aides employed by Medicaid home care agencies. The Training Partnership has the infrastructure to deliver the training and pays the wages for workers who are self-directed to go through the training. Most of the agencies with unions have opted to use the Training Partnership to deliver the training. Some of the Medicaid home care employers have used community instructors or agencies to train their workers.

The core basic training currently is in-person, though has moved virtually because of COVID. Students apply and practice new skills with the instructor and perform the return demonstrations. The curricula endorses adult learned-centered teaching methods, such as guided discussions and hands-on learning and practice activities. For example, the classrooms for the skills practice include a bed, kitchen and bathroom as well as appliances and furniture to simulate a client's home.

The Training Partnership is working on a hybrid model for the training. Only 21 hours of the training could be done online because the skills training needs to be in-person. The state requires that 16 hours of the training is hand-on demonstration.

Assessment: Trainees must pass a written exam required by the Washington DSHS. It also offers refresher courses for students who may have a delay from the time they complete the training and when they take the exam. The courses review the material from basic training and help students prepare for the exam. The state offers the exam in multiple languages: Amharic, Arabic, Chinese, English, Khmer, Korean, Laotian, Russian, Samoan, Spanish, Somali, Tagalog, Ukrainian and Vietnamese. It also provides an interpreter to read the exam to accommodate any additional languages. While not specified, the student must get an overall number of questions correct but doesn't have to pass each content area to pass the exam.

Students must also pass a skills return demonstration that is completed in the classroom. They are tested on five skills, which includes two unprompted skills (handwashing and common care practices). The student is required to pass all five skills.

A student has three attempts within the two-year eligibility period to pass both the written/oral and skills test. They only need to retake the exams that they failed.

Portability/Transferability: The training counts toward certification for home health aides or nursing assistants. The credential allows the PCAs to enter a 24-hour bridge program to earn the certification for home health aide or nursing assistant.

Exemptions to Meet Training Requirements: Personal care aides employed prior to January 2012 and completed a previous basic training requirements are grandfathered and do not have to take the new basic training. Licensed nursing staff also are exempt from the training.

Training Costs:

Costs to Develop the Training

Representatives from the Washington State Department of Social and Health Service did not know the cost to develop the curricula and training program for personal care aides. The original training program was developed by state staff. While interviewees were not able to specify a dollar amount to develop the training program, they identified the key components that would factor into the costs. These included:

- One full-time equivalent to develop the curriculum. Estimated five hours to build one hour of class time.
- Labor time to facilitate stakeholder process for development of the curriculum
- Stipends for experts who provided specific content

Implementation Costs

It is not clear the costs to the state to implement and oversee the training program. In 2015, the Training Partnership expected to spend \$13.1 million on training and support for its

students. This includes the costs for state certification of home care aide (\$1.5 million) and the administrative costs (\$1.8 million). Employers are not paid for training in their vendor rates.

Trainee Costs

The costs to the trainee depends on the model they use to receive the training. Community instructors determine the cost of the training for individual students or employers. The cost ranges from \$500 to \$700 to complete the training.

For employer-based training, employers determine whether or not they charge the employees to participate in the training. The DSHS representatives believe that most employers cover the cost of the training and trainees are not responsible for the costs. Personal care aides also are typically paid by their employer for their time in basic training.

The majority of revenue for the Training Partnership comes from contributions of participating employers (including the state of Washington) through a collective bargaining agreement. Their students do not pay licensing fees, tuition costs, testing fees or materials costs. Non-union members are funded through other sources such as grants or their own personal funds.

References

AARP Foundation, The Commonwealth Fund, The Scan Foundation, and AARP Public Policy Institute. (2017). *Long-Term Services & Supports State Scorecard 2017 Edition*. Retrieved from <http://www.longtermcorecard.org/~media/Microsite/Files/2017/Web%20Version%20LongTerm%20Services%20and%20Supports%20State%20Scorecard%202017.pdf>.

Advanced Home Health Aides Advisory Workgroup. (2015). *Guidance*. Albany, NY: New York State Department of Health. Retrieved from https://www.health.ny.gov/facilities/home_care/advanced_home_health_aides/docs/workgroup_guidance.pdf.

Alaska Administrative Code. (2018). *Agency-Based Personal Care Services Program; Personal Care Assistant Education and Training Requirements*. 7 AAC §125.160. <http://www.akleg.gov/basis/aac.asp#7.125.160>.

Alaska Department of Health and Social Services. (2019). *Personal care services program*. Retrieved from <http://dhss.alaska.gov/dsds/Pages/pca/default.aspx>

American Nurses Association. 2013. *ANA's Principles for delegation by registered nurses to unlicensed assistive personnel (UAP)*. Silver Spring, MD: American Nurses Association. Retrieved from <https://www.nursingworld.org/~4af4f2/globalassets/docs/ana/ethics/principlesofdelegation.pdf>.

Anthony, M. K., Standing, T. & Hertz, J. E. (2000). Factors influencing outcomes after delegation to unlicensed assistive personnel. *The Journal of Nursing Administration*, **30(10)**, 474-481.

Arizona Department of Economic Security. (2007). *Core curriculum and expansions committee: Summary of Strategic Planning Meeting*. Retrieved from <https://web.archive.org/web/20101228231923/https://www.azdes.gov/main.aspx?menu=28&id=702>

Arizona Direct Care Initiative. (2011). *Principles of Caregiving*. Retrieved from http://www.azdirectcare.org/Training--DCW_Curriculum.html

Arizona Health Care Cost Containment System. (2014). *Direct care worker training and testing program*. Retrieved from <https://www.azahcccs.gov/shared/Downloads/ACOM/PolicyFiles/400/429.pdf>

Bates, T., Chapman, S., & Spetz, J. (2018). *Expanding registered apprenticeships in healthcare*. Retrieved from https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/hcap_report_final_111318.pdf

Binette, J., & Vasol, K. (2018). *2018 Home and Community Preferences: A National Survey of Adults Age 18-Plus*. Washington, DC: AARP Research, August 2018. Retrieved from <https://www.aarp.org/research/topics/community/info-2018/2018-home-community-preference.html>

Breslin, M.L. (2018). *Improving support for health maintenance in home and community-based services: How states adopt nursing rules for the Community First Choice Program*. San Francisco, CA: Community Living Policy Center, University of California San Francisco. Retrieved from <https://dredf.org/healthcare-access/improving-support-health-maintenance-hcbs/>.

BrightStar Care. (n.d.). *Home and personal care aide apprenticeship program: Exclusive to BrightStar Care of Honolulu*. Retrieved from <https://www.brightstarcare.com/hawaii/careers/apprenticeship>

California Long-Term Care Education Center. (2016). *Care team integration and training of home care workers*. Retrieved from <http://www.dhcs.ca.gov/provgovpart/Documents/Waiver%20Renewal/CLTCECHomecareIntegrationTrainingProgram.pdf>.

Campbell, S. (2018). *Best practices in state-sponsored personal care aide training curricula: Lessons from six states*. Bronx, NY: PHI. Retrieved from <https://phinational.org/wp-content/uploads/2018/11/State-Sponsored-PCA-Curricula-2018-PHI.pdf>

Campbell, S. (2017a). *Training standards for personal care aides: Spotlight on Arizona*. Bronx, NY: PHI. Retrieved from <https://phinational.org/resource/training-standards-for-personal-care-aides-spotlight-on-arizona/>

Campbell, S. (2017b). *Training standards for personal care aides: Spotlight on Washington*. Bronx, NY: PHI. Retrieved from https://phinational.org/wp-content/uploads/2017/11/wa_case_study_pca_training_standards_2017.pdf

Choitz, V., Helmer, M., & Conway, M. (2015). *Improving jobs to improve care: The SEIU Healthcare NW Training Partnership*. Washington, DC: The Aspen Institute.

Coffman, J.M. & Chapman, S.A. (2012). *Envisioning enhanced roles for In-Home Supportive Services workers in care coordination for consumers with chronic condition: A concept paper*. California: Philip R. Lee Institute for Health Policy Studies and the Center for Personal Assistance Services, University of California, San Francisco, and the Center for Labor Research and Education, University of California, Berkley.

Colorado Department of Public Health and Environment. (2015). *The health of Colorado's older adult population: Data infographic*. Retrieved from <https://www.cohealthdata.dphe.state.co.us/chd/Age/Healthy-Aging-in-Colorado-Infographic.html>.

Colorado 72nd General Assembly. (2018). House Bill (HB) 18-1407: Access to Disability Services and Stable Workforce. Retrieved from: <https://leg.colorado.gov/bills/hb18-1407>

- Colorado 72nd General Assembly (2019). Senate Bill (SB) 19-238: Improve Wages and Accountability Home Care Workers. Retrieved from: <https://leg.colorado.gov/bills/sb19-238>
- Corazzini, K.N., Anderson, R.A., Rapp, C.G., Mueller, C., McConnel, E.S., & Lekan, D. (2010). Delegation in long-term care: Scope of practice or job description? *Online J Issues Nurs.*, **15**(2), Manuscript 4.
- Dawson, S. (2016). The SEIU Healthcare NW Training Partnership in Washington State. *Generations*, **40**(1), 88-91.
- Drake, A. (2019). How 'upskilling' can maximize home care workers' contributions and improve serious illness care. *Health Affairs Blog*.
- Enquist, G., Johnson, C., Lind, A., & Barnette, LP. (2010). *Medicaid-funded long-term care: Toward more home- and community-based options*. Hamilton, NJ: Center for Health Care Strategies, Inc. Retrieved from <https://www.chcs.org/resource/medicaid-funded-long-term-care-toward-more-home-and-community-based-options/>.
- Estela M. (2014). "The role of the senior aide in care management." PowerPoint presented at National Home & Community Based Services Conference, Arlington, VA.
- Farnham, J., Young, H.M., Reinhard, S., Petlick, N., Reinhard, T.F., & Santillan, V. (2011). *New Jersey delegation pilot evaluation report*. Brunswick, NJ: Rutgers Center for State Health Policy. Retrieved from <http://www.cshp.rutgers.edu/publications/new-jersey-nurse-delegation-pilot-evaluation-report>.
- Feldman, P.H., Ryvicker, M., Evans, L.M., & Barron, Y. (2019). The homecare aide workforce initiative: Implementation and outcomes. *Journal of Applied Gerontology*, **38**(2), 253-276. DOI: 10.1177/0733464817707298
- Gleason, H., & Coyle, C. (2016). *Mental health supportive home care aide: Curriculum outline*. Belmont, Massachusetts: Home Care Aide Council. Retrieved from http://commcorp.org/wp-content/uploads/2016/07/hcwtfl-planning-grants_home-care-aide-council-report.pdf.
- Gomez, A. (2019). *Aging in communities in COLORado*. Denver, CO: Colorado Health Institute. Retrieved from <https://www.coloradohealthinstitute.org/blog/aging-communities-colorado>
- Government Performance Solutions, Inc. (2019). Senate Bill 19-238: Improve Wages and Accountability for Home Care Workers: Recommendations regarding home care worker training and notification of compensation and wage changes. Denver, CO: Department of Health Care Policy & Financing.
- Hawaii Department of Labor and Industrial Relations. (2018). *List of non-construction trades in registered apprenticeship programs*. Retrieved from <https://labor.hawaii.gov/wdd/files/2018/07/Revised-Non-Construction-Appr-2018-07-13.pdf>

Heineman, J.M., Washko, M., Gottlieb, A., & Wilson, K. (2008). *The qualitative evaluation of ECCLI: Research and evaluation brief*. Boston, MA: Commonwealth Corporation.

Hewko, S. J. et al. (2015). Invisible no more: a scoping review of the health care aide workforce literature. *BMC Nursing*, **14(38)**. <https://doi.org/10.1186/s12912-015-0090-x>.

Hoge, M.A. & McFaul, M. (2016). *Alaskan Core Competencies for Direct Care Workers in Health and Human Services*. Anchorage, AK: The Alaskan Mental Health Trust. Retrieved from <http://files.aktc.org/ACC%202016%20Booklet.pdf>

Home Care Aide Council. (2016). *Mental health supportive home care aide training*. Retrieved from https://cdn.ymaws.com/www.hcacouncil.org/resource/resmgr/Grants/Fact_Sheet-Mental_Health_SH.pdf.

Koeh, D., Lerman, R., Eyster, L., Anderson, W., Khatutsky, G., & Wiener, J. (2011). *Characteristics of long-term care registered apprenticeship programs: Implications for evaluation design*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from <https://aspe.hhs.gov/execsum/characteristics-long-term-care-registered-apprenticeship-programs-implications-evaluation-design>

Kreiser, A.L., Adamski, T., & Gallagher, B. (2010). *Building a peer mentor home: Implications for home health aide retention*. Philadelphia, PA: Wolters Kluwer Health.

Kuwik, A. (2020). *Colorado's direct care workforce*. Denver, CO: The Bell Policy Center. Retrieved from <https://www.bellpolicy.org/2020/01/21/colorado-direct-care-workforce/>

Landers, S., Madigan, E., Lee, B., et al. (2016). The future of home care: A strategic framework for optimizing value. *Home Health Care Management Practice*, **28(4)**, 262-278.

Larson R. (2015). *PHI completes senior aide training program in New York*. Bronx, NY: PHI. Retrieved from <https://phinational.org/phi-completes-senior-aide-training-program-in-new-york/>.

Lee, C.Y., Beanland, C., Goeman, D., Johnson, A., Thorn, J., Kock, S., & Elliott, R.A. (2015). Evaluation of a support worker role, within a nurse delegation and supervision model, for provision of medicines support for older people living at home: The Workforce Innovation for Safe and Effective (WISE) medicines care study. *BMC Health Services Research*, **15(460)**, 1-11. <https://doi.org/1.1186/s12913-015-1120-9>.

LongTermCare.gov. (2017). *How much care will you need?* Washington, DC: U.S. Department of Health and Administration on Aging. Retrieved from <https://longtermcare.acl.gov/the-basics/how-much-care-will-you-need.html>.

Maine Department of Health and Human Services. (2019). *Personal support specialist student training program*. Retrieved from <https://www11.maine.gov/dhhs/dlc/licensing/pss/documents/9-PSS-Training-Curriculum-2019.pdf>

Maine Direct Service Worker Training Program. (2017). *Maine direct service workers: A guide to job titles*. Retrieved from <http://mainedirectserviceworker.org/files/docs/MDSWAGuidetoJobTitles.pdf>

MassAHEC Network – UMass Medical School. (2016). *Improving the direct care workforce through core competency training: A summary of the four-year effort of the Massachusetts Personal and Home Care Aide State Training (PHCAST) Program*. Retrieved from: https://commed.umassmed.edu/sites/default/files/publications/UMASS_PHCAST%20Technical%20Report_2015%20final.pdf

McDermott, S.B., (2011). *Final narrative report: There's no place like home: New Jersey nurse delegation pilot project*. Trenton, NJ: State of New Jersey Department of Human Services.

Misiorski S. (2018). "Creating career paths for nursing and home health workers." PowerPoint presented at LeadingAge Annual Meeting, Philadelphia, PA, October 29, 2018.

National Council of State Boards of Nursing. 2016. National guidelines for nursing delegation. *Journal of Nursing Regulation*, **7(1)**, 5-14.

National Direct Service Workforce Research Center. (2014). *CMS Direct service workforce core competencies*. Retrieved from <https://www.medicaid.gov/sites/default/files/2019-12/dsw-core-competencies-final-set-2014.pdf>

New York State Department of Health. (n.d). *Advanced home health aides: Chapter 471 of the laws of 2016*. Retrieved from https://www.health.ny.gov/facilities/home_care/advanced_home_health_aides/.

New York State Department of Health. (2007). *Home care health related tasks curriculum*. Retrieved from https://www.health.ny.gov/professionals/home_care/curriculum/docs/health_related_tasks_curriculum.pdf

New York State Department of Health. (2017, May 9). *In-service requirements for Home Health Aides and Personal Care Aides. [Letter to administrators]*. Retrieved from [http://leadingageny.org/home/assets/File/4F173E21B75300A8E053C0A80FB100A8\(1\).pdf](http://leadingageny.org/home/assets/File/4F173E21B75300A8E053C0A80FB100A8(1).pdf)

New York State Department of Health. (2019). *Advanced home health aide agency requirements*. Retrieved from https://www.health.ny.gov/facilities/home_care/dal/docs/19-02.pdf

Ordway, A., Johnson, K., Kneale, L., Amtmann, D., & Deniris, G. (2019). The experience of home care providers and beneficiaries with enhanced training requirements in Washington State. *Journal of Aging and Health*, **31**(10), 124S-144S. Doi.org/10.1177/0898264319860298

Oregon Department of Health and Human Services. (2010 and revised 2018). *RN delegation manual: RN delegation in community-based care settings*. Retrieved from <https://www.oregon.gov/DHS/SENIORS-DISABILITIES/PROVIDERS-PARTNERS/Documents/RN%20Delegation%20Material%20Test.pdf>.

Osterman, P. (2017). *Who will care for us? Long-term care and the long-term care workforce*. New York, NY: Russell Sage Foundation.

Pennsylvania Department of Labor and Industry. (2018). *PA Registered Apprenticeship Programs*. Retrieved from https://www.dli.pa.gov/Individuals/Workforce-Development/apprenticeship/Documents/PA_RegisteredApprenticeship_InfoSheet_7.18.pdf

PHI. (2019). *Personal care aide training requirements: A state-by-state analysis of training requirement for personal care aides*. Retrieved from <https://phinational.org/advocacy/personal-care-aide-training-requirements/>

PHI. (2020a). *It's time to care: A detailed profile of America's direct care workforce*. Retrieved from <https://phinational.org/resource/its-time-to-care-a-detailed-profile-of-americas-direct-care-workforce/>

PHI. (2020b). *Workforce Data Center*. Last modified August 30, 2019. Retrieved from <https://phinational.org/policy-research/workforce-data-center/>.

PHI. (2017). *Success across settings: Six best practices in promoting quality care through quality jobs*. Bronx, NY: PHI. Retrieved from https://phinational.org/wp-content/uploads/2017/09/evaluation_brief_final.pdf.

PHI and Services Employees International Union (SEIU). 2012. *Innovations in care coordination: Rethinking the role of home care workers*. Washington, DC: PHI and SEIU. Retrieved from <https://phinational.org/wp-content/uploads/legacy/clearinghouse/PHISEIU-carecoordination-201203.pdf>

Reckrey, J.M., Tsui, E.K., Morrison, S., Geduldig, E.T., Stone, R.I., Ornstein, K.A., & Federman, A.D. (2019). Beyond functional support: The range of health-related tasks performed in the home by paid caregivers in New York. *Health Affairs*, **38**(6), 927-933. doi:10.1377/hlthaff.2019.00004

Reinhard, S. (2010). A case for nurse delegation explores a new frontier in consumer-directed patient care. *Generation*, **4**(7), 75-81.

Reinhard, S. & Quinn, W.V. (2004). *Oregon's nursing practice policies for home and community living*. Washington, DC: Center for Medicare and Medicaid Services and Office of Assistant

Secretary for Planning and Evaluation. Retrieved from <http://www.cshp.rutgers.edu/publications/state-policy-in-practice-oregons-nurse-practice-for-home-and-community-living-community-living-exchange-collaborative>.

Rodat, C. (2014). *Training New York City home care aides: A landscape survey*. New York: PHI and the New York City Council. Retrieved from <https://phinational.org/wp-content/uploads/2017/07/phitraining-nychomecare-20140813.pdf>

Russell, D., Mola, A., Onorato, N., Johnson, S., Williams, J., Andaya, M., & Flannery, M. (2017). Preparing home health aides to serve as health coaches for home care clients with chronic illness: Findings and lessons learned from a mixed-method evaluation of two pilot programs. *Home Health Care Management & Practice*, **29**(3), 191-198. Doi: 10.1177/1084822317706080.

Scales, E., Sturgeon, J.M., Espinoza, R., Campbell, S., & Cook, A. (2018). *Envisioning the future of home care: Trends and opportunities in workforce policy and practice*. Report to Gordon and Betty Moore Foundation. California: Gordon and Betty Moore Foundation.

Spetz, J., Stone, R.I., Chapman, S.A., & Bryant, N. (2019). Home and community-based workforce for patients with serious illness requires support to meet growing needs. *Health Affairs*, **38**(6), 902-909. Doi:10.1377/hlthaff.2019.00021

St. John's Well Child & Family Center, ULTCW SEIU, & United Long-Term Care Workers. (2014). *St. John's enhanced home care pilot program*. California: St. John's Well Child & Family Center, ULTCW SEIU, & United Long-Term Care Workers.

Stone, R. (2017). Developing a quality direct care workforce: Searching for solutions. *Public Policy & Aging Report*, **27**(3), 96-100. <https://doi.org/10.1093/ppqr/prx015>.

Stone, R.I. and Weiner, J. M. (2001). *Who will care for us? Addressing the long-term care workforce crisis*. Princeton, NJ: The Robert Wood Johnson Foundation. Retrieved from <https://www.urban.org/sites/default/files/publication/42696/310304-Who-Will-Care-For-Us-Addressing-the-Long-Term-Care-Workforce-Crisis.PDF>.

Stone, R.I., & Bryant, N. (2019). The future of the home care workforce: Training and supporting aides as members of home-based care teams. *JAGS, Special Issue* **67**(2), 5444-5448. doi: 10.1111/jgs.15846

The Daily Item. (2014). Enhancing the skills and knowledge of nursing assistants. Retrieved from https://www.dailyitem.com/news/local_news/enhancing-the-skills-and-knowledge-of-nursing-assistants/article_036e85d8-87ae-11e4-8c7f-5350a0ec0445.html

UNLV. (2017, November 14). *UNLV Continuing education seeks caregiver partners for new apprenticeship program*. Retrieved from <http://continuingeducation.unlv.edu/news/unlv-continuing-education-seeks-caregiver-partners-new-apprenticeship-program>

United States Department of Labor. (n.d.). *A quick-start toolkit: Building registered apprenticeship programs*. Retrieved from <https://sites.ed.gov/underservedyouth/files/2017/01/MS5-Small-Biz-4-Youth-A-Quick-Start-Toolkit.pdf>

Virginia Administrative Code. (2017). 12VAC30-120-930 *General requirements for home and community-based participating providers*. Retrieved from <https://law.lis.virginia.gov/admincode/title12/agency30/chapter120/section930/>

Virginia Department of Medical Assistance Services. (2003). *Personal care aide training curriculum*. Retrieved from http://leg5.state.va.us/reg_agent/frmView.aspx?Viewid=3a946000964~1&typ=40&actno=000964&mime=application/pdf

Washington Administrative Code. (2019). *Home and community services and programs*. 388 WAC §71. Retrieved from <https://app.leg.wa.gov/wac/default.aspx?cite=388-71>

Washington State Department of Social & Health Services. (2015). *Revised fundamentals of caregiving: Learner's guide, second edition*. Retrieved from <https://www.dshs.wa.gov/sites/default/files/ALTSA/training/DSHSCurriculum/RFOC.pdf>

Washington State Department of Social and Health Services (DSHS). (2019). *Nursing delegations for nursing assistants and home care aides*. Retrieved from <https://www.dshs.wa.gov/sites/default/files/publications/documents/22-1736.pdf>

Young, H.M., Farnham, J., & Reinhard, S.C. (2016). Nurse delegation in home care: Research guiding policy change. *Journal of Gerontological Nursing*, **42**(9), 7-15. <https://doi.org/10.3928/00989134-20160811-04>.