Department of Health and Human Services
Health Resources and Services Administration

REPORT TO CONGRESS

Personal and Home Care Aide State Training (PHCAST) Demonstration Program Evaluation

Executive Summary

The Personal and Home Care Aide State Training (PHCAST) Demonstration Program is authorized under Social Security Act (SSA) section 2008(b), 42 U.S.C. 1397g (b), to support efforts to develop competency-based training for personal and home care aide (PHCA) certification. This report to Congress is required by SSA section 2008(b)(5)(B), 42 U.S.C. 1397g (b)(5)(B), which states, in part:

> *FINAL REPORT.—Not later than 1 year after the completion of the demonstration project, the Secretary shall submit to Congress a report containing the results of the evaluation conducted under subparagraph (A), together with such recommendations for legislation or administrative action as the Secretary determines appropriate.*

The Affordable Care Act appropriated $5 million annually for the 3 year program, which was funded in fiscal years (FY) 2010 through 2012. During that time, the PHCAST Demonstration Program supported six grantees—in California, Iowa, Maine, Massachusetts, Michigan, and North Carolina—to address a health workforce need to train competent direct care workers capable of caring for an aging population. Several grantees received no-cost extensions which allowed them until September 2014 to complete their approved activities. Grantees in the PHCAST Demonstration Program developed and implemented competency-based curricula for PHCA trainees, recruited and trained qualified applicants, provided trainee support services, and conferred certification for successful completers of the curricula. The PHCAST Demonstration Program funded an evaluation of the program's activities and outcomes. This report serves as the final evaluation report.

The final report covers programmatic activities and includes findings on the questions specified in the SSA:

1. What is the impact of grantees' core competencies training programs on trainees' mastery of job skills acquired through the training, their job satisfaction and the satisfaction of the care recipients and family caregivers with services received?
2. What is the impact of providing the core competencies training on the existing training infrastructure and resources available to grantees for training PHCAs?
3. Should a minimum number of hours of initial training be required for PHCAs, and if so, what minimum number of hours should be required?

The information in this report is current through the end of FY 2015.

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Acronym List

CE	Continuing Education
CNA	Certified Nursing Assistant
FY	Fiscal Year
HRSA	Health Resources and Services Administration
LTSS	Long-term Services and Supports
PHCA	Personal and Home Care Aide
PHCAST	Personal and Home Care Aide State Training
PHI	Paraprofessional Healthcare Institute
SSA	Social Security Act

I. Legislative Language

The Personal and Home Care Aide State Training (PHCAST) Demonstration Program is authorized under the Social Security Act (SSA) section 2008(b), 42 U.S.C. 1397g (b), to support efforts to develop competency-based training for personal and home care aide (PHCA) certification. This report to Congress is required by SSA section 2008(b)(5)(B), 42 U.S.C. 1397g (b)(5)(B), which states:

> *FINAL REPORT.—Not later than 1 year after the completion of the demonstration project, the Secretary shall submit to Congress a report containing the results of the evaluation conducted under subparagraph (A), together with such recommendations for legislation or administrative action as the Secretary determines appropriate.*

An initial 2012 report, Personal and Home Care Aide State Training Demonstration Program: Report to Congress on Initial Implementation, provided an overview of the six grantees (California Community Colleges Chancellor's Office, Iowa Department of Public Health, Maine Department of Public Health, Massachusetts Executive Office of Health and Human Services, Michigan Office of Services to the Aging, and North Carolina Department of Health and Human Services), which included key elements of their demonstration programs and the progress they made toward achieving their benchmarks.

This report serves as the final report to Congress for the PHCAST Demonstration Program, and it includes findings related to the results of the program evaluation. The information in this report is current through the end of fiscal year (FY) 2015.

II. Introduction

As the nation's population ages and millions of baby boomers enter retirement, the number of individuals living with disabilities continues to grow. As a consequence, there are increasing concerns about the capacity and the quality of the frontline caregiving workforce to meet the growing demand for long-term services and supports (LTSS). Policymakers, service providers, and consumers are focusing greater attention on the lack of a competent and stable direct-care workforce to provide appropriate and cost-effective services to individuals in their homes and other community-based settings. In 2010, an estimated 861,000 PHCAs were employed in home- and community-based settings[1]. These figures likely underestimate the number of PHCAs employed in home- and community-based settings, as they do not capture many workers who are hired privately by consumers or their families.

Although millions of family members and other informal caregivers provide LTSS, PHCAs deliver 70 to 80 percent of the hands-on care and emotional support to millions of people with

[1] U.S. Bureau of Labor Statistics. (2012). *Occupational Outlook Handbook, 2012-13*, Washington, DC: Bureau of Labor Statistics, U.S. Department of Labor. Retrieved from http://www.bls.gov/oco/.

chronic illnesses, disabilities, and cognitive impairment who reside in non-institutional settings.[2] PHCAs primarily assist individuals with activities of daily living, which include personal care tasks such as bathing, dressing, feeding, and toileting. PHCAs also assist with instrumental activities of daily living, such as shopping, preparing meals, and housework. PHCAs differ from home health aides in that PHCAs are not trained to provide assistance with medical procedures.

There are challenges to providing consistently high-quality care in personal and home care environments among the PHCA workforce due to the lack of access to standardized training across the United States.[3] In addition, PHCA workers tend to have fewer years of education than the national workforce; 20 percent do not have a high school degree, compared to 9.6 percent of the national workforce, which exacerbates the challenge of lack of access to standardized training.[4] Training requirements and practice standards for home care workers vary substantially from state to state. Identification of competencies and associated training standards is one of the first steps to a successful workforce development effort.

III. Personal and Home Care Aide State Training Demonstration Program

The PHCAST Demonstration Program supported efforts to provide competency-based training for PHCA certification. The demonstration program was developed to determine (1) what types of education and training programs were most appropriate based on an individual's needs, (2) the extent to which training efforts were successful at imparting new skills and knowledge based on real world environments, and (3) the ways in which competency-based trainings contribute to the creation and sustainability of quality jobs with real potential for professional growth and career advancement.

The PHCAST Demonstration Program funded demonstration grants in six states – California, Iowa, Maine, Massachusetts, Michigan, and North Carolina. The demonstration program also provided funds for a final evaluation. Total awards for the six grantees ranged from $2,022,504 to $2,247,354 over 3 years.[5] Table 1 lists the grantees and their award amounts for FY 2010-2012.

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[2] Gonyea, J. (2009). Multigenerational Bonds, Family Support, and Baby Boomers: Current Challenges and Future Prospects for Elder Care. In R.B. Hudson (ed). *Boomer Bust? Economic and Political Issues of the Graying Society* (pp. 213–232). Westport, CT: Praeger.
[3] Luz C, Hanson K. Training the personal and home care aide workforce. Challenges and solutions. *Home Health Care Management Practice*, August 2015; 27(3): 150-3.
[4] Luz C, Hanson K. Training the personal and home care aide workforce. Challenges and solutions. *Home Health Care Management Practice,* August 2015; 27(3): 150-3.
[5] Several grantees received no-cost extensions which allowed them until September 2014 to complete their approved activities.

Table 1 – FY 2010 – FY 2012 Funding and Awards

Fiscal Year & Funding	California	Iowa	Maine	Massachusetts	Michigan	North Carolina
FY 2010	$749,960	$748,054	$747,632	$738,993	$650,061	$578,745
FY 2011	$747,639	$748,021	$749,872	$744,769	$750,000	$703,162
FY 2012	$745,139	$748,521	$749,850	$749,742	$630,476	$740,597
Total Funding	$2,242,738	$2,244,596	$2,247,354	$2,233,504	$2,030,537	$2,022,504

The PHCAST Demonstration Program evaluation was designed to determine how the six grantees designed and implemented PHCA training programs. The evaluation revealed that individual grantees reported variations in program implementation and curricula development that was largely affected by the level and intensity of existing state resources. The evaluation also found variation within the individual demonstrations to establish and/or actively engage community partnerships to develop state-level training curricula for PHCAs. This report presents a summary of findings that offers opportunities for individual states to determine what types of resources and partnerships would be needed to undertake state-level curricula standardization for PHCAs.

The PHCAST Demonstration Program was designed to recruit qualified individuals and train them in core competencies as a way to strengthen the PHCA workforce. Grantees developed and implemented competency-based curricula and developed certification programs for PHCAs. All six grantees worked with partner agencies and organizations to plan, design, and implement their training programs.

Each grantee either had an existing or created a new advisory group to develop the curricula and guide the projects. The advisory groups generally consisted of representatives from a variety of stakeholders, including state agencies, health care providers, workers and unions, consumers, advocacy groups, educational institutions, and community and vocational colleges. The Michigan and Massachusetts grantees did not have existing advisory groups to guide program development. The Michigan grantee organized stakeholders in the northern and southern regions of their state in an advisory capacity to help develop competencies and curriculum workshops. Similarly, the Massachusetts grantee did not have a training infrastructure prior to developing and operating the Massachusetts PHCA training curriculum, and their PHCAST team pulled together the varied groups to create collaboration among the key organizations.

By contrast, the California, Maine, and North Carolina grantees had existing advisory groups that were actively addressing direct care workforce issues before the PHCAST Demonstration Program began. These grantees strengthened the work that was already underway in order to build lasting partnerships and decrease entities working in isolation (also known as silos). The Iowa grantee was unique in that it utilized community partners rather than a formal advisory group for program development guidance. Table 2 shows which grantees had pre-existing advisory groups and those that were created as a result of the PHCAST Demonstration grant.

Table 2 – Advisory Boards

California	Iowa	Maine	Massachusetts	Michigan	North Carolina
Pre-existing, active advisory group before PHCAST began	No advisory group; utilizes support systems and partnerships for guidance in lieu of a formal advisory group	Pre-existing, active advisory group before PHCAST began	New advisory group formed after PHCAST began	New advisory group formed after PHCAST began	Pre-existing, active advisory group before PHCAST began

All grantees addressed the issue of certification. Three grantees (Maine, Michigan, and North Carolina) had existing requirements for PHCA certification, while the three grantees located in states lacking certification prior to commencement of the PHCAST Demonstration Program (California, Iowa, and Massachusetts) subsequently provided certificates for program completers. Table 3 provides a summary of state certifications status. The grantees all adapted and implemented similar versions of an existing competency-based core curriculum — Paraprofessional Healthcare Institute's (PHI) Providing Personal Care Services to Elders and People with Disabilities. SSA section 2008(b)(3)(A) required that each grantee's curriculum cover the following 10 core competencies:

1. Role of the PHCA
2. Consumer rights, ethics, and confidentiality
3. Communication
4. Personal care skills
5. Health care support
6. Nutritional support
7. Infection control
8. Safety and emergency training
9. Consumer needs/Specific support
10. Self-care

Table 3 – State Certifications

California	Iowa	Maine	Massachusetts	Michigan	North Carolina
No state required certification	No state required certification	Existing state requirements	No state required certification	Existing state requirements	Existing state requirements

The grantees worked to create curricula that met their states' requirements and needs. The grantees experimented with different approaches to delivering their curricula. All six grantees provided various forms of supports to trainees; the nature of these supports varied across the grantees. Each grantee addressed the topic of continuing education (CE), though the California

and Iowa grantees did not implement new CE courses. In California, there is no requirement for an individual working as a PHCA in a home or facility to participate in CE; therefore, the California grantee did not utilize resources to develop and implement CE credits. The Iowa Direct Care Worker Advisory Council—an Iowa grantee partner—has dedicated resources to CE development; therefore, the Iowa grantee chose not to dedicate resources to CE development, but rather to work in partnership with the Council.

Based on the different starting conditions and trainee populations among the six grantees, they differed considerably in their timelines, processes, and outcomes. Grantees provided their curricula in different settings, utilizing high school and community college classrooms, private agencies, and/or online settings. Trainee demographics varied across the grantees, as did job titles and certification requirements.

IV. PHCAST Demonstration Program Evaluation

The primary purpose of the PHCAST Demonstration Program evaluation was to examine the impact of core competencies training on the key outcomes, as specified in the statute. The evaluation team did not collect data directly from trainees or consumers, but rather synthesized data summaries and analyses from the six grantees. The evaluation team was charged with assessing three fundamental areas for the PHCAST Demonstration Program:

1. What was the impact of grantees' core competencies training programs on job satisfaction of trainees, trainees' mastery of job skills acquired through the training, and direct care recipient and family caregiver satisfaction with services received?
2. What was the impact of providing the core competencies training on the existing training infrastructure and resources available to states for training PHCAs?
3. Should a minimum number of hours of initial training be required for PHCAs, and if so, what minimum number of hours should be required?

The evaluation drew on four data sources:

1. Grantees' evaluation findings and summary statistics computed from their own data.
2. Data submitted to HRSA with the grantees' annual reports.
3. Evaluation interviews with grantee leadership teams, which are the only direct data the evaluation collected.
4. Existing documents, including training requirements and other program descriptions, grant applications, and the PHCAST Demonstration Program evaluation's literature review.

V. Impact of Training Programs

Evaluation findings are detailed in this section and include the number of people trained, attrition rates, trainee satisfaction with the trainings, and trainee improvements in knowledge and skills.

Numbers and Characteristics of People Trained

Over the course of the project, the PHCAST Demonstration Program trained 4,579 PHCAs (Table 4). The number of PHCAs trained by each grantee was defined as the total number of trainees who successfully completed the core competencies training program during the project period.

Table 4 – Number of PHCAs Trained

Grantee	Number of PHCAs Trained
California	1,054
Iowa	691
Maine	220
Massachusetts	920
Michigan	1,231
North Carolina	463
Six Grantees Aggregate	4,579

The grantees accurately assessed their target populations and the numbers they would be able to train during their demonstration projects. The number of PHCAs trained does not differentiate between the number of agency workers versus independent workers or the numbers of those already working in the PHCA field versus those who are new to the field. The trainees included persons already working in the PHCA field, high school students in allied health professions programs, displaced and unemployed workers, care attendants who worked directly for consumers, and persons registered with workforce investment boards.

Attrition

The PHCA population typically displays high levels of turnover, and trainees often struggle with child care, transportation, literacy, and commitment to the career path. For the purposes of the PHCAST Demonstration Program, attrition was defined as the number of trainees who permanently left the program before completion divided by the total number of trainees who attended at least one training session. Most PHCA training programs experience attrition rates of between 40 and 60 percent.[6]

However, among the six grantees, attrition rates ranged from a high of 12 percent to less than 1 percent. Grantees adopted several innovative methods to reduce attrition, including orientation classes, mentoring, supportive community services such as child care and transportation assistance, stipends, and scholarships. The highest attrition rates were reported for online training programs with no or minimal trainee supports (California and Maine). Conversely, the lowest attrition rates were reported for in-person trainings with higher levels of supports,

[6] Luz C, Hanson K. Training the personal and home care aide workforce. Challenges and solutions. *Home Health Care Management Practice*, August 2015; 27(3):150-3.

including mentoring and case management, and with training provided in the trainees' primary language (Iowa and Massachusetts).

Most of the grantees provided no data on why people left the training. However, the Michigan grantee surveyed all trainees who dropped out. Most respondents indicated that they stopped attending due to personal challenges, such as scheduling conflicts with their current job or school, rather than any dissatisfaction with the training itself. They also found that trainees already working in the PHCA field had a significantly lower dropout rate compared to unemployed learners.

In California, a focus group with six trainees who failed to complete the online course indicated that the main reasons for dropping out were that it was easy to fall behind in an online course, that they sometimes had to wait for others to complete group projects, and that they struggled with other technical requirements.

Satisfaction with Training

Each grantee defined satisfaction with training using its own survey. The broad concept of satisfaction was defined and operationalized in different ways. Two grantees (Iowa and Maine) collected feedback on every training module, while others assessed trainee satisfaction within domains such as instructor knowledge, materials, and overall course content.

In general, trainees reported extremely high levels of satisfaction with the core competencies trainings, ranging from 92 percent to 100 percent. The Massachusetts grantee found little difference in satisfaction ratings between native and non-native English speakers, suggesting an effective implementation of trainings in multiple languages. Suggestions from California trainees included more time for hands-on skill training, smaller skill practice groups, ongoing classes to learn new techniques and equipment, and more information on developing relationships with clients and families. Maine trainees suggested having the entire training course online, as opposed to a hybrid design, and that the online portion could have been made better by condensing it into a shorter span of time.

Improvements in Knowledge and Skills

Grantees used different methods to measure changes in knowledge or skills from before to after the training. For example, some grantees administered pre-/post-training knowledge tests. Others surveyed trainees about their perceptions of their knowledge gains and how they planned to incorporate their new knowledge into their work. Maine's hybrid online program used an in-person skills test, in which trainees repeatedly demonstrated skills until they showed sufficient competency to pass the test. Grantees also found that retention strategies such as trainee supports to keep trainees in the program are essential to improving their knowledge and skills.

Four grantees—Iowa, Massachusetts, Michigan, and North Carolina—conducted pre-training and post-training tests to assess gains in knowledge. All four reported increased average knowledge scores, ranging from 11 percent to 28 percent. Massachusetts trainees also reported increased confidence, better understanding of the material, and an increased likelihood that they

would work as a PHCA. The Michigan trainees showed an average increase of 27 percent in their pre-/post-test knowledge scores, whereas no significant differences in the pre-/post-test knowledge scores existed in the control group.

The California and Maine grantees examined the perceptions of the PHCA trainees only after the training. Most trainees in California and Maine reported they had increased their knowledge of the topic areas or felt better prepared to work as a PHCA.

VI. Longer-term Outcomes

The PHCAST Demonstration Program evaluation also inquired about outcome measures, including job satisfaction, employment status, and consumer satisfaction.

Job Satisfaction

While common definitions, measures, or methods for collecting data on post-training job satisfaction varied across the six grantees, most grantees used a definition similar to Iowa's: "I find enjoyment in my job." It was difficult to measure improvement in job satisfaction among trainees for most of the grantees, as this requires baseline and follow-up surveys with representative groups of trainees. However, some conclusions can still be drawn from the data collected. Specifically, trainees who had never worked in the PHCA field showed the largest increase in job satisfaction after the trainings. Smaller impacts were reported by those already working in the field. Among trainees already working in the field, the Iowa and North Carolina grantees found similar high job satisfaction levels before and after the training. The Michigan grantee compared improvement in job satisfaction of trainees with that of a control group at 3 months post-training. Of the trainees, 77 percent reported improved job satisfaction levels that they attributed to the PHCAST training; the control group reported no change in job satisfaction. In addition, a significantly higher percentage of Michigan trainees reported they were satisfied or very satisfied with their job (93 percent) than the percentage of control group members (79 percent). The Massachusetts grantee reported that 90 percent of its 164 trainees who were surveyed between 6 months and 2 years post-training indicated high levels of overall job satisfaction. The California grantee conducted post-training focus groups, and the majority of participants reported that they had meaningful work and found real purpose in their jobs.

Employment Status

Grantees' definitions of employment (e.g., full-time versus part-time, working desired number of hours versus under-employed) and turnover varied. In the future, long-term individual-level data for trainees would be helpful to determine if training programs result in improvements in job status. Data collected show that across all six grantees, 50-60 percent of the trainees were employed as PHCAs after the PHCAST trainings.[7]

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[7] There were no common definitions of employment (e.g., full-time versus part-time, working desired number of hours versus under-employed) or turnover across the grantees.

The California grantee reported an increase in the percentage of trainees who worked as PHCAs, from 23 percent before training to 50 percent at 6 months post-training. The Massachusetts grantee reported a 26 percent increase in the numbers employed as direct-care workers 3 months post-training, and over 75 percent of trainees were either employed as a PHCA or had already received additional training to move up the career ladder to a home health aide. In Michigan, the unemployment rate among trainees dropped from 58 percent to 38 percent post-training, and a significantly higher percentage of trainees reported not intending to leave the job (70.5 percent) compared to the control group (50.8 percent).

Consumer Satisfaction

Most grantees reported that it was difficult to collect reliable information about consumer satisfaction. However, the Iowa grantee succeeded in surveying a group of consumers. Clients and consumers were asked for their opinions in response to four questions.

The Iowa consumers that were surveyed rated their PHCA trained workers highly, including the following:

- 100 percent reported that their PHCA treated them with respect.
- 92 percent reported that their PHCA listened to them.
- 94 percent reported that their PHCA was trained to meet their needs.
- 97 percent reported that they either enjoyed or thoroughly enjoyed working with their PHCA.

The observations of home care agency supervisors and employers may be better judges of worker skills and impacts than most LTSS recipients. Supervisors in Massachusetts reported that PHCAST-trained workers required less job coaching or supervisor assistance. They also indicated they believed that PHCAST-trained workers were more likely to remain in the direct care field. All agreed that PHCAST-trained workers are well positioned for career advancement.

North Carolina employers also made positive statements about the PHCAST-trained employees. Employers commented that their PHCAST-trained employees, compared to other employees, were better able to communicate with other staff and supervisors about client matters. As one supervisor stated, “I’ve done some supervisory visits on clients with the caregivers that graduated from the program. What I notice is that they [PHCAST graduates] give me more pertinent information.” These differences suggest that training programs may be an important factor in preparing PHCAs to be better, more useful members of care teams within systems of care.

VII. Impacts on Infrastructure and Resources

Another evaluation question involved the impact of the PHCAST training on the existing training infrastructure and resources of the grantees. Grantees either created new or streamlined existing PHCA training curricula. The six grantees developed core competency curricula, which was applicable across settings, to make it easier for direct care workers to move across multiple LTSS sectors.

The impact of the PHCAST Demonstration Program on a state's infrastructure depended on its pre-PHCAST infrastructure, its regulatory status for PHCA workers, and changes resulting from new or ongoing partnerships with organizations that were also represented on the grantee advisory groups. All grantees reported at least one infrastructure change related to their PHCAST funding in the following areas:

- Partnerships and collaborations
- New and streamlined training
- Cadre of trainers
- Training transferability and career pathways
- Information technology.

Table 5 indicates the areas that the training program impacted for each grantee over the 3-year project period.

Table 5 – State Infrastructure Changes

Grantee	Partnerships	New Training	Trainers	Registry	Career Pathway	Information Technology
CA	Created new partnerships with community colleges and agencies.	Established new trainings.				
IA	Built on existing partnerships and created new collaborations among groups.	Reduced redundancies and lack of portability and created consistency in training.		Through the PHCAST grant, developed *The Care Book*, a registry that tracks workers who have completed the PHCAST (Prepare to Care) training modules.	Established a career pathway for the entire direct care workforce.	Established a comprehensive website with resources for instructors. Developed information technology systems to track and monitor the workforce. Developed an online system for training.
ME	Merged silos among government agencies.	Streamlined multiple trainings.	Trained instructors on new delivery model of online training program.		Created a framework for a comprehensive system that provides logical career progressions and enables specialization and cross-training.	Created a web portal tool for potential trainees and people already working in the PHCA field to access training modules and ongoing CE.

Grantee	Partnerships	New Training	Trainers	Registry	Career Pathway	Information Technology
MA	Forged collaboration among groups and eliminated silos.		Created train-the-trainer webinar that is available for new trainers to maintain fidelity of training program.			
MI	Merged silos and developed new partnerships.	Established new trainings.				
NC	Formed partnerships between community colleges/high schools, and community-based organizations.	Established consistent home care that is not only focused on facility-based care training and competencies for limited assistance aides. Developed two new curricula in the allied health field and a new career pathway for students.		Added Home Care Nurse Aide designation into the Nurse Aide I registry.	Developed allied health tracks within Human Resource Development departments and established pathways within community colleges.	

Partnerships and Collaborations

Five of the six grantees reported building new partnerships among different groups working on direct care worker issues, training, or competencies. The advisory teams created collaborations among community colleges and educators, consumers, state government agencies/departments, community organizations, and home care provider agencies. Grantee partners engaged in regular meetings and open communication to keep processes transparent and members informed during each phase of the program. The various stakeholder groups provided input and feedback, including review and testing of the curriculum.

The grantees each assembled a diverse team of partners with whom they collaborated to develop and implement their demonstration programs. Grantees were encouraged to consult and collaborate with community colleges and vocational colleges. All of the grantees collaborated with community colleges by the end of the PHCAST Demonstration Program or had plans to expand their training within local community college systems.

Partners were involved with the demonstration programs through curricula development and program implementation activities. In terms of curriculum development, partners representing a range of related workforce organizations, state agencies, and private sector entities were integrated into the demonstration programs in an advisory capacity, providing input into curricula development and revisions, program administration, and the testing and certification of trainees.

In terms of program implementation, many of the demonstration programs represent a collaboration between public educational institutions and private workforce training organizations to ensure that the new competency-based curricula are piloted among a wide range of target populations (e.g., community colleges, high schools, distance learning, direct care worker agencies, in-service training). In addition, the majority of grantees involved a broad base of stakeholder groups in program development efforts in order to solicit buy-in from their direct care worker sector for establishing competency-based core curricula throughout their state. Most grantees also partnered with professional/industry associations for PHCAs (e.g., California Association for Health Services at Home, Iowa CareGivers Association, Direct Care Workers Association of North Carolina), to design curricula and recruit potential trainees. Table 6 summarizes each grantee's program partners and indicates their partner role as Implementing (I), Curriculum Development (D), and Stakeholder (S).

Table 6 - Grantee Partners and their Roles

Demonstration Program Partners	CA	IA	ME	MA	MI	NC
Community Colleges	I	I	D	I	S	I
Universities/Academic Centers	I	I	I	S	I	D
High Schools						I
Other State Agencies/Bodies	D	D	I	I	I	I
Home Health Agencies/Residential Care Facilities	A	I	I	D	I	I
Work Investment Boards/Programs		S	I	S	S	D
Professional/Industry Associations	I	D	D	I	D	D
PHIs	D			D	I	D
State Medicaid Agency					I	
System Transformation Task Force (Michigan Choice participants)					D	

Note: Partners' roles designated as Implementing (I), Curriculum Development (D) and Stakeholder (S).

Each grantee relied in part on the existing educational infrastructure to develop the training activities. The California grantee represents one example of a state partnership with the state community college system, which provides a venue to deliver the training and a cadre of

instructors. Their efforts created a model for statewide implementation and allowed for a sustainable pipeline for PHCA workers.

New and Streamlined Trainings

Grantees differed in the training infrastructure in place prior to the PHCAST Demonstration Program, and some grantees did not have training programs for PHCAs. The Michigan grantee put in place the infrastructure to design the PHCA competencies and build the PHCA training curriculum. The Massachusetts grantee developed a train-the-trainer program, recruited trainers, developed a marketing plan, and recruited trainees.

Other grantees built on and revised existing training. The Maine grantee deconstructed existing state-approved curricula and examined the common content across the curricula to align and streamline the training. The grantee also created a standard core curriculum and specialty content and integrated a new training system—a hybrid model of online and in-person training—into the existing system. They also developed and offered CE through a new web portal. North Carolina had existing state-wide training for PHCAs and had already developed consistent training and competencies for the different categories of PHCA workers prior to the PHCAST award. However, North Carolina's existing programs were single-pathway and siloed. The demonstration program allowed the grantee to form partnerships with multiple programs to create a network that participated in a multi-phased approach that would meet the needs of new and existing workers.

Cadre of Trainers

A significant impediment to the development of these demonstration programs was the availability of quality instructors. Several grantees built their programs around faculty who were already training certified nursing assistants and home health aides, adapting the curricula and the training modalities to the needs of individuals pursuing PHCA training.

The training programs developed by grantees resulted in the creation of a cadre of skilled trainers with experience in the new models. In addition, some grantees built train-the-trainer webinars or classes to ensure the fidelity to program design and to help trainers effectively deliver the training. The Maine grantee utilized the state-approved trainers for their existing curricula prior to PHCAST. The instructors were trained in the new curricula, which included a distance delivery method that changed the instructors' role from a teacher to a facilitator.

Based on annual reports from grantees and lessons learned, potential best practices for training instructors included:

- Instructors should understand and be able to implement adult-learner-centered teaching methods.
- Instructors can benefit from understanding learners' backgrounds to meet their needs during training.
- Train-the-trainer and required orientation sessions for instructors can help maintain the fidelity of the program.

- Multiple instructors with expertise in different curriculum areas can help ensure a sufficient number of instructors.
- Ongoing trainer recruitment and periodic train-the-trainer sessions should be provided to ensure that there is an adequate supply of trainers to meet the demand.

Training Transferability and Career Pathways

The Maine, Massachusetts, and North Carolina grantees helped to create career ladders for the direct care workers, expanding career opportunities for workers who pursue ongoing education and workforce training. Specifically:

- The Maine grantee developed a common core curriculum and three job-specific specialty curricula that allowed trainees to be certified to provide services to other LTSS populations.
- The Massachusetts grantee aligned its PHCA curriculum with its state Department of Public Health nurse aide standards and plans to develop a PHCA to Nurse Aide Bridge curriculum. PHCAST trainings will serve as the foundation.
- The North Carolina grantee's comprehensive, multi-phased training program was developed to provide multiple pathways to direct care work for PHCA trainees.

Information Technology

Grantees improved their information technology infrastructures by developing systems to deliver the training and websites to train instructors and provide resources. Specifically:

- Comprehensive websites with resources, including entire curricula for every module and unit, teaching toolboxes, and handouts.
- Information technology systems to track and monitor the workforce (i.e., instructors can track trainees' progress, review quiz results, and respond to trainees' questions about course content).
- Online systems for training which are especially helpful for individuals in rural areas to access training.
- Web portal access to the training modules and CE.

VIII. Minimum Number of Hours of Initial Training

It was difficult to define the number of hours needed for the PHCA's initial training given the differing approaches the six grantees used to screen, orient, and support trainees throughout the core competencies programs. Reported hours of training for PHCA's in the demonstration programs ranged from 50 to 120. Demonstration programs with more hours of training included introductory and orientation sessions. The Maine grantee's hybrid online program allowed trainees to proceed at their own pace, and some completed the training in as few as 36 hours.

Certified Nursing Assistants (CNAs) who work in nursing care facilities must have a minimum of 75 hours of state-approved training, though some programs provide 200 – 300 hours of total

training. Given that the duties of PHCAs vary by state, states may be best positioned to determine the minimum number of hours of initial training.

Based on the number of hours required for CNA training and the fact that CNAs have a higher level of responsibility, PHCA training programs would be best positioned to recruit candidates if the number of hours were fewer than the 75 hours required to become a CNA.

IX. Summary: PHCAST Demonstration Program Accomplishments

Over the 3 years of the PHCAST Demonstration Program, more than 4,500 individuals received training. The 6 grantees incorporated the 10 legislated core competencies in their curricula and utilized both classroom and online settings. The grantees created materials and resources for the trainees and instructors, such as student manuals and workbooks and trainer guides, as well as assessment tests to demonstrate improved skill competency.

The evaluation identified several infrastructure improvements that resulted from the PHCAST Demonstration Program. Perhaps the most important was the development of effective partnerships with community colleges, employers, and various community organizations to develop and implement the training curricula. Grantees reported that these new partnerships broke down silos between different groups working on direct care worker issues, training, or competencies. The advisory teams forged collaborations among community colleges and educators, consumers, state government agencies/departments, community organizations, and providers.

PHCAST Demonstration Program activities raised the profile of personal care attendant training. Grantees have built a larger supply of instructors to provide training and maintain the fidelity of their programs. Websites have been created that provide a central point of access for information about the program and resources to support both the trainees and the instructors. Some grantees created or upgraded career lattices open to PHCAs to enhance job opportunities for direct care workers.

X. Conclusions

Training programs and certification for PHCAs appear to enhance workers' job satisfaction and career stability. Having a documented and demonstrable skill set can position PHCAs as trusted and valued care team members. This group of workers often requires a range of supports if they are to complete training and enter the workforce. Lower attrition rates were related to in-person training, more personalized trainee supports, and offering the training in the trainees' primary language. Types of trainee support included stipends, scholarships, case management, transportation, child care, mentoring, and assistance from local social service providers. By crafting programs that meet their trainees' specific needs, individual states can reach, recruit, and train significant numbers of PHCAs.

Evaluation findings underscore the importance of partnerships between various stakeholders in developing and sustaining training programs targeted to the PHCA workforce. The successful implementation of the six demonstration programs depended in large part on effective collaboration between agencies responsible for health and LTSS programs, workforce development activities and educational efforts, and partnerships with the various provider organizations and worker groups. Future programs should consider developing effective partnerships with the state's community college systems, offering the training within that system, and assessing the knowledge and skills gained by trainees through hands-on skills tests.