



Dementia-related workforce training

Table I. Personal Care Attendants, Home Health Aides, Certified Nursing Aides and Licensed Practical Nurses

	Personal Care Attendants (PCA)	Home Health Aides (HHA)	Certified Nursing Aides (CNA)	Licensed Practical Nurses (LPN)
Educational requirements	None/GED preferred	None or same as CNA	Nurse aide training programs must include a minimum of 75 hours of instruction, at least 16 of which must consist of supervised practical training. Supervised practical training is training in a clinical setting in which the trainee performs clinical tasks under the direct supervision of an RN or a licensed practical nurse (LPN).	The LPN curriculum in Colorado is 9-11 months focusing on the care of patients with predictable outcomes. A high school diploma or its equivalent usually is required for entry, although some programs accept candidates without a diploma and some programs are part of a high school curriculum. The curriculum emphasizes the maintenance of patients and performance of nursing skills with a high degree of technical expertise. The LPN student is taught to identify normal from abnormal in each of the body systems and to identify changes in a patient's condition which are then referred to an RN or MD for a full assessment.
Licensure	Certification is optional through the National Association for Home Care and Hospice (NAHC) for personal and home care aides. Not employed by a home care agency, but usually acts as an independent agent, employed by client directly or through an employment agency.	None, or same as CNA, although beginning June 1, 2009, home care agencies that provide skilled nursing services must apply for licensure with the Colorado Department of Public Health and Environment, and home care placement agencies must notify the department in writing if they provide referrals for skilled home health services. As of January 1, 2010, home care agencies that provide in-home personal care must apply for licensure with the department; the State Board of Health must promulgate rules providing for minimum standards for operating agencies including inspections, educational requirements, enforcement remedies and annual license fees.	Colorado has a Nurse Aide Practice Act that regulates the practice of CNAs with certification either by examination or endorsement. Certification within 4 months of obtaining employment as a nurse aide is required to practice in a nursing home or a home health agency. Certification is required prior to obtaining employment in a nursing pool or registry; there is no 4-month requirement to obtain the certification.	LPNs are required to pass a licensing examination, known as the NCLEX-PN, after completing a state-approved practical nursing program.

	Personal Care Attendants (PCA)	Home Health Aides (HHA)	Certified Nursing Aides (CNA)	Licensed Practical Nurses (LPN)
Dementia or Alzheimer's-specific training	None	None	The Colorado Department of Regulatory Agencies (DORA) certifies CNAs and approves training curriculum which includes: mental health and social service needs, awareness of developmental tasks associated with the aging process, responding to behavior, allowing the resident to make personal choices, using the family as a resource, caring for cognitively impaired individuals including techniques for addressing the unique needs and behaviors of individuals with dementia, communicating with and understanding the behavior of cognitively impaired residents and responding appropriately to the behavior of cognitively impaired residents.	The National Federation of License Practical Nurses offers certification in gerontology, requiring an LPN license, copy of nursing school transcripts and a review of selected materials to qualify for examination. Must recertify every two years. The National Association for Practical Nurse Education and Service, Inc. also offers certification in long-term care (LTC), available to anyone who holds a current LP/VN license, documents 2,000 hours of long-term care practice within the previous 3 years and receives passing grade on the certification exam. Must recertify every three years.
Core competencies and best practice recommendations	<p>Better Jobs Better Care—PA has designed the Universal Core Curriculum (UCC) for potential direct care workers to learn about positions in LTC settings and basic skills needed common to these settings. Consumers and workers report that it is the relationship that is at the heart of high-quality personal care. Students actively participate in their training through role-playing, small group work and demonstration of skills. Students' progress is measured by written tests and demonstration of interpersonal and direct care skills. The Universal Core Curriculum (UCC) requires approximately 60 hours of training while each module varies in terms of hours of training. The UCC requires the following modules specifically for Alzheimer's disease: recognizing symptoms of Alzheimer's disease and behavior changes; understanding the emotions of the patient with Alzheimer's disease; techniques to manage challenging behaviors related to dementia; relating to family members in respectful, professional manner; and understanding the role family members play in patient's care. The Iowa Alzheimer's disease state plan specifies these recommendations for direct care workers: establish or broaden the number of hours for training for direct care staff to a minimum of 8 hours classroom instruction and 8 hours of supervised interactive experience; establish or broaden the number of continuing education/in-service hours for direct care workers on the topic of Alzheimer's disease or related disorders to a minimum of 8 hours annually; add a competency exam following Alzheimer's disease or related disorders training; establish a standard curriculum model that will include but not be limited to the diagnostic process, progression of the disease, communication skills (including the patient, family, friends and caregivers), family stress and challenges, nutrition and dining information, activities, daily life skills, caregiver stress, the importance of building relationships and understanding the personal history, expected challenging behaviors and non-pharmacologic interventions, and medication management; establish a certification process for trainers and educators of the standard curriculum model.</p>			

Table 2. Registered Nurses, Advanced Practice Nurses and Physician Assistants

	Registered Nurses (RN)	Advanced Practice Nurses (APN)	Physician Assistants (PA)
Educational requirements	There are 3 educational pathways to become an RN: bachelor of science in nursing (BSN), associate degree in nursing (ADN) and diploma. BSN programs are a 4-year degree; ADN programs take 2-3 years to complete; diploma programs are typically 3 years (diploma programs are very rare as more formal education is the preferred route to an RN license).	All four advanced practice nursing specialties (nurse practitioners, certified registered nurse anesthetists, certified nurse midwives and clinical nurse specialists) require at least a master's degree. Most programs include 2 years of full-time study and require a BSN degree for entry; some programs require at least 1-2 years of clinical experience as an RN for admission.	PA Training programs usually last at least 2 years and are full time. PA students complete more than 2,000 hours of supervised clinical practice prior to graduation. Most applicants to PA programs already have a bachelor's degree.
Licensure	Students must graduate from an approved nursing program and pass a national licensing examination, known as the NCLEX-RN in order to obtain an RN license. Nurses may be licensed in more than one state, either by examination or by endorsement. Colorado is a member of the Nurse Licensure Compact Agreement which allows nurses licensed and permanently residing in a member state to practice in another member state without obtaining additional licensure. RNs can delegate within guidelines to an LPN, CNA or other health care professional, or an unlicensed person.	Colorado statutes define an advanced practice nurse (APN) as a professional nurse who has acquired additional specialized education and training and is accepted by the Board of Nursing for inclusion in the advanced practice registry. Requirements for inclusion include the successful completion of a nationally accredited education program in the appropriate specialty and passing a national certification examination.	PA's must pass the Physician Assistant National Certifying Examination administered by the National Commission on Certification of Physician Assistants (NCCPA), which is open only to graduates of accredited PA education programs. Only those successfully completing the examination may use the credential Physician Assistant-Certified. To remain certified, PA's must complete 100 hours of continuing medical education every 2 years. Every 6 years, they must pass a recertification examination or complete an alternative program combining learning experiences and a take-home examination.

	Registered Nurses (RN)	Advanced Practice Nurses (APN)	Physician Assistants (PA)
Dementia or Alzheimer's-specific training	The Colorado Board of Nursing does not require Alzheimer's or dementia-specific training in RN programs. The RN program at the University of Colorado Denver (UCD) School of Nursing does introduce students to this material in a variety of courses in a minimal way.	An APN can specialize in gerontology. To do so, an individual must hold a current RN license, 2 years of practice as an RN, have practiced 2,000 hours in a geriatrics setting in the last 3 years and have completed 30 hours of continuing education in the past 3 years. There are three specialty tracks: geriatric nurse specialist, clinical nurse specialist (CNS) in geriatric nursing or geriatric nurse practitioner. For the latter two, an RN must hold a master's, post-master's or doctorate degree from a geriatrics clinical nurse specialist program accredited by the Commission on Collegiate Nursing Education or the National League for Nursing Accrediting Commission. A minimum of 500 faculty supervised clinical hours must be included in the educational program.	PA education includes classroom instruction in biochemistry, pathology, human anatomy, physiology, microbiology, clinical pharmacology, clinical medicine, geriatric and home health care, disease prevention and medical ethics. Students obtain supervised clinical training in several areas including family medicine, internal medicine, surgery, prenatal care and gynecology, geriatrics, emergency medicine, psychiatry and pediatrics. The rotations often lead to permanent employment. Accreditation standards require PA programs to provide clinical experience in LTC settings and require supervised clinical practice in geriatrics, including developmental psychology and end-of-life issues.
Core competencies and best practice recommendations	The American Association of Colleges of Nursing recommends these competencies for BSN curriculum: courses that address communication, group dynamics and psychiatric mental health, opportunities to address student attitudes and values about older adults and aging, strategies to maximize effective communication with older adults and issues of family dynamics as they apply to older adults. Students should be exposed to the cognitive changes common to older adults, particularly dementia, delirium and depression, and to case finding and management of elder mistreatment. Maximizing independence to maintain older adults in the least restrictive environment and alternatives to the use of physical and chemical restraints are recommended. The Geriatric Nursing Education Consortium has developed a set of core competencies for senior-level undergraduate nursing courses for dementia: assessing cognitive function using screening tools, such as the Folstein Mini-Mental State Examination or the Mini Cog, during various stages of dementia and in various clinical practice settings; assessing patients and caregiving situations for unsafe living conditions and making alternative plans of care; developing and co-managing dementia patients experiencing paranoia, delusions or hallucinations; recognizing risk for delirium associated with acute illness superimposed on dementia; identifying and modifying history taking and/or physical examination of older adults with aphasia from dementia; participating on interdisciplinary team; discussing with caregivers issues related to awareness of the impact of dementia on management of other medical conditions and behavioral management to optimize cognitive, functional and psychosocial well-being; evaluating cognitively impaired older adults experiencing pain, unsafe living conditions, frequent falling and/or urinary incontinence; recognizing stigma associated with cognitive impairment and interceding to counteract negative stereotypes in a selected clinical practice setting; and recommending care plans for older adults with early-moderate and late-stage dementia in various clinical practice settings.		

Table 3. All Physicians and Geriatricians

	All Physicians	Geriatricians
Educational requirements	Physicians typically complete a 4-year undergraduate degree, 4 years of medical school and 3-8 years of internship and residency (depending on the specialty selected). A few medical schools offer combined undergraduate and medical school programs that last 6 years rather than the customary 8 years.	After earning a medical degree, geriatricians complete a 3-year residency program in either internal medicine or family medicine before entering a geriatric medicine fellowship program.
Licensure	To be licensed, physicians must graduate from an accredited medical school, pass a licensing examination and complete 1-7 years of graduate medical education. MDs and DOs seeking board certification in a specialty may spend up to 7 years in residency training, depending on the specialty. A final examination immediately after residency or after 1-2 years of practice also is necessary for certification by a member board of the American Board of Medical Specialists (ABMS) or the American Osteopathic Association (AOA).	Family physicians must be certified by the American Board of Family Medicine (ABFM) and must be diplomats in good standing in order to sit for a certificate of added qualification examination in Geriatric Medicine. Diplomats must hold a current, valid and unrestricted medical license, and must qualify by satisfactory completion of an Accreditation Council for Graduate Medical Education (ACGME) accredited fellowship training program in Geriatric Medicine. The American Board of Internal Medicine will grant credit for geriatric medicine training occurring in combination with a subspecialty of internal medicine consisting of: 1) 8 block months of geriatric medicine training; 2) the equivalent of 3 months training in continuing care (such as a continuity of care clinic); and (3) a one-month vacation or other leave.
Dementia or Alzheimer's-specific training	There is no requirement to have a geriatric medicine rotation in Colorado. At UCD, medical students do have an obligatory internal medicine rotation and MAY get dementia exposure and usually a neurology rotation. All internal medicine residents at UCD have a 1-month obligatory geriatric medicine rotation and have considerable exposure to dementia in lectures, clinic, consults and nursing homes.	Geriatricians develop clinical competence in the physiology of aging; illnesses common among older persons; atypical presentations of illnesses in older adults; the functional assessment of older adults; the treatment and management of older adults in acute care, LTC, community-based and home-care settings, and the assessment of cognitive status and mood in the elderly.
Core competencies and best practice recommendations	Competencies from the Association of American Medical Colleges and the John A. Hartford Foundation for cognitive and behavioral disorders include: 1) compare and contrast among clinical presentations of delirium, dementia and depression; 2) formulate differential diagnosis and implement initial evaluation in patient who exhibits delirium, dementia or depression; 3) in older patients with delirium, initiate urgent diagnostic work-up to determine the root cause (etiology); 4) perform and interpret cognitive assessment in older patients for whom there are concerns regarding memory or function; 5) develop evaluation and non-pharmacologic management plan for agitated demented or delirious patients.	

Table 4. Licensed Clinical Social Workers, Psychologists and Licensed Professional Counselors

	Licensed Clinical Social Workers (LCSW)	Psychologists	Licensed Professional Counselors
Educational requirements	A master's degree in social work (MSW) is required to practice. A social worker may also receive a doctorate in social work (DSW) or a PhD.	A doctoral degree usually is required for independent practice as a psychologist, which generally requires 5 to 7 years of graduate study.	The Colorado Department of Regulatory Agencies (DORA) requires an LPC applicant to hold a masters or doctoral degree in professional counseling from a program approved by the Council for Accreditation of Counseling and Related Educational Programs or its equivalent as determined by the Board. Such degree or program must include a practicum or internship in the principles and the practice of professional counseling.
Licensure	Becoming an LCSW requires a master's degree in social work from a Council on Social Work Education (CSWE) approved program, passing the advanced generalist or clinical-level Association of Social Work Boards (ASWB) exam and completion of 2 years, 3,360 hours post-degree supervised experience with at least 96 hours of supervision (48 hours of which must be individual supervision). All candidates for social work licensure must also submit a completed, signed application, submit the appropriate fee and pass a board-developed jurisprudence examination. There is no specific certification available for geriatric social workers.	In Colorado, the Examination for Professional Practice in Psychology is required, as well as post-doctoral experience adding to 1,500 hours of experience and 75 hours of supervision, 50 hours of which must be individual (face-to-face) supervision, all spread out over a minimum of 12 months. Post-doctoral supervised experience may not begin until the doctoral degree is conferred and applicants have obtained a counseling position with appropriate supervision.	DORA also requires LPC applicants to have at least two years post degree experience (one year with a doctoral degree) under supervision approved by the Board (24 months, 2,000 hours of experience, with at least 100 hours of supervision, 70 hours of which must be individual supervision). Experience and supervision must be done concurrently over a minimum of 24 months and demonstrate professional competence by passing an examination in professional counseling as prescribed by the Board. Post-degree supervised experience may not begin until the degree is completed/conferred and the applicant has obtained a counseling position with appropriate supervision.
Dementia or Alzheimer's-specific training	According to the John J. Hartford Foundation, most graduate social work students do not receive education or training in geriatrics or gerontology, much less in Alzheimer's or dementia. Many efforts are currently attempting to infuse geriatric content into social work curricula, including the Gero-Ed Center at the National Center for Gerontological Social Work Education. This center has developed Curriculum Development Institutes (CDIs), in which faculty participants will become leaders in preparing social work students with the knowledge, values and skills to meet the workforce needs of a rapidly aging society. Rather than adding specialization or electives to programs, the CDIs will infuse and transform foundational courses with gerontological competencies (e.g., a course about women in poverty would include a section on older women).	For example, UCLA offers a two-year post-doctoral fellowship for psychologists which includes the following areas of training: phenomenology of mental health in older adults; psychiatric syndromes in older adults, cognitive disorders, psychosis, mood syndromes, anxiety, and others; age-related physiological changes affecting clinical phenomenology and pharmacotherapy; age-related psychosocial changes; neuropsychology and the healthy psychology of aging; community health issues and health service delivery research and administration.	One example from the U.S. is at the University of Washington in Seattle. The school offers a Certificate in Geriatric Mental Health, for mental health counselors, social workers, and licensed psychologists. The certificate program includes the following areas of study: development of treatment plans; grief and loss related to aging; methods for accurately diagnosing dementia; psychiatric, medical, and pharmacological perspectives in the diagnosis and treatment of mood and thought disorders; and, effective ways to navigate multiple systems and community resources.

Core competencies and best practice recommendations	Licensed Clinical Social Workers (LCSW)	Psychologists	Licensed Professional Counselors
	<p>The CSWE, in collaboration with the National Center for Gerontological Social Work Education and Gero-Ed, has identified a list of foundational knowledge, values and competencies to form classroom learning objectives for bachelor of social work (BSW) and 1st year-MSW students. The list includes competencies such as: respect and promotion of older adults' rights to dignity and self-determination within the context of the law and safety concerns; using empathy and sensitive interviewing skills (e.g., reminiscence or life review, support groups, counseling); assessing social functioning (e.g., social skills, social activity level) and social support of older adults; assessing cognitive functioning and mental health needs of older adults (e.g., depression, dementia); and providing social work case management to link older adults and their families to resources and services and to conduct long-term planning.</p>	<p>The American Association of Geriatric Psychiatry (AAGP) developed the "Geriatric Core Competencies for General Psychiatry Residents." The competencies outline the ability of residents to gather accurate key information from the patient, collateral sources, and other health care professionals as needed to complete:</p> <ul style="list-style-type: none"> * History * Mental Status Exam * Structured cognitive assessment (vascular, frontotemporal, Diffuse Lewey body dementia spectrum, Alzheimer's) * Functional assessment * Medical/Neurological Assessments * Abuse assessments * Caregiver issues * Community and home assessment <p>Other competencies include the recognition and management of risks, prevalence and presentation of cognitive disorders; recognition of the interplay between general medical conditions and psychiatric illness; use of effective listening and communication skills to accommodate sensory, cognitive and functional deficits of patients.</p>	<p>"Retooling the Health Care Workforce for an Aging America Act of 2009" was introduced both in the U.S. House and the Senate in January of 2009. The American Association of Geriatric Psychiatry worked with senators on provisions relating to mental health. AAGP supports a provision that would expand funding for Geriatric Education Centers (GECs) to include new grants for short-term intensive courses (mini-fellowships) in geriatrics, chronic care management and long-term care to faculty members of medical and other health professions school. It would require GECs applying for these grants to incorporate mental health and dementia "best practices" training into most of their courses.</p>

Table 5. Physical Therapist, Occupational Therapist and Nursing Home Administrator

	Physical Therapist (PT)	Occupational Therapist (OT)	Nursing Home Administrator
Educational requirements	Individuals pursuing a career as a physical therapist usually need master's degree from an accredited physical therapy program. Only master's and doctoral degree programs are accredited in accordance with the Commission on Accreditation in Physical Therapy Education. Master's degree programs typically last 2 years and doctoral degree programs are 3 years.	A master's degree or higher in occupational therapy is the minimum requirement for entry into the OT profession. OT programs also require the completion of 6 months of supervised fieldwork.	A typical nursing home administrator has received a bachelor's degree in one of the following: business administration, public health administration, health administration, health care organizations and systems; or BSN or master's in LTC management. For Colorado, there is also a Nursing Home Administrator in Training requirement of 2,000 hours.
Licensure	Colorado requires the National Physical Therapy Examination for licensure.	To obtain a license, applicants must graduate from an accredited educational program and pass the National Board for Certification of Occupational Therapy exam. Those who pass the exam are awarded the title "Occupational Therapist Registered (OTR)."	Both national and state exams are required for nursing home administrators. Nursing homes in the U.S. that provide Medicare and Medicaid services must operate under the supervision of licensed administrator. Every state requires that applicants for licensure pass the national licensing exam.
Dementia or Alzheimer's-specific training	The American Board of Physical Therapy Specialties has established minimum requirements to sit for the geriatrics specialist certification examination: 1) current license to practice physical therapy in the United States, 2) evidence of minimum of 2,000 hours of clinical practice in the specialty area, 25% of which must have occurred within the last 3 years; or 3) evidence of successful completion of a post-professional clinical residency that has a curriculum plan reflective of the "Description of Specialty Practice: Geriatric Physical Therapy."	Board certification is offered for OTs in gerontology. Minimum requirements include: certified or licensed and in good standing with an American Occupational Therapy Association (AOTA) recognized credentialing or regulatory body, 2,000 hours of experience as an OT and 600 hours of experience delivering occupational therapy services in the certification area to clients (individuals, groups or populations) in the last 5 calendar years.	The National Association of Long Term Care Administrator Board does not specifically address Alzheimer's disease or dementia in its domains of practice.

	Physical Therapist (PT)	Occupational Therapist (OT)	Nursing Home Administrator
Core competencies and best practice recommendations	<p>According to new research reported at the Alzheimer's Association 2009 International Conference on Alzheimer's Disease, maintaining or increasing participation in moderate physical activity may help preserve memory and thinking abilities as individuals age. Benefits of regular exercise by people with Alzheimer's disease include maintenance of motor skills, decreased falls and reduced rate of disease associated with mental decline. Improved behavior and memory and better communication skills are a few other benefits associated with routine exercise programs for Alzheimer's disease patients.</p>	<p>Occupational therapists may gain further training in various areas including driver rehabilitation. These occupational therapists have the skills to evaluate an individual's overall ability to operate a vehicle safely, and, where appropriate, to provide rehabilitation to strengthen skills used in driving.</p>	<p>The Iowa State Alzheimer's Plan recommends broadening the spectrum of people who are required to receive training specific to Alzheimer's disease or related disorders to those who work in direct contact with people diagnosed with Alzheimer's disease, including but not limited to administrators, directors, dietary staff, administrative and management staff, hospital direct care staff, state employees with responsibility for LTC oversight/monitoring and ombudsmen. The national Alzheimer's Association offers these fundamentals for effective dementia care:</p> <ul style="list-style-type: none"> • For people with dementia in assisted living and nursing homes, quality of life depends on the quality of the relationships they have with the direct care staff. • Optimal care occurs within a social environment that supports the development of healthy relationships between staff, family and residents. • Good dementia care involves assessment of a resident's abilities, care planning and provision, strategies for addressing behavioral and communication changes, appropriate staffing patterns and an assisted living or nursing home environment that fosters community. • Each person with dementia is unique, having a different constellation of abilities and need for support, which change over time as the disease progresses. • Staff can determine how best to serve each resident by knowing as much as possible about each resident's life story, preferences and abilities. • Good dementia care involves using information about a resident to develop "person-centered" strategies, which are designed to ensure that services are tailored to each individual's circumstances.