

Appendix A. Search Strategy

1 "long-term care".ti,ab
2 "day care".ti,ab.
3 "assisted living".ti,ab.
4 "adult day health center".ti,ab.
5 "adult day health care".ti,ab.
6 "adult foster care".ti,ab.
7 "independent living".ti,ab.
8 "board and care".ti,ab.
9 "home health care".ti,ab.
10 "group residential care".ti,ab.
11 "residential care".ti,ab.
12 "home and community based care".ti,ab.
13 "home and community based services".ti,ab.
14 "personal care services".ti,ab.
15 "aging in place".ti,ab.
16 "continuing care retirement communit\$".ti,ab.
17 "group residential care".ti,ab.
18 or/1-17
19 exp nursing homes/
20 institutionalization/
21 nursing home\$.ti,ab.
22 "institutional care".ti,ab.
23 (nursing adj home\$).tw.
24 (residential adj (aged or elderly or geriatric)).tw.
25 or/19-24
26 18 and 25
27 Randomized controlled trials as topic/
28 randomized controlled trial/
29 random allocation/
30 double blind method/
31 single blind method/
32 clinical trial/
33 clinical trial, phase i.pt.
34 clinical trial, phase ii.pt.
35 clinical trial, phase iii.pt.
36 clinical trial, phase iv.pt.
37 controlled clinical trial.pt.
38 randomized controlled trial.pt.
39 multicenter study.pt.
40 clinical trial.pt.
41 exp clinical trials as topic/
42 or/27-41
43 epidemiological studies/
44 exp case control studies/

45 exp cohort studies/
46 case control.tw.
47 (cohort adj (study or studies)).tw.
48 cohort analy\$.tw.
49 cohort analy\$.tw.
50 (follow up adj (study or studies)).tw.
51 (observational adj (study or studies)).tw.
52 longitudinal.tw.
53 retrospective.tw.
54 cross sectional.tw.
55 cross-sectional studies/
56 or/43-55
57 26 and 42
58 26 and 56
59 limit 57 to (english language and yr="1995-Current")
60 limit 58 to (english language and yr="1995-Current")
61 (case reports or comment or editorial or historical article or letter or news or newspaper
article or"review").pt.
62 59 not 61
63 60 not 61

Appendix B. Sources of Grey Literature

Federal and state agencies	<ul style="list-style-type: none">• Administration on Aging (AoA)• Agency for Healthcare Research and Quality (AHRQ)• Centers for Medicare and Medicaid Service (CMS)• Congressional Research Service (CRS)• Office of the Assistant Secretary for Planning and Evaluation (ASPE)• U.S. Government Accountability Office (GAO)• State Departments of Health or Health & Human Services• Veterans Administration
Research organizations, foundations, and advocacy groups	<ul style="list-style-type: none">• AARP• Abt Associates• Alliance for Health Reform• American Public Human Services Association Health Services Division• Center for Excellence in Assisted Living• Kaiser Family Foundation• LeadingAge• Mathematica Policy Research• Milbank Memorial Fund• National Academy for State Health Policy• National Association of Area Agencies on Aging• National Association of Medicaid Directors• National Center for Assisted Living• National Conference of State Legislatures• National Governors Association• National Investment Center• National PACE Association• PAS Center for Personal Assistance Services, UCSF• Robert Wood Johnson Foundation• RTI International• Scripps Gerontology Center• The Clearinghouse for Home and Community Based Services• The Commonwealth Fund• The Hilltop Institute• The John A. Hartford Foundation• The Lewin Group• The SCAN Foundation• Urban Institute• Visiting Nurse Service of New York

Appendix C. Excluded Studies

(Note that this set of references is different from those in the text, and the numbers are different.)
(Reason for exclusion shown in italics at the end of each reference.)

1. Andren S, Elmstahl S. Former family carers' subjective experiences of burden: a comparison between group living and nursing home environments in one municipality in Sweden. *Dementia* 2002; 1(2):241-54. *No relevant comparison*
2. Ashcraft AS, Owen DC, Feng D. A comparison of cognitive and functional care differences in four long-term care settings. *Journal of the American Medical Directors Association* 2006; 7(2):96-101; 16461251. *No relevant settings or sample*
3. Beland F, Bergman H, Lebel P, et al. A system of integrated care for older persons with disabilities in Canada: results from a randomized controlled trial. *Journals of Gerontology Series A-Biological Sciences & Medical Sciences* 2006; 61(4):367-73; 16611703. *No relevant comparison*
4. Biola H, Sloane PD, Williams CS, et al. Physician communication with family caregivers of long-term care residents at the end of life. *Journal of the American Geriatrics Society* 2007; 55(6):846-56; 17537084. *No relevant characteristics or outcomes*
5. Biola H, Sloane PD, Williams CS, et al. Preferences Versus Practice: Life-Sustaining Treatments in Last Months of Life in Long-Term Care. *Journal of the American Medical Directors Association* 2010; 11(1):42-51. *No relevant settings or sample*
6. Boustani M, Zimmerman S, Williams CS, et al. Characteristics associated with behavioral symptoms related to dementia in long-term care residents. *Gerontologist* 2005; 45(Special Issue 1):56-61. *No relevant characteristics or outcomes*
7. Boyle G. Facilitating choice and control for older people in long-term care. *Health and Social Care in the Community* 2004; 12(3):212-20. *No relevant characteristics or outcomes*
8. Buck D, Gregson BA, Bamford CH, et al. Psychological distress among informal supporters of frail older people at home and in institutions. *The Resource Implications Study Group of the MRC Cognitive Function and Ageing Study. International Journal of Geriatric Psychiatry* 1997; 12(7):737-44; 9251936. *No relevant characteristics or outcomes*
9. Caprio AJ, Hanson LC, Munn JC, et al. Pain, dyspnea, and the quality of dying in long-term care. *Journal of the American Geriatrics Society* 2008; 56(4):683-8; 18266666. *No relevant settings or sample*
10. Castle NG, Lowe TJ, Lucas JA, et al. Use of resident satisfaction surveys in New Jersey nursing homes and assisted living facilities. *Journal of Applied Gerontology* 2004; 23(2):156-71. *No relevant characteristics or outcomes*
11. Chao S-Y, Lan Y-H, Tso H-C, et al. Predictors of psychosocial adaptation among elderly residents in long-term care settings. *Journal of Nursing Research* 2008; 16(2):149-59; 18528821. *Non-U.S., Canadian, European, Australian*
12. Chiu L, Tang KY, Liu YH, et al. Cost comparisons between family-based care and nursing home care for dementia. *Journal of Advanced Nursing* 1999; 29(4):1005-12; 10215994. *Non-U.S., Canadian, European, Australian*
13. Cohen-Mansfield J, Jensen B. Changes in habits related to self-care in dementia: the nursing home versus adult day care. *American Journal of Alzheimer's Disease and Other Dementias* 2007; 22(3):184-9. *No relevant characteristics or outcomes*
14. Curtis MP, Sales AEB, Sullivan JH, et al. Satisfaction with care among community residential care residents. *Journal of Aging & Health* 2005; 17(1):3-27; 15601781. *No relevant comparison*
15. Daaleman TP, Williams CS, Preisser JS, et al. Advance Care Planning in Nursing Homes and Assisted Living Communities. *Journal of the American Medical Directors Association* 2009; 10(4):243-51. *No relevant settings or sample*
16. Dobbs D, Munn J, Zimmerman S, et al. Characteristics associated with lower activity involvement in long-term care residents with dementia. *Gerontologist* 2005; 45 Spec No 1(1):81-6; 16230754. *No relevant characteristics or outcomes*
17. Friedman SM, Mendelson DA, Bingham KW, et al. Hazards of hospitalization: residence prior to admission predicts outcomes. *Gerontologist* 2008; 48(4):537-41; 18728303. *No relevant settings or sample*

18. Godden S, Pollock AM. The use of acute hospital services by elderly residents of nursing and residential care homes. *Health & Social Care in the Community* 2001; 9(6):367-74; 11846815. *No relevant comparison*
19. Golden AG, Roos BA, Silverman MA, et al. Home and Community-Based Medicaid Options for Dependent Older Floridians. *Journal of the American Geriatrics Society* 2010; 58(2):371-6. *No relevant comparison*
20. Hanson LC, Eckert JK, Dobbs D, et al. Symptom experience of dying long-term care residents. *Journal of the American Geriatrics Society* 2008; 56(1):91-8; 17727647. *No relevant settings or sample*
21. Howard DL, Sloane PD, Zimmerman S, et al. Distribution of African Americans in residential care/assisted living and nursing homes: more evidence of racial disparity? *American Journal of Public Health* 2002; 92(8):1272-7. *No relevant characteristics or outcomes*
22. Jackson GA, Templeton GJ, Whyte J. An overview of behaviour difficulties found in long-term elderly care settings. *International Journal of Geriatric Psychiatry* 1999; 14(6):426-30; 10398351. *No relevant characteristics or outcomes*
23. Kane RL, Homyak P, Bershadsky B, et al. Patterns of utilization for the Minnesota senior health options program. *Journal of the American Geriatrics Society* 2004; 52(12):2039-44; 15571539. *No relevant comparison*
24. Liu L-F, Wen M-J. A longitudinal evaluation of residents' health outcomes in nursing homes and residential care homes in Taiwan. *Quality of Life Research* 2010; 19(7):1007-18; 20449664. *Non-U.S., Canadian, European, Australian*
25. Lockhart C, Giles-Sims J, Klopfenstein K. Comparing states' Medicaid nursing facilities and home and community-based services long-term care programs: quality and fit with inclination, capacity, and need. *Journal of Aging & Social Policy* 2009; 21(1):52-74; 19197608. *No relevant comparison*
26. Mitchell G, 2nd, Salmon JR, Polivka L, et al. The relative benefits and cost of Medicaid home- and community-based services in Florida. *Gerontologist* 2006; 46(4):483-94; 16921002. *No relevant comparison*
27. Munn JC, Dobbs D, Meier A, et al. End-of-life experience in long-term care: five themes identified from focus groups with residents, family members, and staff. *Gerontologist* 2008; 48(4):485-94. *No relevant comparison*
28. Page C, Conner T, Prokhorov A, et al. The effect of care setting on elder abuse: results from a Michigan survey. *Journal of Elder Abuse & Neglect* 2009; 21(3):239-52; 19827327. *No relevant characteristics or outcomes*
29. Pruchno RA, Rose MS. Time use by frail older people in different care settings. *Journal of Applied Gerontology* 2002; 21(1):5-23. *No relevant characteristics or outcomes*
30. Reed PS, Zimmerman S, Sloane PD, et al. Characteristics associated with low food and fluid intake in long-term care residents with dementia. *Gerontologist* 2005; 45(Special Issue 1):74-80. *No relevant characteristics or outcomes*
31. Sloane PD, Zimmerman S, Williams CS, et al. Dying with dementia in long-term care. *Gerontologist* 2008; 48(6):741-51. *No relevant settings or sample*
32. Small JA, Montoro-Rodriguez J. Conflict resolution styles: a comparison of assisted living and nursing home facilities. *Journal of Gerontological Nursing* 2006; 32(1):39-45. *No relevant characteristics or outcomes*
33. Stone RI, Reinhard SC. Place of assisted living in long-term care and related service systems. *Gerontologist* 2007; 47(Special Issue 3):23-32. *Review*
34. Verbeek H, van Rossum E, Zwakhalen SMG, et al. The effects of small-scale, homelike facilities for older people with dementia on residents, family caregivers and staff: design of a longitudinal, quasi-experimental study. *BMC Geriatrics* 2009; 9:3; 19154579. *No relevant comparison*
35. Weisman GD, Kovach C, Cashin SE. Differences in dementia services and settings across place types and regions. *American Journal of Alzheimer's Disease and Other Dementias* 2004; 19(5):291-8. *No relevant characteristics or outcomes*
36. Williams SW, Williams CS, Zimmerman S, et al. Characteristics associated with mobility limitations in long-term care residents with dementia. *Gerontologist* 2005; 45(Special Issue 1):62-7. *No relevant characteristics or outcomes*

Appendix D. Evidence Table

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Resource Implications Study Group 2000 ¹ United Kingdom Longitudinal	To examine psychological morbidity in informal caregivers of frail older people at home and in institutions. Predictors of psychological morbidity in caregivers and factors related to deterioration in their wellbeing over time were identified.	Care-recipients age 65 and older receiving care at home (HCBS) or NH care in the United Kingdom with follow-up for 2 years	Cognitive function	Family caregivers' psychological morbidity	No differences in GHQ scores between caregivers at home and visitors and no changes in GHQ score over time. Caregiver characteristics were stronger than those of care recipients in predicting psychological morbidity at follow-up and in predicting deteriorating well-being over time.
Department of Elder Affairs, State of Florida 2011 ² Florida Longitudinal Grey Literature	To present data on the Department of Elder Affairs Long-Term Care Community Diversion Pilot Project (Diversion), which is a model of managed HCBS for frail elders at risk of permanent NH placement.	Older Medicaid LTC users in Florida in HCBS waiver program, managed care HCBS program (Diversion program), AL, and NH for fiscal year 2009-10	Physical function, cognitive function	Costs	The average capitation rate per member per month for the Diversion HCBS managed care program is lower than Medicaid reimbursement for NH care.
Applebaum 2009 ³ Ohio Longitudinal Grey Literature	To present an evaluation of the Assisted Living Medicaid Waiver Program in Ohio.	Medicaid LTC users in Ohio in AL waiver and NH	Physical function	Costs	AL waiver participants are less functionally impaired than NH residents or HCBS waiver clients, but have higher levels of cognitive impairment compared to HCBS waiver clients. Average Medicaid AL waiver participant expenditures are lower than average Medicaid expenditures for long-stay NH residents.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Applebaum 2004 (Ohio HCBS Waiver) ⁴ Ohio Cross-sectional	To describe LTC use patterns for older adults in Ohio from 1992-1999.	Older Medicaid LTC users in Ohio in HCBS waiver and NH	Physical function	NA	Despite an increasing older population in Ohio over the time period, NH occupancy rates fell and in-home service and AL use increased.
Beattie et al. 2005 ⁵ U.S. Cross-sectional	To compare the wandering behavior of residents in AL and NH.	AL and NH residents age 65 and older in a metropolitan area of a midwestern state who had a diagnosis of dementia	Physical function, cognitive function	NA	There were no significant differences in wandering behavior between AL and NH residents.
Boersma et al. 1997 ⁶ The Netherlands Cross-sectional	To examine service utilization among patients with dementia and to examine whether sociodemographic and health-related variables are associated with care utilization.	Individuals age 65 and older with dementia in The Netherlands who received no professional/formal care at home, used one or more types of professional/formal care (HCBS), residential living in a home for the aged (RH), or a specialized NH	Physical function, cognitive function, mental health/affect	NA	82% of study subjects used one or more types of formal care and 55% were institutionalized. Age, severity of dementia, somatic disorders, dependency in terms of activities of daily living, and marital status were predictors of higher levels of care.
Borrayo et al. 2002 ⁷ Florida Cross-sectional	To analyze consumers' predisposing, enabling, and need characteristics influencing their utilization of HCBS, AL, or NH.	LTC users age 60 and older in Florida including HCBS users, AL residents, and long-stay NH residents	Physical function, cognitive function, conditions/comorbidities	NA	Need characteristics contributed the most to differential LTC use, with those with the most need more likely to be in NH or HCBS. Enabling characteristics, including Medicaid eligibility and geopolitical region of the state, were associated with higher NH use. Predisposing and enabling characteristics had a moderating influence on need.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Challis et al. 2000 ⁸ England Cross-sectional	To examine dependency and general health status of older individuals newly admitted to residential homes and NH for LTC.	New admits age 65 and older to residential homes (RH) and NH in northwest England	Physical function, cognitive function	NA	31% of NH and 71% of RH residents were 'low dependency.' In NH, low-dependency residents were more likely to be self-funding than those with higher dependency. A diagnosis of dementia was associated with NH rather than RH admission.
Chappell et al. 2004 ⁹ Canada Cross-sectional	To examine the cost-effectiveness of home care as a substitute for institutional care for seniors needing LTC.	LTC users age 65 and older in Canada (Victoria, BC and Winnipeg, Manitoba) receiving LTC in the community or long-term care facilities (nursing homes/intermediate care facilities)	Physical function, mental health/affect	NA	Costs were significantly lower for home care clients than for facility clients, regardless of whether costs only to the government were taken into account or whether both formal and informal costs were taken into account. When informal caregiver time is valued at either minimum wage or replacement wage, there was a substantial increase in the average annual costs for both community and facility clients relative to when informal caregiver time was valued at zero.
Doty et al. 2010 (ASPE Private LTC Insurance Cohort) ¹⁰ U.S. Longitudinal	To profile individuals with private LTC insurance at the onset of using paid LTC services and to track their service use, satisfaction, and transitions over 28 months.	Private LTC insurance policyholders using HCBS, AL, or NH; longitudinal panel starting at initiation of services and followed for 28 months	Physical function, cognitive function	Satisfaction	About 96% of those filing claims were approved for payment. Few claimants reported that their policies restricted their choice of providers and most care costs were covered. Individuals using paid home care or assisted living had higher overall satisfaction than individuals in NH, and NH users had the greatest

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
					decline in their levels of satisfaction over the study period. The average number of care transitions was one, typically occurring within 4 months of baseline.
Edelman et al. 2005 ¹¹ U.S. Cross-sectional	To compare three methods of assessing dementia specific quality of life.	Residents with dementia in AL facilities with dementia-specific programs and special care NH in a metropolitan area of the U.S.	Physical function, cognitive function, mental health/affect, conditions/comorbidities	NA	The relationship of staff quality-of-life measures to resident characteristics varied by care setting while no significant relationships were found for resident quality-of-life measures.
Franks 2004 ¹² Washington Cross-sectional	To compare perceived quality of life between matched AL and NH residents.	Residents age 65 and older in western Washington in AL and NH	Physical function	NA	After matching based on level of disability, matched pair t-tests revealed no difference in quality of life scores between AL and NH residents.
Frytak et al. 2001 (Oregon Assisted Living study) ¹³ Oregon Longitudinal	To compare the outcome trajectories for the ability to perform activities of daily living, psychological well-being, and pain and discomfort between AL and NH residents.	AL and NH residents age 65 and older in Oregon followed for 1 year	Physical function, mental health/affect, conditions/comorbidities	Physical function, mental health/affect, pain and discomfort	There were differences in case-mix between AL and NH residents but no differences in outcome trajectories for activities of daily living, psychological well-being, and pain and discomfort. For activities of daily living and pain and discomfort, residents in both AL and NH on average experienced change over the study period. For psychological well-being, residents in AL and NH on average experienced no change.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Gaugler 2006 ¹⁴ Kentucky Cross-sectional	To examine the association between different dimensions of family involvement and resident psychosocial status for residents in family care homes, AL, and NH.	Residents in family care homes, AL, and NH in Kentucky	Physical function, cognitive function, mental health/affect	NA	Facility family orientation and family involvement in care conferences were associated with great resident well-being (i.e., sense of aesthetics, or ability to appreciate beauty in one's surroundings), while families who transported residents to appointments outside of facilities had relatives with a lower sense of aesthetics.
Gaugler & Kane 2005 (Oregon Assisted Living study) ¹⁵ Oregon Longitudinal	To compare the activity of AL and NH residents over 1 year.	AL and NH residents age 65 and older in Oregon followed for 1 year	Cognitive function, conditions/comorbidities	Activity	AL residents reported significantly higher activity compared to NH residents over time, but there was also considerable variability in activity across settings.
Gruber-Baldini et al. 2005 (Dementia Care Project) ¹⁶ U.S. Cross-sectional	To describe the prevalence, assessment, and treatment of depression and characteristics associated with depression for residents with dementia in AL and NH.	Residential care/assisted living facility (AL) residents stratified by (a) facilities with <16 beds; (b) facilities with ≥16 beds of the "new-model" type that provide nursing care and cater to an impaired population; and (c) "traditional" facilities with ≥16 beds not meeting the "new-model" criteria and NH residents age 65 and older with dementia in four states with follow-up for 6 months	Mental health/affect	NA	23.9% of AL residents had depression and 26.6% of NH residents had depression. Depression was related to severe cognitive impairment, behavioral symptoms, pain, and for-profit NH residence.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Lee et al. 2001 ¹⁷ New York Cross-sectional	To explore factors affecting the choice of LTC setting among older adults.	Older Medicaid LTC users in New York City in a HCBS program and NH	Physical function, cognitive function, conditions/comorbidities	NA	The results indicated that HCBS program use was characterized by a higher rate of being admitted from private homes, less cognitive impairments, less limitations in activities of daily living, and younger age than for NH residents. Health-related factors were found to be more important predictors than sociodemographic characteristics or support system for choice of different types of care.
Leon & Moyer 1999 ¹⁸ U.S. Cross-sectional	To estimate the potential cost savings from substituting AL for NH care for residents with Alzheimer's Disease that have health profiles that appear manageable within AL that specialize in dementia care.	LTC users in AL and NH across 9 states with probable Alzheimer's Disease	Physical function, cognitive function, conditions/comorbidities	NA	Findings suggest that up to 13.9% of NH costs could be saved by substituting AL care for NH residents with Alzheimer's Disease that could be managed in AL.
Marek et al. 2005 ¹⁹ Missouri Longitudinal	To compare clinical outcomes (activities of daily living, cognitive function, depression, incontinence, and pressure ulcers) between older adults who received services in the Aging in Place community-based LTC program to similar individuals residing in NH.	Older Medicaid HCBS Aging in Place program participants and NH residents in Missouri followed for 30 months	Mental health/affect	Physical function, cognitive function, mental health/affect	The HCBS Aging in Place group had statistically significantly better outcome in cognition at 6, 12, and 18 months, in depression at 6 and 12 months, in activities of daily living at 6, 12, and 24 months, and in incontinence at 24 months.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Margallo-Lana et al. 2001 ²⁰ United Kingdom Cross-sectional	To determine the prevalence of behavioral and psychological symptoms among elderly individuals with dementia residing in care environments, the relationship with severity of dementia, and the pattern of psychotropic medication use.	Elderly individuals with dementia in the United Kingdom residing in social care facilities and NH	Physical function, cognitive function	NA	Overall 90% of study subjects had dementia with 79% of them having clinically significant behavioral and psychological symptoms in dementia and 58% receiving psychotropic medication. There was no difference in the prevalence of behavioral and psychological symptoms between social and nursing care.
McCann et al. 2009 ²¹ Northern Ireland Longitudinal	To estimate mortality rates for residents in nursing and residential homes in Northern Ireland and analyze the variation by type of home and resident characteristics.	Residents in residential homes (RH), NH, and dually registered residential and NH (Dual) age 65 and older in Northern Ireland with follow-up for 5 years	Conditions/comorbidities	Mortality	Median survival for residential home residents was 4.51 years, for NH residents was 2.33 years, and for dually registered home residents was 2.75 years.
Mehdizadeh 2007 (Ohio PASSPORT) ²² Ohio Longitudinal Grey Literature	To examine the costs of consumers in the PASSPORT program, Ohio's aged and disabled waiver program, compared to NH residents.	Medicaid LTC users in Ohio in HCBS waiver and NH	Physical function, cognitive function	Costs	On average, the total public cost (excluding Medicare) of caring for an individual in a NH was more than twice the cost of caring for them in the HCBS waiver.
Mehdizadeh 2002 ²³ Ohio Longitudinal	To examine the health and LTC use trajectories of disabled older women dually eligible for Medicare and Medicaid.	Disabled women age 60 and older using HCBS and NH services in Ohio; sample included those who remained in the community the entire first year (HCBS), those who remained in a NH the entire first year (NH), and those who transitioned between home and NH	Physical function, cognitive function, conditions/comorbidities	NA	As sample members proceeded along their LTC career and their health and disability status worsened, there was a shift in the type of care needed from hospital and home care to NH care. There was also a shift in the major payer from Medicare to Medicaid.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
		one or more times the first year (Transition)			
Miller et al. 2008 (ASPE Private LTC Insurance Cohort) ²⁴ U.S. Longitudinal Grey Literature	To describe the demographic, health, and attitudinal profile of individuals with private LTC insurance at the initiation of LTC service use, understand the factors involved in the decision about how and why to use services in a particular setting, and to understand how and why people transition between care settings over time.	Private LTC insurance policyholders using HCBS, AL, or NH; longitudinal panel starting at initiation of services and followed for 28 months	Physical function	Mortality, costs	Compared to those not yet receiving paid care at baseline, NH residents at baseline had the highest odds of mortality during the study period, followed by those using home care at baseline and AL residents at baseline. Compared to people who were receiving paid care at baseline, individuals in home care had monthly expenditures that were 56% higher, NH residents had expenditures that were 113% higher, and AL residents had expenditures that were 62% higher.
Mitchell et al. 2004 ²⁵ Michigan Longitudinal	To compare the end-of-life care of older individuals with advanced dementia dying in home care and NH settings.	A retrospective cohort of home care and NH users age 65 and older in Michigan with dementia; all persons in sample died within 1 year of admission to either HCBS or NH	Physical function, cognitive function, conditions/comorbidities	Utilization, advance care planning, nonpalliative treatments, symptoms, other treatments	NH residents dying with advanced dementia had greater functional impairment and more behavior problems compared to those in HCBS. Only 5.7% of NH residents and 10.7% of HCBS clients were referred to hospice, while 43.7% of NH residents and 31.5% of HCBS clients were hospitalized. End-of-life variables independently associated with NH versus

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
					HCBS care included hospice (adjusted odds ratio 0.26), life expectancy less than 6 months (adjusted odds ratio 0.31), advance directives (adjusted odds ratio 1.48), pain (adjusted odds ratio 0.38) shortness of breath (adjusted odds ratio 0.20) and oxygen therapy (adjusted odds ratio 2.47).
Ormond et al. 2006 ²⁶ Texas Cross-sectional Grey Literature	To report on the transition process, participant characteristics, and service utilization and costs for Rider (a Money Follows the Person initiative for individuals to move from NH to community) participants.	Medicaid LTC users in Texas in the Community-Based Alternatives community care program, residents in NH, and participants in the Rider initiative for individuals moving from NH to the community	Cognitive function, mental health/affect, conditions/comorbidities	NA	Rider participants represented a wide range of NH residents, but individuals with certain characteristics were more represented in Rider participants compared to NH residents (such as those with the lowest care dependence).
Port et al. 2005 (Dementia Care Project) ²⁷ U.S. Cross-sectional	To compare the sociodemographics, self-rated health, and involvement of family caregivers for residents with dementia in AL and NH.	Residential care/assisted living facility (AL) residents stratified by (a) facilities with < 16 beds; (b) facilities with ≥ 16 beds of the “new-model” type that provide nursing care and cater to an impaired population; and (c) “traditional” facilities with ≥ 16 beds not meeting the “new-model” criteria and NH residents age 65 and older with dementia	Physical function, cognitive function, conditions/comorbidities	NA	NH caregivers rated their health poorer than AL caregivers. AL caregivers rated their perception of involvement and burden higher than NH caregivers, and they engaged in more frequent monitoring of resident's health, well-being, and finances than NH caregivers despite the reported time spent per week on care not differing.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Pruchno & Rose 2000 ²⁸ Ohio Longitudinal	To compare mortality rates, relocation, and trajectories of cognitive status, functional ability, depression, and subjective health of AL and NH residents.	Older adults in AL or NH living on a single LTC campus in Cleveland, Ohio with follow-up for 15 months	Physical function, cognitive function, mental health/affect, conditions/comorbidities	Physical function, cognitive function, mental health/affect, mortality	Logistic regression results found that facility type (AL versus NH) was not a significant predictor of mortality or relocations due to declining health. The repeated ANOVA results found that trajectories of cognitive status, functional ability, depression, and subjective health of AL and NH residents did not change at different rates.
Reinardy & Kane 1999 ²⁹ Oregon Cross-sectional	To examine the decisions, circumstances, and perceived control of residents choosing adult foster homes and NH.	Residents in foster care and NH in Oregon	Physical function, cognitive function, conditions/comorbidities	NA	There were statistically significant differences between foster care and NH residents in the characteristics of the setting that each group deemed important, the circumstances surrounding the decision, the people influencing it, and the perceived control over the decision.
Rigler et al. 2004 (Kansas Medicaid) ³⁰ Kansas Longitudinal	To examine the relationship between disease burden and inappropriate medication use in older Medicaid beneficiaries not receiving any HCBS or NH care (community-dwelling), receiving HCBS, and receiving NH care.	Medicaid beneficiaries age 65 and older in Kansas including an ambulatory cohort (community-dwelling older adults not receiving any HCBS or NH care during study year), HCBS cohort, and NH cohorts with followup for 1 year	Conditions/comorbidities	Harms	Inappropriate medication use occurred in 21% of community-dwelling non-LTC cohort, 48% of HCBS cohort, and 38% of NH cohort. For the community-dwelling non-LTC and HCBS cohorts, inappropriate medication use increased as disease burden increased, but the rates of inappropriate medication use in the NH cohort showed little variation across disease burden.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Rothera et al. 2003 (Nottingham study) ³¹ United Kingdom Cross-sectional	To examine the dependency and health status of older individuals admitted to residential care or NH and compare the findings with assessments conducted by social services departments prior to placement.	Residents in residential homes (RH), nursing homes (NH), and dually registered residential and nursing homes (Dual) in the United Kingdom	Physical function, cognitive function, mental health/affect	NA	Residents in NH had significantly higher cognitive impairment and physical disability, although a third of residents in residential care had substantial physical disability. 25% of NH residents had low dependency needs but these residents had greater cognitive impairment than residential home residents with the same level of dependency. Most residents had some behavioral disturbance (particularly nursing home residents) and more severe disturbance was associated with greater cognitive impairment and more depressed mood, but not physical disability.
Rothera et al. 2002 (Nottingham study) ³² United Kingdom Longitudinal	To examine life expectancy and mortality of older residents in nursing and residential homes and specific risk factors.	Residents in residential homes (RH), nursing homes (NH), and dually registered residential and nursing homes (Dual) in the United Kingdom with follow-up for 20 months		Mortality	One-year survival rates were 76% in RH, 66% in NH, and 59% in dually registered homes. The odds ratio was 1.85 for NH residents and 1.80 for dually registered home residents for mortality compared with those in RH.
Sands et al. 2008 ³³ Indiana Longitudinal	To compare the expenditures and utilization between Medicaid beneficiaries with dementia who received HCBS and NH care.	Older Medicaid recipients in Indiana with dementia who lived in the community 6 months before receiving HCBS or NH care with follow-up for 1 year	Conditions/comorbidities	Utilization, costs	Adjusted rates of inpatient use were stable for NH residents (0.06) but significantly increased over 12 months for HCBS clients (0.07-0.12, p = 0.048). Adjusted total expenditures significantly increased over 12 months from \$1419 to \$2002 for HCBS clients, but

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
					remained stable for NH residents (\$3413-\$3336). LTC expenditures were on average \$1688 per month higher for NH residents.
Schroeder et al. 1998 ³⁴ U.S. Cross-sectional	To compare functional ability, balance, strength, flexibility, life satisfaction, and physical activity between older adults in the community, AL, and NH.	Adults age 75-85 in the community (no assistance), AL, and NH	Physical function, mental health/affect	NA	No difference was found among the groups in life satisfaction. NH residents had poorer functional ability, balance, strength, flexibility, and physical activity compared to individuals in AL and community non-LTC users.
Shireman & Rigler 2004 (Kansas Medicaid) ³⁵ Kansas Longitudinal	To examine the characteristics, health care utilization, and expenditures of Medicaid beneficiaries in HCBS waivers versus NH.	Medicaid beneficiaries age 65 and older in Kansas using HCBS or NH care with follow-up for 10-12 months	Cognitive function, mental health/affect	Costs	After adjusting for demographic and clinical characteristics, mean monthly expenditures were \$1281 lower for the HCBS clients compared to NH residents.
Shugarman et al. 1999 ³⁶ U.S. Cross-sectional	To compare HCBS clients and NH residents on measures of resource utilization, activities of daily living, and overall case mix.	Admits to the Michigan Medicaid HCBS waiver program and to Ohio NH	Physical function, conditions/comorbidities	NA	The HCBS and NH groups were similar across the resource utilization categories, but the NH group was more functionally impaired in activities of daily living functioning and overall case mix.
Sloane et al. 2005 (Collaborative Studies of Long-Term Care sub-sample) ³⁷ U.S. Longitudinal	To compare the health and functional outcomes and utilization between individuals with dementia in AL and NH.	Residential care/assisted living facility (AL) residents stratified by (a) facilities with < 16 beds; (b) facilities with ≥ 16 beds of the "new-model" type that provide nursing care and cater to an	Physical function, cognitive function, mental health/affect, conditions/comorbidities	Physical function, cognitive function, mental health/affect, mortality, utilization, behavior, social function, social withdrawal, morbidity	Mortality rates, new or worsening morbidity, change in activities of daily living, cognition, behavioral problems, depressive symptoms, social function, and withdrawal did not significantly differ between AL and NH residents.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
		impaired population; and (c) “traditional” facilities with ≥ 16 beds not meeting the “new-model” criteria and NH residents with dementia in four states with follow-up for 1 year			Hospitalization rates were higher among individuals with mild dementia in AL. Due to death or transfer, about one half of individuals with mild dementia and one third of individuals with moderate or severe dementia remained in AL one year after enrollment.
Sloane et al. 2003 (Collaborative Studies of Long-Term Care sub-sample) ³⁸ U.S. Cross-sectional	To compare end-of-life care in AL and NH.	AL and NH residents from four states who died in or within 3 days after discharge from a study facility	Physical function, cognitive function	NA	Most decedants died in the facility where they had resided. Greater proportions of staff and family in NH knew that the resident's death was only days or weeks away. Both AL and NH residents experienced few highly negative moods and overall discomfort was low. Summary ratings of family satisfaction were significantly higher for the AL versus NH group.
Spillman et al. 2002 ³⁹ U.S. Cross-sectional Grey Literature	To describe the characteristics of elderly residents in AL and NH and the characteristics of the facilities.	Medicare beneficiaries age 65 and older in AL and NH	Physical function, cognitive function, mental health/affect, conditions/comorbidities	NA	AL residents were generally healthier and less disabled than those in NH.
Tucker et al. 2010 ⁴⁰ Maryland Longitudinal Grey Literature	To examine Medicare services and expenditures for dually eligible Medicaid recipients in Mary, to serve as a primer on analytic methods needed to assess differences in a	Matched sample of dually eligible Medicare and Medicaid beneficiaries in Maryland in HCBS waiver for individuals age 50 and older and in NH		Costs	Long-stay NH Medicaid recipients who are dually eligible for Medicare use significantly fewer Medicare resources than do comparable dual who receive Medicaid HCBS supports in the community.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
	treatment effect, and to examine the effects of Medicaid LTC on Medicare resource use.				
Wieland et al. 2010 ⁴¹ South Carolina Longitudinal	To compare the long-term survival of entrants into HCBS, PACE, and NH.	Medicaid beneficiaries age 55 and older entering HCBS waiver, PACE, and NH in two counties in South Carolina with follow-up for 5 years	Physical function, cognitive function, mental health/affect, conditions/comorbidities	Mortality	PACE entrants were older, more cognitively impaired, and had intermediate activities of daily living compared to HCBS and NH entrants. Unstratified median survival for HCBS was 3.5, for PACE was 4.2, and for NH was 2.3 years (p = 0.53). Accounting for risk, higher risk PACE entrants had higher survival compared to HCBS (moderate risk: PACE median survival 4.7 versus HCBS 3.4 years and high risk PACE median survival 3.0 versus HCBS 2.0 years).
Williams et al. 2005 (Dementia Care Project) ⁴² U.S. Cross-sectional	To describe the prevalence, assessment, and treatment of pain and characteristics associated with pain for residents with dementia in AL and NH.	Residential care/assisted living facility (AL) residents stratified by (a) facilities with < 16 beds; (b) facilities with ≥ 16 beds of the “new-model” type that provide nursing care and cater to an impaired population; and (c) “traditional” facilities with ≥ 16 beds not meeting the “new-model” criteria and NH residents age 65 and older with dementia in	Conditions/comorbidities	NA	Based on resident report, 38.9% of AL residents and 25.0% of NH residents had pain (p = 0.318). Pain was more commonly reported in for-profit facilities, and for those receiving professional assessment and treatment.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Wodchis et al. 2003 ⁴⁵ Canada Cross-sectional	To introduce a health-related quality-of-life measure based on the Minimum Data Set and the Health Utilities Index Mark 2 for community and institutional LTC users.	four states LTC clients in private households, supportive housing apartments, care facilities, and a chronic care hospital in Ontario, Canada	Physical function, cognitive function, mental health/affect, conditions/comorbidities	NA	The new health-related quality of life measure results provide preliminary evidence of good validity. Institutional populations had lower overall health-related quality of life scores than community populations.
Youngs et al. 2005 ⁴⁴ Michigan Cross-sectional Grey Literature	To report on demographics, clinical characteristics, and costs of individuals in Michigan's Nursing Facility Transition Initiative.	Individuals in Michigan from the Nursing Facility Transition Initiative who transitioned from a NH to the community and residents in NH	Physical function, cognitive function	NA	The transition population had similar characteristics to the NH population.
Zimmerman et al. 2003 (Collaborative Studies of Long-Term Care sub-sample) ⁴⁵ U.S. Cross-sectional	To compare AL and NH care and residents, identify different types of AL care and residents, and examine how AL case-mix relates to differences in care provision and/or consumer preference.	Residential care/assisted living facility (AL) residents stratified by (a) facilities with < 16 beds; (b) facilities with ≥ 16 beds of the "new-model" type that provide nursing care and cater to an impaired population; and (c) "traditional" facilities with ≥ 16 beds not meeting the "new-model" criteria and NH residents age 65 and older in four states	Physical function, cognitive function, conditions/comorbidities	NA	NH report provision of significantly more health services and have significantly more lenient admission policies than AL, but they provide less privacy. They are similar to larger AL facilities in policy clarity or resident control. There are differences within AL types, with smaller and for-profit facilities scoring lower across multiple process measures. Resident impairment is substantial in both AL and NH, but differs by AL facility characteristics.

Appendix D. Evidence Table (continued)

Author, Year, Project Name, Location, Study Type	Study Aim	Study Sample/Settings	Baseline Characteristics Reported	Outcomes Reported	Study Findings
Zimmerman et al. 2005 (Dementia Care Project) ⁴⁶ U.S. Longitudinal	To examine dementia care in AL and NH and its relationship to resident quality of life.	Residential care/assisted living facility (AL) residents stratified by (a) facilities with < 16 beds; (b) facilities with ≥ 16 beds of the “new-model” type that provide nursing care and cater to an impaired population; and (c) “traditional” facilities with ≥ 16 beds not meeting the “new-model” criteria and NH residents age 65 and older with dementia in four states with follow-up for 6 months		Quality-of-life	Change in quality-of-life was not related to facility type (AL versus NH).

NA = Not applicable

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Appendix E. Risk of Bias for Individual Studies

Study	Study type	Overall Risk of Bias Assessment	Comments
Resources Implications Study Group 2000	Longitudinal	High	No correction for selection bias; some crossover of groups; inadequate adjustment for confounders.
Doty et al. 2010	Longitudinal	High	No correction for selection bias; no adjustment for confounders; non-generalizeable sample.
Frytak et al. 2001	Longitudinal	High	No correction for selection bias; attrition bias.
Gaugler & Kane 2005	Longitudinal	Moderate	Adjustment for selection bias using Heckman two-stage approach; adequate adjustment for other confounders.
Marek et al. 2005	Longitudinal	High	Different measures used for HCBS and NH groups; attrition bias; no adjustment for other confounders.
McCann et al. 2009	Longitudinal	High	No correction for selection bias; inadequate adjustment for confounders.
Mitchell et al. 2004	Longitudinal	High	No correction for selection bias; different measures used for HCBS and NH groups.
Pruchno & Rose 2000	Longitudinal	High	No correction for selection bias; attrition bias; non-generalizeable sample.
Rigler et al. 2004	Longitudinal	High	No correction for selection bias; limited confounders used in analysis; analyzed within groups but not across groups.
Rothera et al. 2002	Longitudinal	High	No correction for selection bias; inadequate adjustment for confounders.
Sands et al. 2008	Longitudinal	Moderate	Limited confounders used in analysis.
Shireman & Rigler 2004	Longitudinal	High	No correction for selection bias; limited confounders used in analysis.
Sloane et al. 2005	Longitudinal	High	No correction for selection bias.
Wieland et al. 2010	Longitudinal	High	No stratified analysis comparing HCBS groups and NH.
Zimmerman et al. 2005	Longitudinal	High	No correction for selection bias; attrition bias.
Department of Elder Affairs, State of Florida 2011	Longitudinal	NA	Grey literature studies not assessed for risk of bias.
Applebaum et al. 2009	Longitudinal	NA	Grey literature studies not assessed for risk of bias.
Applebaum et al. 2004	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Beattie et al. 2005	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Boersma et al. 2002	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.

Borrayo et al. 2002	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Challis et al. 2000	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Chappell et al. 2004	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Edelman et al. 2005	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Franks 2004	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Gaugler 2006	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Gruber-Baldini et al. 2005	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Lee et al. 2001	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Leon & Moyer 1999	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Margallo-Lana et al. 2001	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Mehdizadeh 2007	Longitudinal	NA	Grey literature studies not assessed for risk of bias.
Mehdizadeh 2002	Longitudinal	NA	Not included in longitudinal analytic set; not assessed for risk of bias.
Miller et al. 2008	Longitudinal	NA	Grey literature studies not assessed for risk of bias.
Ormond et al. 2006	Cross-sectional	NA	Grey literature studies not assessed for risk of bias.
Port et al. 2005	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Reinardy & Kane 1999	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Rothera et al. 2003	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Schroeder et al. 1998	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Shugarman et al. 1999	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Sloane et al. 2003	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Spillman et al. 2002	Cross-sectional	NA	Grey literature studies not assessed for risk of bias.
Tucker et al. 2010	Longitudinal	NA	Grey literature studies not assessed for risk of bias.
Williams et al. 2005	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Wodchis et al. 2003	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.
Youngs et al. 2005	Cross-sectional	NA	Grey literature studies not assessed for risk of bias.
Zimmerman et al. 2003	Cross-sectional	NA	Cross-sectional studies not assessed for risk of bias.

Appendix F. Overall Strength of Evidence Assessment

Outcome	Longitudinal Studies Examining the Outcome	Risk of Bias	Directness	Precision	Consistency	Strength of Evidence Rating
Physical Function	Frytak et al., 2001 ¹ Pruchno & Rose, 2000 ² Sloane et al., 2005 ³ Marek et al., 2005 ⁴	High	Direct	Imprecise	Inconsistent	Low
Cognitive Function	Pruchno & Rose, 2000 ² Sloane et al., 2005 ³ Marek et al., 2005 ⁴	High	Direct	Imprecise	Inconsistent	Low
Mental Health/Affect	Frytak et al., 2001 ¹ Pruchno & Rose, 2000 ² Sloane et al., 2005 ³ Marek et al., 2005 ⁴	High	Direct	Imprecise	Inconsistent	Low
Mortality	Pruchno & Rose, 2000 ² Sloane et al., 2005 ³ Wieland et al., 2010 ⁵	High	Direct	Imprecise	Inconsistent	Low
Harms	Rigler et al., 2004 ⁶ Mitchell et al., 2004 ⁷	High	Direct	Imprecise	Inconsistent	Low
Utilization	Sands et al., 2008 ⁸ Sloane et al., 2005 ³ Mitchell et al., 2004 ⁷	High	Direct	Imprecise	Consistent	Low
Costs	Sands et al., 2008 ⁸ Shireman & Rigler, 2004 ⁹	High	Direct	Imprecise	Consistent	Low

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Appendix G. Outcome – Other (Longitudinal Studies)

Appendix Table G1. Outcome – other (longitudinal studies) – domestic

Study	Measure	Result	Risk of Bias Rating
Doty et al. 2010 ¹ (ASPE private LTC insurance cohort)	Question about satisfaction with services being received	Percent very satisfied at first and last wave: HCBS: 74%, 79% AL: 74%, 72% NH: 60%, 49%	High
Frytak et al. 2001 ² (Oregon Assisted Living study)	Pain and discomfort from scale developed at RAND; higher scores indicate more pain and discomfort	<i>Intercept coefficient:</i> -0.500, $p = 0.373$ <i>Slope coefficient:</i> 0.615, $p = 0.419$ <i>Slope² coefficient:</i> -0.378, $p = 0.293$ Type of setting (AL or NH) did not predict one's pain and discomfort score at baseline, individual variation in the growth rates for pain and discomfort, or the acceleration rate for pain and discomfort.	High
Gaugler & Kane 2005 ³ (Oregon Assisted Living study)	Resident social activity based on 5 items	AL residents engaged in more social activity than NH residents at baseline and 6 months, but type of setting was not significantly associated with activity at 1 year or change in activity over the 1 year period.	Moderate
⁴ Sloane et al. 2005 ⁴ (Collaborative Studies of Long-Term Care sub-sample)	Mean change increase in behavior problems per 12 months; mean change increase in social function per 12 months; mean change increase in social withdrawal per 12 months; new or worsening morbidity as the incidence of worsening of fracture, infection, stroke or paralysis, bleeding from the stomach or bowel, diabetes, heart condition, or skin ulcer reported as incidence rate per 100 participants per quarter	Behavior for residents with mild dementia: AL 1.08, NH 0.69, $p = 0.604$ Behavior for residents with moderate or severe dementia: AL: 1.72, NH 1.49, $p = 0.809$ Social function for residents with mild dementia: AL 1.55, NH 1.76, $p = 0.568$ Social function for residents with moderate or severe dementia: AL: 0.91, NH 1.44, $p = 0.110$ Social withdrawal for residents with mild dementia: AL 2.84, NH 2.24, $p = 0.364$ Social withdrawal for residents with moderate or severe dementia: AL: 2.55, NH 1.78, $p = 0.307$ New or worsening morbidity for residents with mild dementia: AL 23.5, NH 21.8, $p = 0.574$ New or worsening morbidity for residents with moderate or severe dementia: AL: 21.1, NH 21.7, $p = 0.865$	High
⁵ Zimmerman et al. 2005 ⁵ (Dementia Care Project study)	Quality of Life in Alzheimer's Disease	There was no statistically significant difference in the adjusted change in quality of life score by facility type (AL or NH).	High

¹Indicates study focused on participants with dementia

HCBS = Home and Community-based Services; NH = Nursing Home; AL = Assisted Living

Appendix Table G2. Outcome—other (longitudinal studies) – international

Study	Measure	Results	Risk of Bias Rating
Resource Implications Study Group 2000 ⁶	Family caregivers' psychological morbidity measured by General Health Questionnaire (GHQ) score	There were no significant changes over 2-year period in GHQ scores for any of the groups of caregivers for residents in HCBS, NH, or HCBS to NH transition group.	High

HCBS = Home and Community-based Services; NH = Nursing Home; AL = Assisted Living; LTC = Long-term care; ASPE=Assistant Secretary for Planning and Evaluation, U.S Department of Health and Human Services

References for Appendix G

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