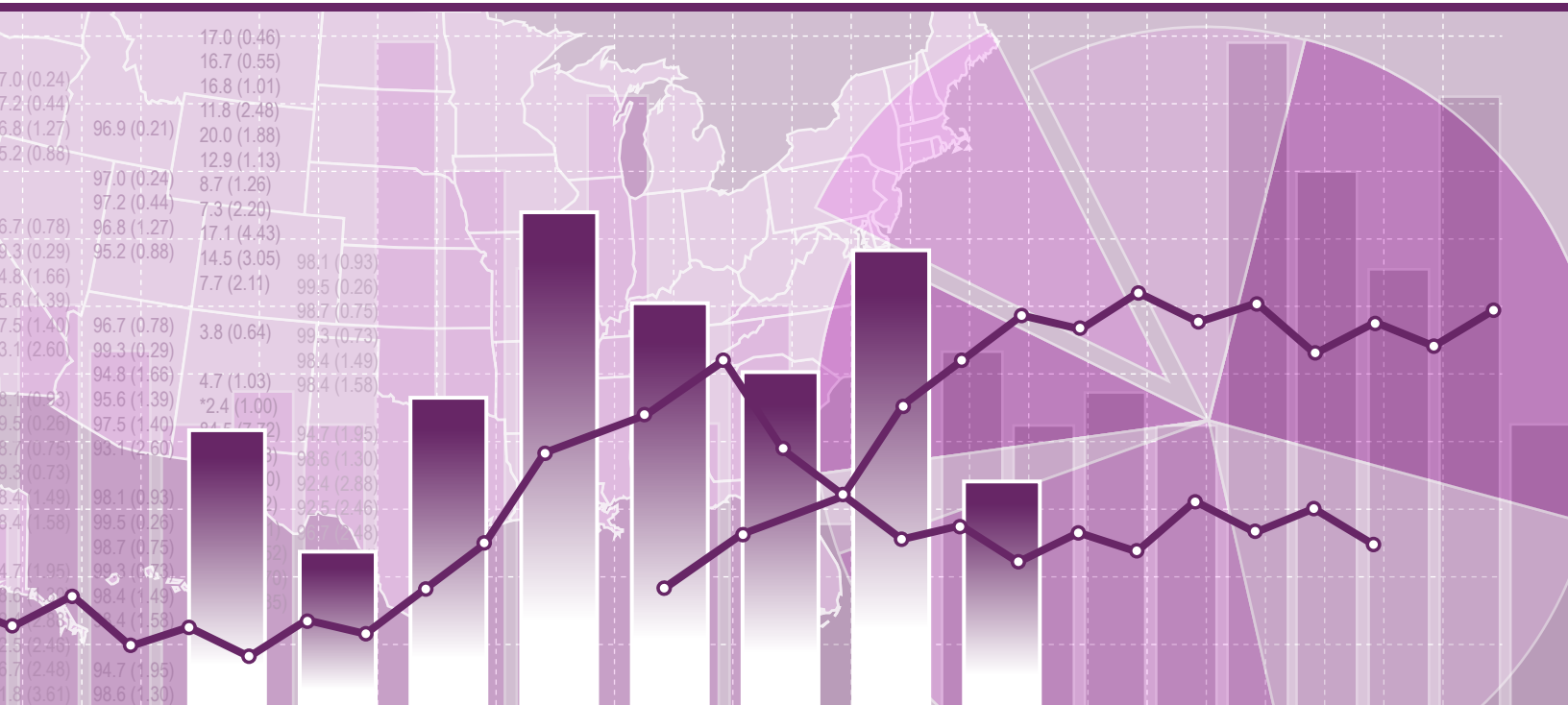




Post-acute and Long-term Care Providers and Services Users in the United States, 2017–2018

Analytical and Epidemiological Studies



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

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This report was revised on July 20, 2026, after errors were found. Corrections were made to the estimates for residential care community average staffing hours per resident per day on pages 14 and 15, in Figure 11 on page 14, and in Table X on page 79.

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Suggested citation

Sengupta M, Lendon JP, Caffrey C, Melekin A, Singh P. Post-acute and long-term care providers and services users in the United States, 2017–2018. National Center for Health Statistics. Vital Health Stat 3(47). 2022. DOI: <https://dx.doi.org/10.15620/cdc:115346>.

For sale by the U.S. Government Publishing Office
Superintendent of Documents
Mail Stop: SSOP
Washington, DC 20401–0001
Printed on acid-free paper.

NATIONAL CENTER FOR HEALTH STATISTICS

Vital and Health Statistics

Series 3, Number 47

May 2022

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

Hyattsville, Maryland
May 2022

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Acknowledgments

The authors are grateful to the many people who provided technical expertise and assistance in implementing the 2018 National Study of Long-Term Care Providers (NSLTCP) and in developing this report.

This report was edited and produced by the National Center for Health Statistics (NCHS) Office of Information Services, Information Design and Publishing Staff: editor Laura Drescher, typesetter Kyung Park, and graphic designer Simon McCann.

The authors are indebted to the directors and administrators of the assisted living and similar residential care communities and adult day services centers, and their designated staff, who took time to complete the questionnaires. This report would lack information on these sectors without their participation.

The authors recognize the following organizations for their vital contributions in successfully completing the 2018 NSLTCP adult day services center and residential care community surveys: ADvancing States, American Seniors Housing Association (ASHA), Argentum, Center for Excellence in Assisted Living (CEAL), LeadingAge, National Adult Day Services Association (NADSA), and National Center for Assisted Living (NCAL). For promoting participation in the 2018 surveys, the authors thank Maribeth Bersani (Argentum), Jeanne McGlynn Delgado (ASHA), Brendan Flinn (LeadingAge), Donna Hale (NADSA), Ruth Katz (LeadingAge), Stephen Maag (LeadingAge), Lisa Peters-Beumer (NADSA), Lance Roberts (NADSA), Martha Roherty (ADvancing States), Lindsay Schwartz (NCAL and CEAL), and Claire Shanley (CEAL).

The authors thank the members of the 2011 NSLTCP Work Group, whose expertise helped guide the NSLTCP survey content. Members, with affiliations at the time of the 2011 meeting, include: Jean Accius, AARP; Gretchen Alkema, The SCAN Foundation; Nicholas Castle, University of Pittsburgh; Thomas Clark, American Society of Consultant Pharmacists; Joel Cohen, Agency for Healthcare Research and Quality; Rosaly Correa-de-Araujo, U.S. Department of Health and Human Services; Holly Dabelko-Schoeny, The Ohio State University; Frederic Decker, Health Resources and Services Administration; Elena Fazio, Administration for Community Living; Michael Furukawa, Office of the National Coordinator for Health Information Technology; Mary George, Centers for Disease Control and Prevention (CDC); Stacie Greby, CDC; Stuart Hagen, Congressional Budget Office; Christa Hojlo, Department of Veterans Affairs (VA); Teresa Johnson, NADSA; Judith Kasper, Johns Hopkins University; Enid Kassner, AARP; Ruth Katz, Office of the Assistant Secretary

for Planning and Evaluation (ASPE); Gavin Kennedy, ASPE; Mary Jane Koren, The Commonwealth Fund; Dave Kylo, NCAL; Sheila Lambowitz, Centers for Medicare & Medicaid Services (CMS); Karen Love, CEAL; William Marton, ASPE; Lisa Matthews-Martin, American Health Care Association; Anne Montgomery, U.S. Senate Special Committee on Aging; Vincent Mor, Brown University; Richard Nahin, CDC; Carol O'Shaughnessy, National Health Policy Forum; Doug Pace, Long-Term Quality Alliance; Georgeanne Patmios, National Institute on Aging; Carol Regan, Paraprofessional Healthcare Institute; Robin Remsburg, University of North Carolina at Greensboro; Robert Rosati, Visiting Nurse Service of New York; Emily Rosenoff, ASPE; James Scanlon, ASPE; Daniel Schoeps, VA; Margo Schwab, Office of Management and Budget; Carol Spence, National Hospice and Palliative Care Organization; Nimalie Stone, CDC; Robyn Stone, LeadingAge; Mary St. Pierre, National Association for Home Care & Hospice; Nicola Thompson, CDC; Daniel Timmel, CMS; Julie Weeks, NCHS; Janet Wells, National Consumer Voice for Quality Long-Term Care; and Cheryl Wiseman, CMS.

Under a contract with NCHS, RTI International implemented the 2018 NSLTCP surveys. The authors gratefully acknowledge the talented and dedicated staff at RTI International for their contributions to the design and successful implementation of the 2018 NSLTCP surveys, especially Angela Greene, Melissa Hobbs, Katherine Mason, Katelan McDaniel, Mai Nguyen, Linda Lux, Kristie Porter, Rebecca Powell, and Celia Eicheldinger.

The authors are grateful for the technical support and assistance from staff at CMS and the Research Data Assistance Center who helped identify and obtain needed administrative data sources throughout this project, specifically Stephanie Bartee, Dovid Chaifetz, Wesley Choi, Angela Jannotta, Matt McFalls, Jennifer Reese, Cheryl Sample, Samantha Saykao, and Elizabeth Thompson. Special thanks to Anne Valentino and Tanya Boyd in NCHS' Division of Health Care Statistics for helping with the purchase of administrative data files from CMS.

We specially acknowledge the contributions made by Vincent Rome during data collection, data file development, and in preparation of the report.

Post-acute and Long-term Care Providers and Services Users in the United States, 2017–2018

by Manisha Sengupta, Ph.D., Jessica Penn Lendon, Ph.D., Christine Caffrey, Ph.D., Amanuel Melekin, Ph.D., and Priyanka Singh, M.P.H.

Abstract

Objective

This report presents the most current national results from the National Study of Long-Term Care Providers (NSLTCP), conducted by the National Center for Health Statistics (NCHS) to describe providers and services users in seven major sectors of paid, regulated post-acute and long-term care services in the United States.

Methods

In January 2020, NSLTCP was renamed National Post-acute and Long-term Care Study (NPALS) to reflect the addition of new post-acute care sectors. Data sources include NCHS surveys of adult day services centers and residential care communities (covering the 2018 data year) and administrative records from the Centers for Medicare & Medicaid Services on home health agencies, hospices, nursing homes, inpatient rehabilitation facilities, and long-term care hospitals (covering the 2017 and 2018 data years). For the first time since the study's inception in 2012, the 2018 NSLTCP surveys of adult day services centers and residential care communities included a user-level data collection component in addition to a provider-level component.

Results

This report presents information on the supply, geographical and organizational characteristics, staffing, and services offered by providers, and the demographic, health, functional composition, and adverse events in users of these services. Services users include residents of nursing homes and residential care communities;

patients of home health agencies, hospices, inpatient rehabilitation facilities, and long-term care hospitals; and participants of adult day services centers. This fourth edition updates “Long-Term Care Providers and Services Users in the United States, 2015–2016” (available from: https://www.cdc.gov/nchs/data/series/sr_03/sr03_43-508.pdf). New content in this report includes information on two additional post-acute care sectors (inpatient rehabilitation facilities and long-term care hospitals).

Conclusion

In 2018, about 69,000 paid, regulated post-acute and long-term care services providers among seven major sectors included in this report served more than 9.5 million people in the United States. Sectors differed by ownership and chain status, and supply varied by region. Post-acute and long-term care services users varied by sector in their demographic and health characteristics and functional status.

Public use files from the 2018 NSLTCP adult day services center and residential care community surveys are available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm>. NCHS plans to conduct NPALS every 2 years. NPALS results and publications are available from: <https://www.cdc.gov/nchs/npals/studyresults.htm>.

Keywords: aging • disability • chronic conditions • long-term services and supports • post-acute care • National Study of Long-Term Care Providers

Key Findings

In 2018, about 69,000 paid, regulated post-acute and long-term care services providers in seven major sectors served more than 9.5 million people in the United States.

- Post-acute and long-term care services were provided by 4,200 adult day services centers, 11,500 home health agencies, 4,700 hospices, 15,600 nursing homes, 31,400

assisted living and similar residential care communities, 1,200 inpatient rehabilitation facilities, and 400 long-term care hospitals (Appendix III, [Table IX](#)).

- In 2018, an estimated 251,100 current participants were enrolled in adult day services centers; 1,321,200 people were current residents in nursing homes; and 918,700 current residents were living in residential care communities. In 2017, about 4,940,300 patients

were discharged from home health agencies; 1,562,500 patients received services from hospices; 380,400 patients received services from inpatient rehabilitation facilities; and 115,800 patients received services from long-term care hospitals (Appendix III, [Table XII](#)).

Supply varied by region and sectors differed by ownership and chain status.

- The supply of residential care beds per 1,000 people aged 65 and over was higher than the supply of nursing home beds in the West, while nursing home beds outnumbered residential care community beds in all other regions. The capacity of adult day services centers was lowest in the Midwest. Moreover, the capacity of inpatient rehabilitation facilities and long-term care hospitals was lowest in the West compared with their capacity among other regions ([Figure 3](#)).
- Most home health agencies, hospices, nursing homes, residential care communities, and long-term care hospitals were for profit, while a minority of adult day services centers and inpatient rehabilitation facilities were for profit ([Figure 4](#)). Most nursing homes and residential care communities were chain-affiliated, in contrast to adult day services centers, the minority of which were chain-affiliated ([Figure 5](#)).

Nearly 1.6 million nursing employee full-time equivalents (FTEs)—including registered nurses (RNs), licensed practical or vocational nurses (LPNs or LVNs), and aides—and about 35,000 social work employee FTEs worked in the seven sectors.

- The relative distribution of nursing and social work employee FTEs varied across sectors; the most common employee FTEs were aides in adult day services centers, nursing homes, and residential care communities, while RNs were the most common employee FTEs in home health agencies, hospices, and inpatient rehabilitation facilities. LPNs or LVNs were the most common employee FTEs in long-term care hospitals ([Figure 9](#)).

Sectors differed in their average staffing levels for nursing, social work, and activities employees.

- Among the three sectors where nursing staff levels (RNs, LPNs or LVNs, and aides) could be examined, the average total nursing staff hours per resident or participant day was higher in residential care communities than in nursing homes and adult day services centers ([Figure 11](#)).
- The average social work staffing level was higher in residential care communities than in adult day services centers and nursing homes, and the average activities staffing level in adult day services centers was more than in nursing homes and residential care communities.

Daily-use rates among people aged 65 and over per 1,000 people aged 65 and over varied by sector.

- The daily-use rate was higher for nursing homes than for residential care communities and adult day services centers (data not shown).

Post-acute and long-term care services users varied by sector in their demographic and health characteristics and functional status.

- Adult day services center participants tended to be younger than services users in other sectors ([Figure 20](#)).
- Adult day services center participants were the most racially and ethnically diverse among the seven sectors ([Figure 22](#)).
- More than one-quarter of services users in each of the seven sectors had a diagnosis of Alzheimer disease or other dementias, and more than one-half of services users in each sector had a diagnosis of hypertension ([Figure 24](#)). However, the prevalence of these and eight other reported diagnosed chronic conditions varied widely between sectors.
- Fewer residential care community residents needed assistance with four of six activities of daily living (ADLs; dressing, toileting, transferring, and eating) than services users in other sectors ([Figure 25](#)).

Adverse events among post-acute and long-term care services users varied by sector.

- Compared with adult day participants and residential care residents, more home health patients had overnight hospital stays and emergency department visits ([Figure 26](#)).
- More residential care residents had falls compared with adult day participants and nursing home residents.

Nursing home resident characteristics varied by length of stay.

- Short-stay (fewer than 100 days) residents differed from long-stay (100 days or more) residents by age and sex, and in the prevalence of numerous diagnosed conditions, overnight hospital stays, and falls (Appendix III, [Table XIII](#)).

Introduction

Paid long-term care services and supports include a broad range of health, personal care, and support services that meet the needs of older people and other adults whose capacity for self-care is limited because of a chronic illness; injury; physical, cognitive, or mental disability; or other health-related conditions (1). Post-acute care provides rehabilitative or palliative services to patients just after a stay in an acute care hospital, or instead of a stay in an acute care setting. Depending on the intensity of care the patient requires, post-acute treatment may include a stay in a facility, outpatient services, or home care (2). Both post-acute and long-term care may be home- and community-based or provided in institutional care settings (1,3,4).

Previous versions of this report on long-term care (5) have focused on long-term care services and supports—adult day services centers, assisted living and similar residential care communities, home health agencies, hospices, and nursing homes. While the previous reports also covered some of the nation’s post-acute care services, including Medicare-certified skilled nursing facilities and home health agencies that provide both post-acute and long-term care, the results for these sectors were not a key focus (3).

This report provides an overview of the operational and user characteristics of seven paid, regulated post-acute and long-term care services providers in the United States. In addition to the sectors described in the previous report, this report expands the study’s representation of post-acute care by including two services providers that exclusively offer post-acute care: inpatient rehabilitation facilities and long-term care hospitals.

This report provides the only national statistics on adult day services centers and residential care communities in the United States, and a comprehensive comparison across key sectors in the post-acute and long-term care continuum. However, it does not represent the entire picture of post-acute and long-term care in the United States, which includes a large proportion of care provided by unpaid caregivers, such as family, friends, and neighbors. In 2015, 40 million people were unpaid caregivers of adults, which increased to 48 million in 2020 (6). Many of the older people and adults with disabilities who rely on the paid, regulated post-acute and long-term care services providers included in this report also receive care by unpaid caregivers. More information regarding unpaid caregivers and care recipients can be found in AARP and National Alliance for Caregiving’s 2020 report (6).

Long-term Care Services

The Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended, available from: <https://www.govinfo.gov/content/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>) uses the term “long-term services and supports” and defines it to include certain institutionally based and noninstitutionally based long-term services and supports [Section 10202(f)(1)]. This report uses “long-term care services” to refer to both health care-related and nonhealth care-related services.

Long-term care services include assistance with activities of daily living (ADLs; dressing, bathing, and toileting), instrumental activities of daily living (IADLs; medication management and housework), and health maintenance tasks. Long-term care services assist people in improving and maintaining an optimal level of physical functioning and quality of life and can include help from other people and special equipment or assistive devices. The need for long-term care services is generally defined based on functional limitations (need for assistance with or supervision in ADLs

and IADLs) regardless of cause, age of the person, where the person is receiving assistance, whether the assistance is human or mechanical, and whether the assistance is paid or unpaid.

People may receive long-term care services in a variety of settings (4,7–9):

- In the community, such as at an adult day services center.
- In the home, for example, from a home health agency, hospice, or family and friends.
- In institutions, such as in a nursing home or skilled nursing facility.
- In other residential settings, such as in an assisted living or similar residential care community.

Long-term care services provided by paid regulated providers are an important component of personal health care spending in the United States (10). Estimates of expenditures for paid long-term care services vary, depending on what types of providers, populations, and services are included. Finding a way to pay for long-term care services is a growing concern for older adults, other people with disabilities, and their families, and it is a major challenge facing state and federal governments (11–14). People who use paid long-term care services, through home- and community-based services or institutional care, are among the most costly participants in Medicare and Medicaid programs (15). Medicaid finances the largest portion of paid long-term care services, followed by Medicare, out-of-pocket payments by persons and families, other private sources, private insurance, and other public programs (8,10,16).

Medicaid finances a variety of long-term care services through multiple mechanisms (such as Medicaid state plans, home- and community-based services waiver programs, and other options for community-based long-term care services), including an array of home- and community-based services and institutional services (17–19). Medicaid spending on long-term care services totaled \$129 billion in 2018, accounting for 32% of total Medicaid expenditures (20). This report does not address all long-term care services financed by Medicaid. For example, intermediate care facilities for people with intellectual or developmental disabilities are excluded.

Decreasing family size and increasing employment rates among women may reduce the traditional pool of family caregivers, further stimulating demand for paid long-term care services (21). Among people who need long-term care services, adults aged 65 and over are more likely than younger adults to receive paid help (22). Results from the National Health and Aging Trends Study show that of the 10.9 million older adults who reported receiving help with daily activities in a given month in 2011, about 3 in 10 received paid help (23). Recent projections using microsimulation modeling estimate that about one-half of Americans reaching age 65 will need long-term care services and will incur, on average, \$138,000 in long-term care costs

(24). The average projected length of needing long-term care services is 2 years, including an average length of 1 year of paid long-term care services. However, about one-third of people turning age 65 are projected to need long-term care services for more than 2 years and to incur higher long-term care services costs (24).

Post-acute Care Services

People may receive post-acute care services from home health agencies, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals, all of which are included in this report. Users typically receive post-acute care following a hospitalization. In 2018, post-acute care fee-for-service spending was \$58.6 billion (2). Post-acute care is a growing sector due to an increasing aging population with complex conditions, shorter hospital stays, and trends toward care coordination and community-based care (25). Medicare dictates specific criteria to cover beneficiaries in each post-acute care setting covered in this report.

Home health agencies provide nursing, therapeutic, and social work services to patients in their homes. It often replaces institutional post-acute care but can also be considered to provide long-term support services. This report includes Medicare- and Medicaid-participating home health agencies and beneficiaries. Post-acute home health care is typically covered by Medicare. Patients must be physician-certified for home health care and typically need part-time care and would have difficulty leaving the home (2).

This report includes Medicare and Medicaid-certified skilled nursing facilities, which offer short-term, post-acute nursing and rehabilitation care and are typically covered by Medicare, in addition to nursing homes that provide long-term services and supports. Nursing homes are often dual certified as a skilled nursing facility and nursing home to provide both levels of care. Skilled nursing facilities provide medical care, often through registered nurses (RNs), rehabilitation specialists, and medical doctors, where nursing homes provide more nonmedical support for ADLs (2).

Inpatient rehabilitation facilities must qualify for Medicare's inpatient rehabilitation facility prospective payment system, and patients are enrolled in Medicare Part A fee-for-service. These facilities offer physical, occupational, and speech therapies and nursing services for patient rehabilitation after illness, injury, or surgery, usually following a hospital stay (2). In 2017, 75% of facilities were located within an acute care hospital and about 25% were freestanding; each setting is responsible for about one-half of inpatient rehabilitation facility discharges (2). Compared with Medicare requirements for skilled nursing facilities, participating inpatient rehabilitation facilities must have at least 60% of patients that meet certain guidelines to ensure inpatient rehabilitation facility admission, including being treated for

one of 13 primary conditions (such as traumatic brain injury, spinal cord injury, amputation, congenital deformity, major burns, major trauma, orthopedic or arthritic conditions, joint replacement, hip fracture, and other neurological conditions) (26,27). Inpatient rehabilitation facility patients must require, and be likely to benefit from, resource-intensive inpatient care, medical supervision by a specially trained rehabilitation physician, a multidisciplinary team with a medical plan and 24-hour registered nurse care, and 3 hours of intensive therapy for 5 days a week (26,27).

Long-term care hospitals are for people with complex conditions who need hospital-level care for longer periods of time. This report includes long-term care hospitals that participate in the Medicare prospective payment system for long-term care hospitals and serve Medicare fee-for-service beneficiaries. They can be freestanding or hospital-based, must meet requirements for an acute care hospital, and their patients must have an average length of stay of more than 25 days (27). Long-term care hospital patients often require ventilators and have complex chronic comorbidities, organ failure, or severe infection (28). Compared with users of other types of post-acute care providers, such as skilled nursing and inpatient rehabilitation, long-term care hospital patients were more likely to have a preceding intensive care unit stay of a week or more (29).

Projections estimate that the number of older adults using paid post-acute and long-term care services will grow considerably in the coming years (21,30–33). A substantial share of these sectors are publicly funded through Medicare and Medicaid, and these sectors vary in the types of services they provide and in characteristics of the populations they serve. Accurate and timely statistical information can help guide public programs and inform relevant policy decisions, and the National Study of Long-Term Care Providers (NSLTCP) is designed to help supply this information.

National Study of Long-Term Care Providers

The post-acute and long-term care services delivery system in the United States has changed substantially over the last 30 years. For example, although nursing homes are still a major provider of long-term care services, use of skilled nursing facilities for short-term post-acute care and rehabilitation has increased (34). Additionally, consumers' desire to stay in their own homes, as well as federal and state policy developments, have led to growth in a variety of home- and community-based alternatives (35–37). Examples of these federal and state policy developments include the U.S. Supreme Court's *Olmstead* decision, introduction of the Medicare Prospective Payment System, and a variety of initiatives to encourage balancing of Medicaid-financed services from institutional to noninstitutional settings, such as Money Follows the Person, Community First Choice Option, and the Balancing Incentives Payment Program (38).

In 2011, the National Center for Health Statistics (NCHS) launched the biennial NSLTCP—an integrated strategy for efficiently obtaining and providing statistical information about the major sectors of paid, regulated long-term care services in the United States. The study began including post-acute care sectors in 2018. In 2020, the study was renamed National Post-acute and Long-term Care Study (NPALS) to reflect the addition of the two post-acute care sectors; however, this report refers to the 2018 study data as NSLTCP, the study’s name when the data were collected. NSLTCP is designed to provide reliable, accurate, relevant, and timely statistical information to support and inform post-acute and long-term care services policy, research, and practice.

The main goals of NSLTCP are to:

1. Estimate the supply, provision, and use of paid, regulated post-acute and long-term care services.
2. Estimate key policy-relevant characteristics and practices.
3. Produce national and state estimates, where feasible.
4. Compare estimates among sectors.
5. Monitor trends over time.

NSLTCP replaced NCHS’ periodic National Nursing Home Survey and National Home and Hospice Care Survey, as well as the onetime National Survey of Residential Care Facilities. Unlike the previous strategy of surveying major sectors of long-term care services separately and at different times—often several years apart—NPALS (formerly NSLTCP) provides information on providers and services users at similar points in time and provides updated information on all sectors every 2 years. The study is designed to:

- Broaden NCHS’ ongoing coverage of paid, regulated post-acute and long-term care services providers beyond home health agencies, hospices, and nursing homes to also include adult day services centers and assisted living and similar residential care communities (called “residential care communities” in this report).
- Have the potential over time to add other types of paid, regulated services providers.
- Capitalize on existing national administrative data from the Centers for Medicare & Medicaid Services (CMS).
- Collect primary data every other year from cross-sectional, nationally representative, establishment-based surveys of adult day services centers and residential care communities, because administrative data do not exist.
- Produce state estimates, where feasible.
- Compare and monitor trends across sectors.

In addition to the core content, the NPALS data collection system provides the infrastructure on which to build provider-specific surveys, cross-provider topical modules, more in-depth surveys to respond to evolving or emerging policy issues, and sampling and collecting information on individual users.

Structure of Report

This is the fourth edition of a descriptive overview report intended to inform policy makers, providers, researchers, consumer advocates, the media, foundations, and others to inform planning for post-acute and long-term care services. The report includes two sections that present findings. “National Profile of Post-acute and Long-term Care Services Providers” presents findings on providers of post-acute and long-term care services. This section includes estimates on provider supply, geographical and organizational characteristics, staffing, and services offered.

In its 2008 report, “Retooling for an Aging America: Building the Health Care Workforce,” the Institute of Medicine documented the growing need for gerontological social workers and the lack of interest among social workers in working with older adults (39). According to one study, while 36,100–44,200 professional social workers were employed in long-term care settings in 2002, about 110,000 social workers would be needed in these settings by 2050 (40). Projections estimate that social workers and home health and personal care aides are among the long-term care services occupations that will grow the most by 2030 (41). This report contributes to the literature on the post-acute and long-term care services workforce by using NSLTCP data to provide information by sector on the numbers of nursing, licensed social work, and activities employees, and average hours per service user day.

The second section, “National Profile of Post-acute and Long-term Care Services Users,” presents findings on users, including participants of adult day services centers; patients of home health agencies, hospices, inpatient rehabilitation facilities, and long-term care hospitals; and residents of nursing homes and residential care communities. This section’s topics include demographic characteristics; functional status; selected health conditions, including Alzheimer disease and other dementias; and adverse events in services users, including hospitalizations and falls. Alzheimer disease is a common precipitating factor for transition to receiving long-term care services (42). According to the Alzheimer’s Association, in 2018 about 5.7 million Americans were living with Alzheimer dementia; 5.5 million of them were aged 65 and over (43). The number of people with Alzheimer disease or other dementias will continue to increase along with the growth of the older population (43). This section presents estimates on 10 diagnoses and overnight hospitalizations in nursing home residents and estimates by length of stay for selected characteristics (age, sex, race and ethnicity, diagnoses, overnight hospital stays, and falls) for nursing home residents.

The Technical Notes (Appendix I) describes the data sources used to produce the information on providers and services users in each of the seven sectors, outlines the approach used for data analyses, and discusses study limitations. Appendix II in this report defines each variable used for each sector in the study, and Appendix III presents the data tables

for the figures in the report. This report presents national results from the fourth wave of NSLTCP, using data from surveys about adult day services centers and participants and residential care communities and residents that were fielded by NCHS between July 2018 and February 2019. The report also uses data from administrative records obtained from CMS on home health agencies and patients, hospices and patients, nursing homes and residents, inpatient rehabilitation facilities and patients, and long-term care hospitals and patients, which reflect these providers and services users from 2017 through 2018. See Appendix I for definitions of the seven sectors and the corresponding data sources used in this report. This report updates previous versions that are available from: <https://www.cdc.gov/nchs/npals/studyresults.htm>.

National Profile of Post-acute and Long-term Care Services Providers

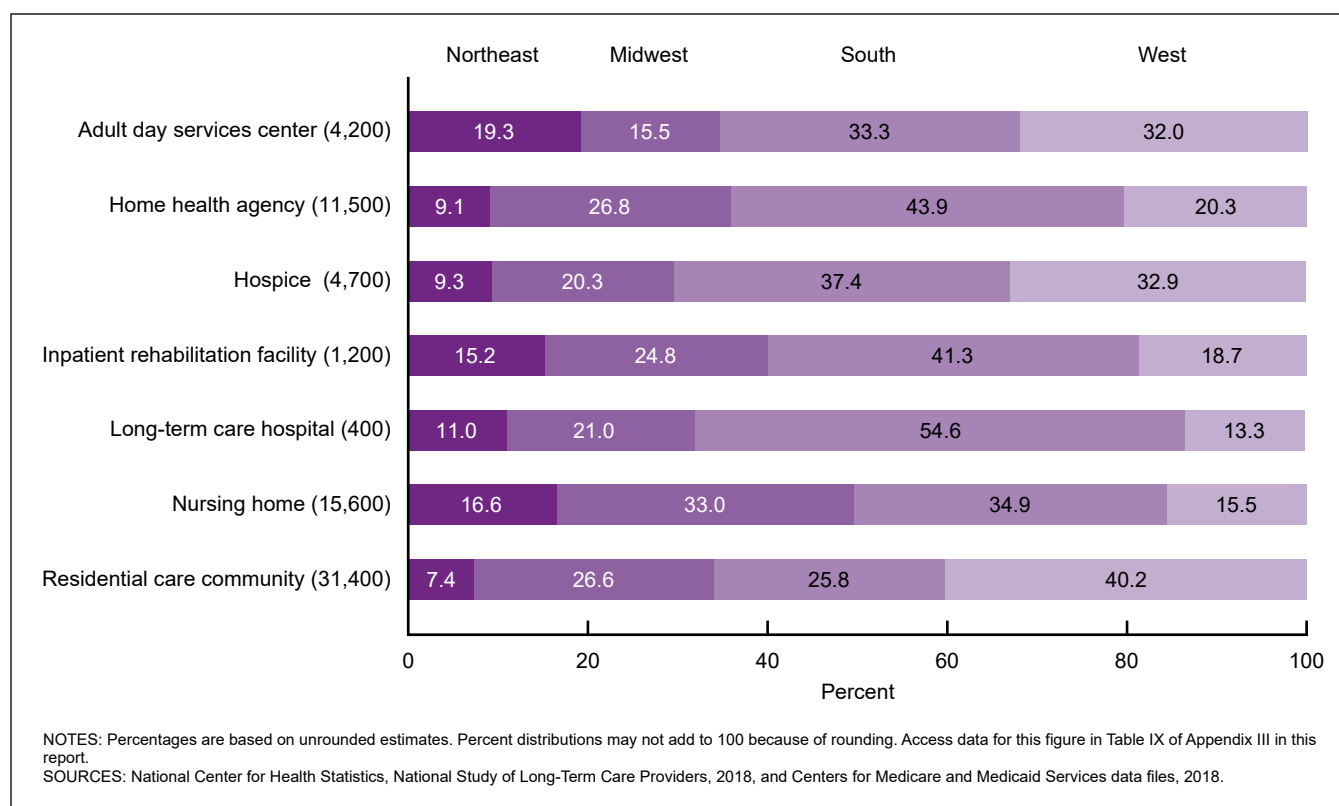
Supply of Post-acute and Long-term Care Services Providers

As of 2018, there were an estimated 4,200 adult day services centers, 11,500 home health agencies, 4,700 hospices, 15,600 nursing homes, 31,400 residential care communities, 1,200 inpatient rehabilitation facilities, and 400 long-term

care hospitals in the United States (Appendix III, [Table IX](#)). This report includes only providers that are in some way regulated by federal or state government. Adult day services centers and residential care communities were state regulated; home health agencies, inpatient rehabilitation facilities, long-term care hospitals, and nursing homes were Medicare- or Medicaid-certified; and hospices were Medicare-certified. Of these estimated 69,000 paid, regulated post-acute and long-term care services providers, 6.1% were adult day services centers, 16.7% were home health agencies, 6.8% were hospices, 22.6% were nursing homes, 45.5% were residential care communities, 1.7% were inpatient rehabilitation facilities, and 0.6% were long-term care hospitals.

This section provides an overview of the supply, organizational characteristics, staffing, and services offered by paid, regulated providers of post-acute and long-term care services in each of these seven sectors. Supply information is provided nationally, by census geographic region, by metropolitan statistical area (MSA) status, and by capacity. Organizational characteristics include ownership type, chain affiliation, Medicare and Medicaid certification, and number of people served. Staffing measures include number and distribution of nursing and social work employees; percentage of providers employing any nursing, social work, or activities employees; and average hours per resident or participant per day, by staff type. Services include social work; mental health or counseling; physical,

Figure 1. Percent distribution of post-acute and long-term care services providers, by sector and region: United States, 2018



occupational, and speech; skilled nursing or nursing; pharmacy or pharmacist; hospice; dietary and nutritional; and dementia care.

Geographic distribution

The supply of providers in the seven post-acute and long-term care services sectors varied in their geographic distribution. The largest share of adult day services centers (33.3%), home health agencies (43.9%), hospices (37.4%), nursing homes (34.9%), inpatient rehabilitation facilities (41.3%), and long-term care hospitals (54.6%) was in the South, while the largest share of residential care communities (40.2%) was in the West (Figure 1).

Metropolitan and micropolitan statistical areas (MSAs) are geographic entities defined by the Office of Management and Budget (see Appendix II for MSA definition). Most providers in all seven sectors were in MSAs (Figure 2). This distribution reflects the higher population density in these areas. Compared with hospices (81.1%) and nursing homes (71.9%), a greater percentage of long-term care hospitals (94.8%), inpatient rehabilitation facilities (86.7%), residential care communities (86.5%), home health agencies (85.4%),

and adult day services centers (84.6%), were in MSAs.

Capacity

Based on the maximum number of participants allowed, the 4,200 adult day services centers in the country could serve a daily maximum of up to 283,200 participants nationally (Appendix III, Table IX). The allowable daily capacity of adult day services centers ranged from 1 to 400, with an average capacity of 68 participants. The 15,600 nursing homes in the country provided a total of 1,655,400 certified beds. Nursing homes ranged in capacity from 2 to 1,389 certified beds, with an average of 106 certified beds. The 31,400 residential care communities in the United States provided 1,183,600 licensed beds. Residential care communities ranged in capacity from 4 to 418 licensed beds, with an average of 38 licensed beds. The 1,200 inpatient rehabilitation facilities provided a total of 344,600 certified beds. Inpatient rehabilitation facilities ranged in capacity from 10 to 2,449 beds, with an average of 298 licensed beds. The 400 long-term care hospitals had a total of 26,500 licensed beds. Long-term care hospitals ranged in capacity from 4 to 760 licensed beds with an average of 68 licensed beds. Capacity

Figure 2. Percent distribution of post-acute and long-term care services providers, by sector and metropolitan statistical area status: United States, 2018

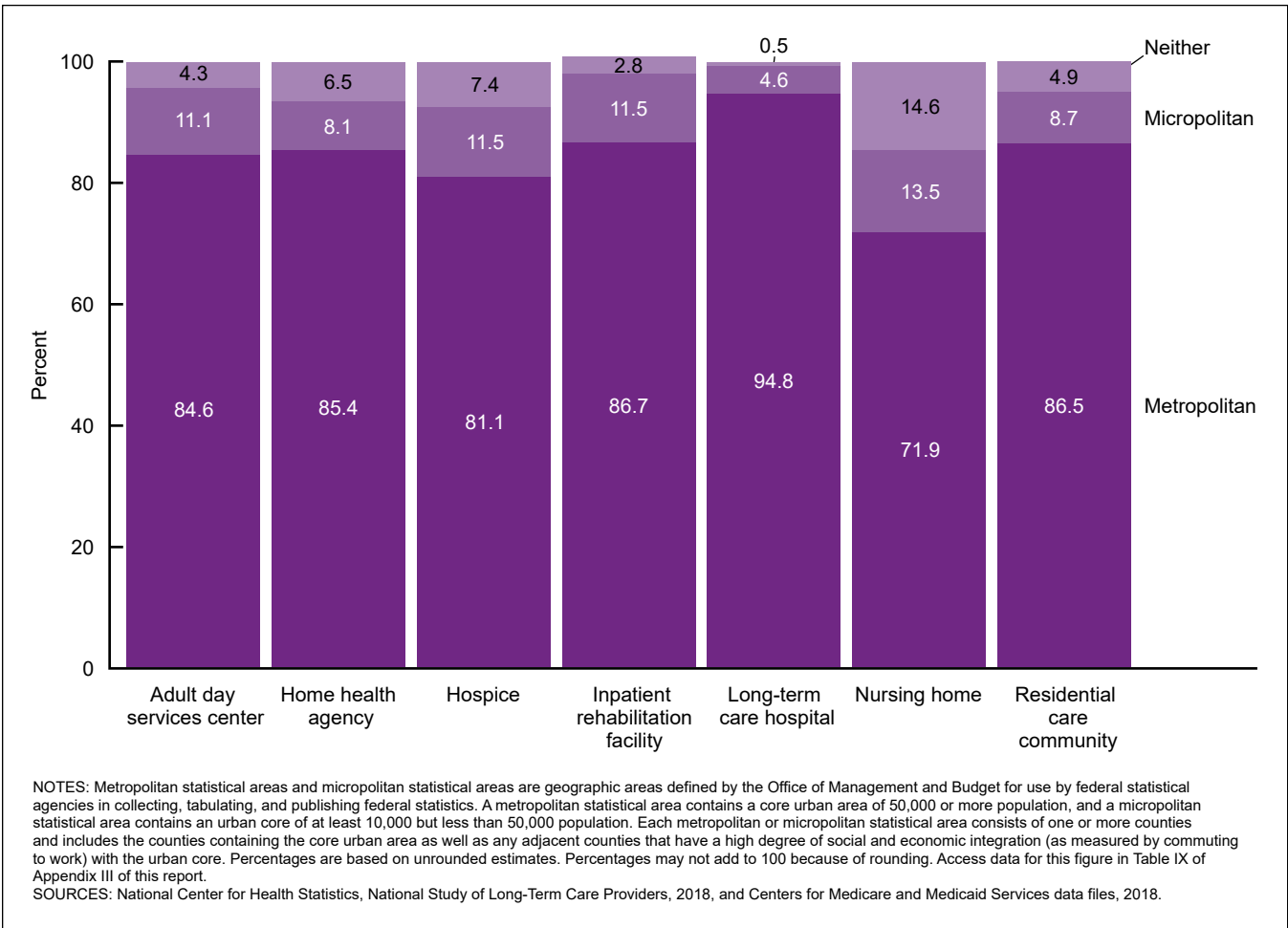
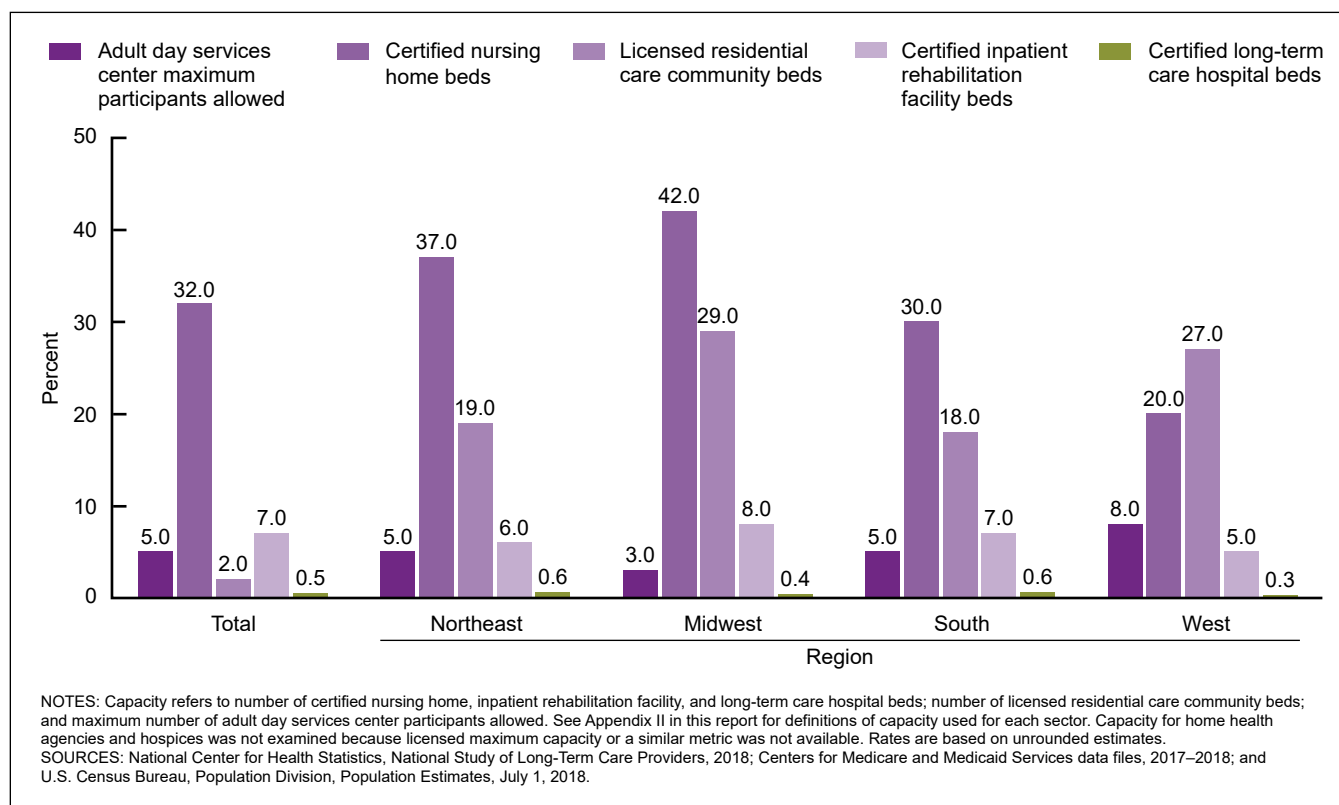


Figure 3. Post-acute and long-term care services provider capacity per 1,000 people aged 65 and over, by sector and region: United States, 2018



for home health agencies and hospices was not examined because licensed maximum capacity or a similar metric was not available.

The supply of adult day services center capacity and nursing home, residential care, inpatient rehabilitation facility, and long-term care hospital beds varied by region (Figure 3). Compared with other regions, the Midwest had the largest supply of nursing home beds (42) and the smallest supply of adult day services center capacity (3) per 1,000 people aged 65 and over. The Midwest (29) and West (27) had a larger supply of residential care beds per 1,000 people aged 65 and over compared with the Northeast (19) and the South (18). In the West, the supply of residential care beds (27) was greater than the supply of nursing home beds (20) per 1,000 people aged 65 and over, while nursing home beds outnumbered residential care beds in all other regions. The West had the smallest supply of inpatient rehabilitation (5) and long-term care hospital (0.3) capacity per 1,000 people aged 65 and over compared with other regions.

Organizational Characteristics of Post-acute and Long-term Care Services Providers

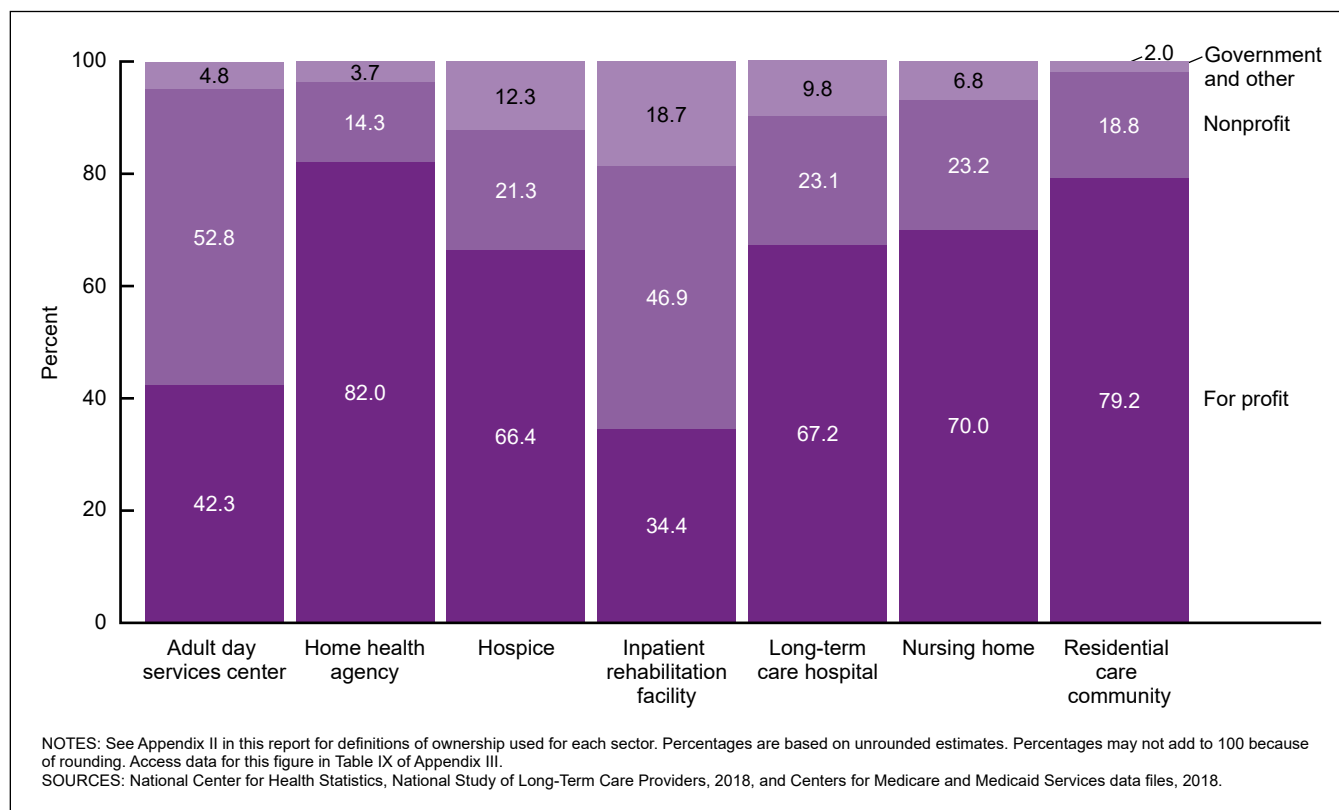
Ownership type

In all sectors except adult day services centers and inpatient rehabilitation facilities, most post-acute and long-term care services providers were for profit (Figure 4). Home health agencies (82.0%) and residential care communities (79.2%) had the highest percentages of for-profit ownership, while inpatient rehabilitation facilities (34.4%) and adult day services centers (42.3%) had the lowest percentages. About one-half of adult day services centers (52.8%) and 46.9% of inpatient rehabilitation facilities were nonprofit.

Chain status

The majority of residential care communities (60.3%) and nursing homes (58.6%) were chain-affiliated, while fewer adult day services centers (42.7%) were part of a chain (Figure 5). Chain affiliation for home health agencies, hospices, inpatient rehabilitation facilities, and long-term care hospitals was not examined because this information was not available.

Figure 4. Percent distribution of post-acute and long-term care services providers, by sector and ownership: United States, 2018



Medicare and Medicaid certification

All data on home health agencies, nursing homes, inpatient rehabilitation facilities, and long-term care hospitals used in this report are only for Medicare- or Medicaid-certified providers, and all data on hospices are only for Medicare-certified hospices. Virtually all inpatient rehabilitation facilities (100%), long-term care hospitals (100%), home health agencies (98.6%), and nursing homes (95.4%) were Medicare-certified (Figure 6). Medicare does not pay for adult day care services or for the cost of residency and care in residential care communities, so they were not asked about Medicare certification. Almost all inpatient rehabilitation facilities (95.9%) and nursing homes (95.4%); about three-quarters of adult day services centers (74.9%), home health agencies (78.9%), and long-term care hospitals (76.9%); and almost one-half of residential care communities (46.9%) were authorized

Figure 5. Percentage of post-acute and long-term care services providers that are chain-affiliated, by sector: United States, 2018

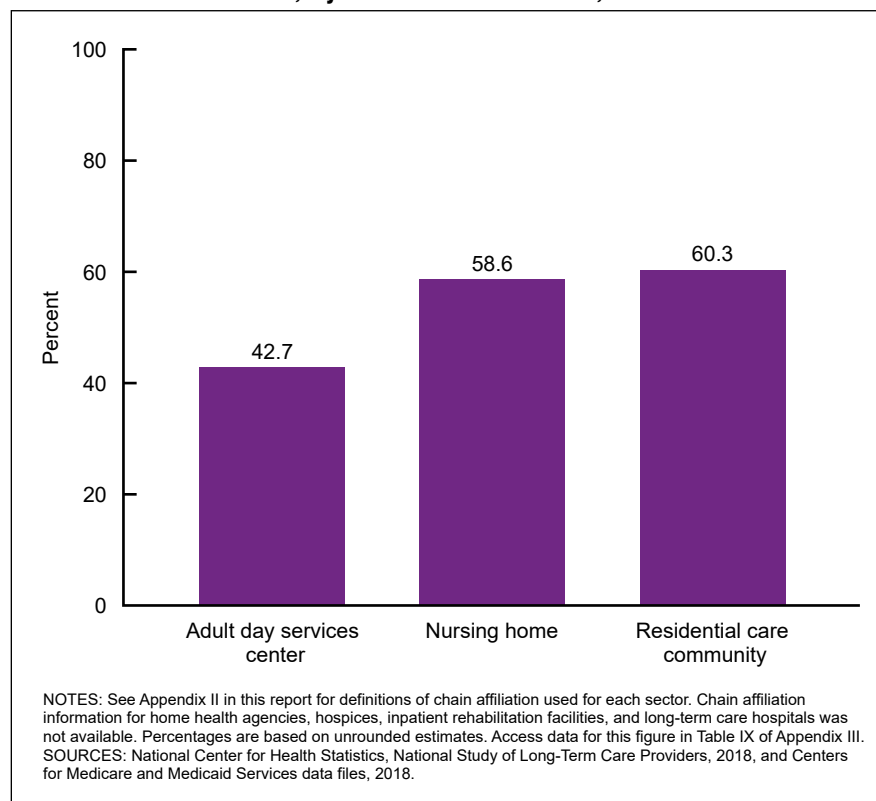
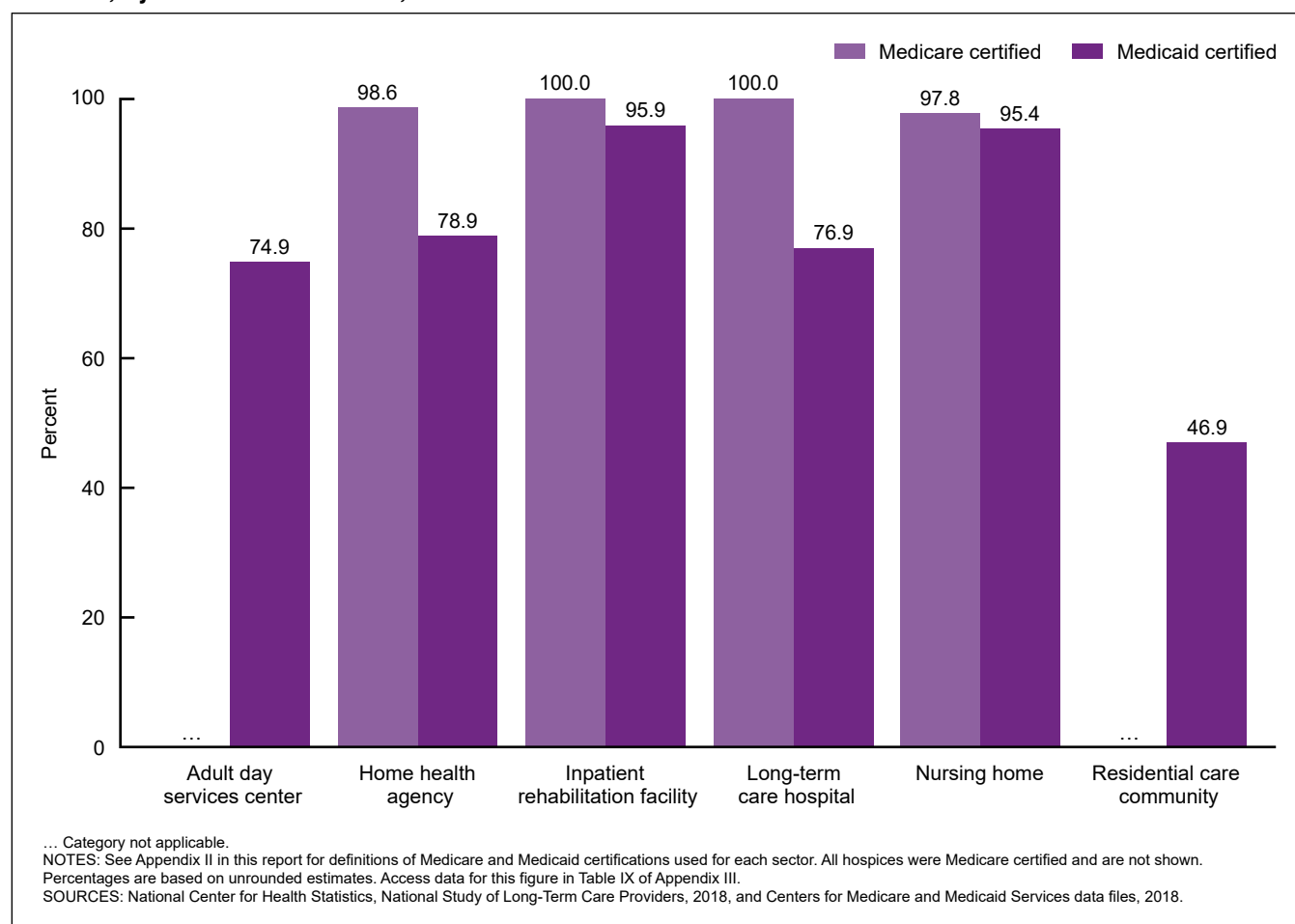


Figure 6. Percentage of post-acute and long-term care services providers that are Medicare- and Medicaid-certified, by sector: United States, 2018



or certified to participate in Medicaid. Information was not available on whether any Medicare-certified hospices were also certified by Medicaid.

Number of people served

See Appendix II for how the number of people served was defined for each sector.

In terms of people served daily per provider, nursing homes served, on average, more than twice the number of people as residential care communities. Nursing homes had an average of 85 current residents daily, while adult day services centers had an average weekday daily attendance of 65 participants, and residential care communities served an average of 32 residents daily (Appendix III, [Table IX](#)).

The majority of adult day services centers (58.7%) and nursing homes (65.4%) served between 26 and 100 residents daily, while the majority of residential care communities (62.9%) served 25 residents or fewer daily ([Figure 7](#)). The percentage of nursing homes serving more than 100 people daily (29.1%) was almost five times higher than the percentage of residential care communities (6.0%) doing so, and about

1.5 times higher than the percentage of adult day services centers (18.5%) doing so ([Figure 7](#)).

In terms of people served annually, in 2017, home health agencies served an average of 458 patients (who were then discharged from the agency in 2017), hospices served an average 356, inpatient rehabilitation facilities served an average 348, and long-term care hospitals served an average 293 (Appendix III, [Table IX](#)).

About 42.7% of home health agencies discharged 100 patients or fewer annually, while 24.4% discharged 101–300, and 32.9% discharged 301 or more ([Figure 8](#)). The number of patients served annually per hospice agency was about evenly distributed, with about one-third of agencies each serving 1–100 patients (37.1%), 101–300 (32.5%), and 301 or more (30.3%). For inpatient rehabilitation facilities, 15.0% served 100 or fewer patients, 46.2% served 101–300 patients, and 38.8% served more than 300 patients. More than one-half of long-term care hospitals served 101–300 patients (58.3%), about one-third (32.6%) served more than 300 patients, and 9.1% served 1–100 patients.

Figure 7. Percent distribution of post-acute and long-term care services providers, by sector and number of people served daily: United States, 2018

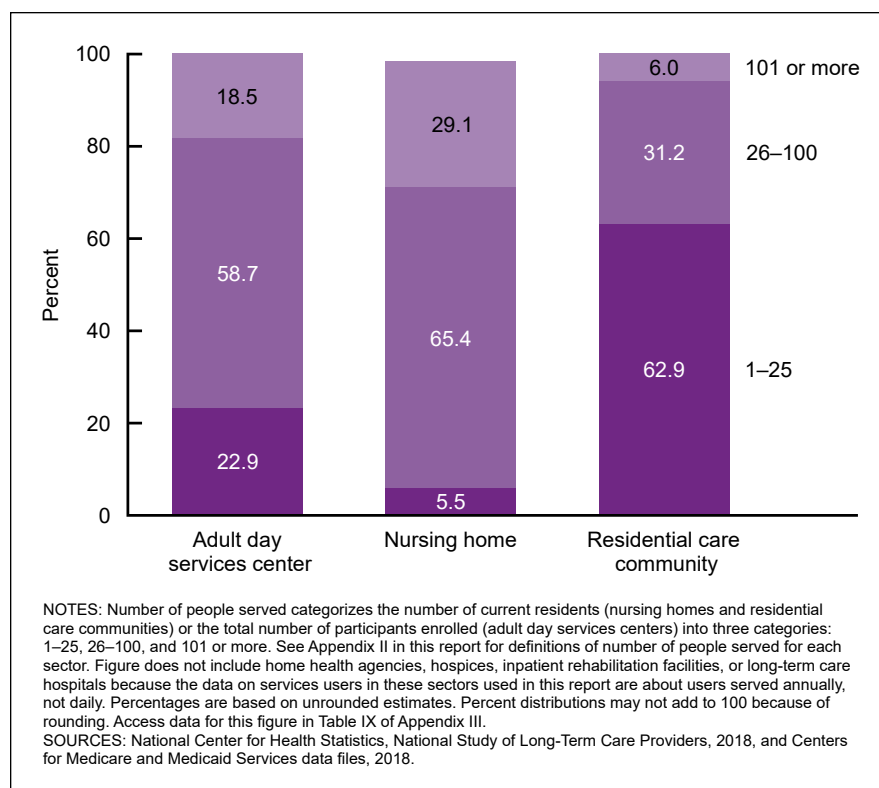
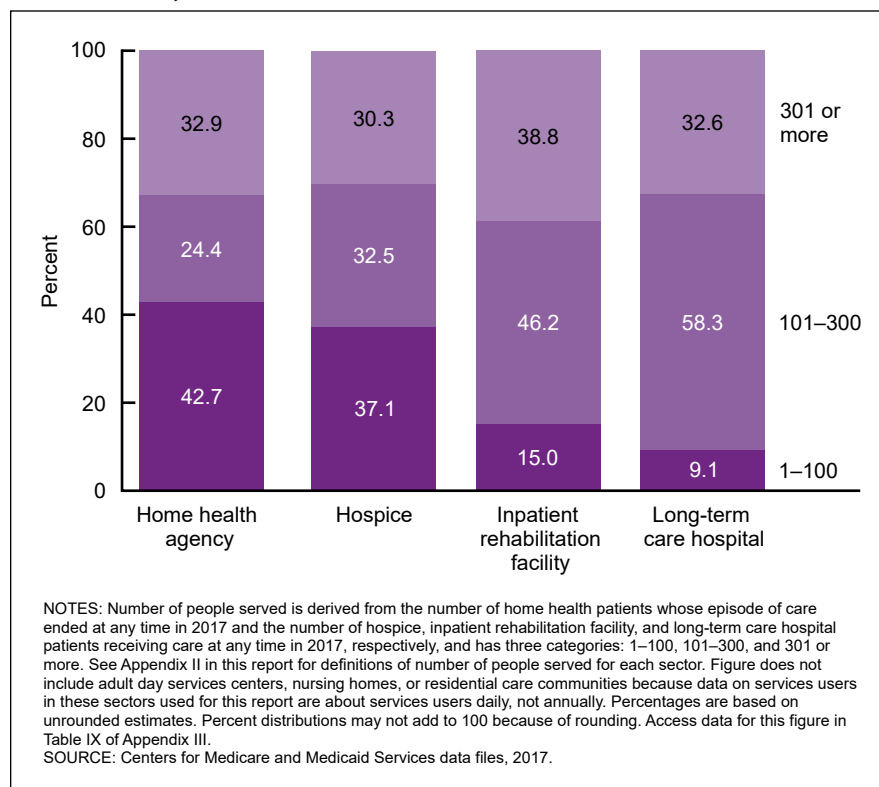


Figure 8. Percent distribution of post-acute and long-term care services providers, by sector and number of people served annually: United States, 2017



Staffing: Nursing, Social Work, and Activities Employees

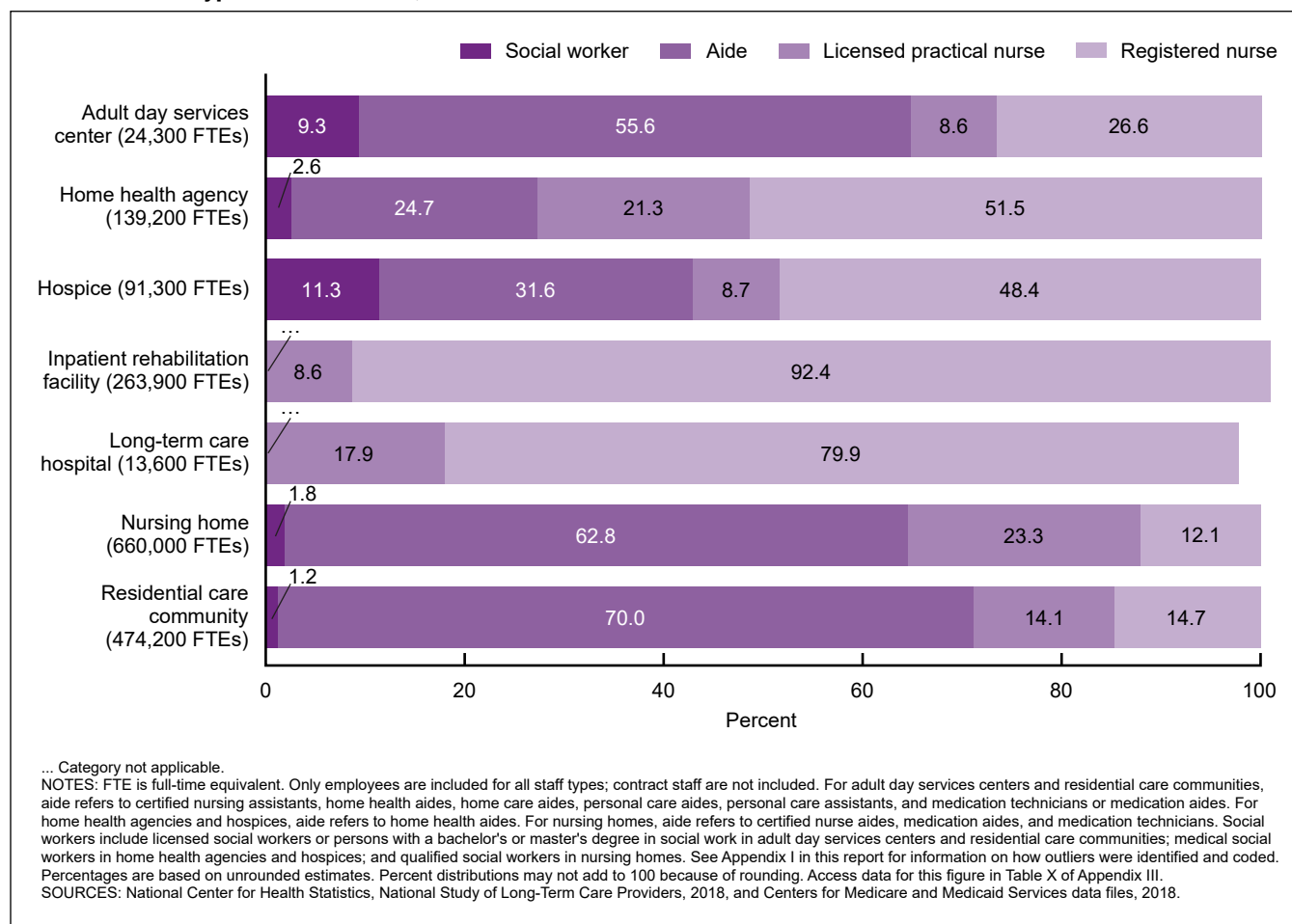
This section focuses on workers employed directly by adult day services centers, home health agencies, hospices, nursing homes, residential care communities, inpatient rehabilitation facilities, and long-term care hospitals. Information is provided about RNs, licensed practical nurses (LPNs) or licensed vocational nurses (LVNs), aides, social workers, and activities staff. See Appendix II for the definition of FTE and each staff type used for each sector. Contract staff who work for these providers were excluded because comparable information on contract staff was not available for all seven sectors.

Nursing and social work employee FTEs

All seven sectors employed nursing FTEs, including RNs and LPNs or LVNs; adult day services centers, home health agencies, hospices, nursing homes, and residential care communities also employed aides and social workers. Inpatient rehabilitation facilities and long-term care hospitals did not employ aides and social workers. In 2018, about 1,632,700 nursing employee FTEs worked in the seven sectors, and about 33,700 social work employee FTEs worked in the five sectors that employed social workers (data not shown). Of these nursing and social work employees, 39.6% (660,000 FTEs) were nursing home employees, 28.5% (474,200 FTEs) were residential care community employees, 15.8% (263,900 FTEs) were inpatient rehabilitation facility employees, 8.4% (139,200 FTEs) were employed by home health agencies, 5.5% (91,300 FTEs) were employed by hospices, 1.5% (24,300 FTEs) were adult day services center employees, and 0.8% (13,600 FTEs) were employed by long-term care hospitals (Appendix III, Table X).

The relative distribution of social work and nursing employee FTEs varied across sectors. The majority

Figure 9. Total number and percent distribution of nursing and social work full-time equivalent employees, by sector and staff type: United States, 2018



of employee FTEs in adult day centers (55.6%), nursing homes (62.8%), and residential care communities (70.0%) were aides (Figure 9). However, in inpatient rehabilitation facilities (92.4%), long-term care hospitals (79.9%), home health agencies (51.5%), and hospices (48.4%), RNs were the most common employee FTEs. Social work FTE employees were most common in hospices (11.3%), followed by adult day services centers (9.3%), home health agencies (2.6%), nursing homes (1.8%), and residential care communities (1.2%).

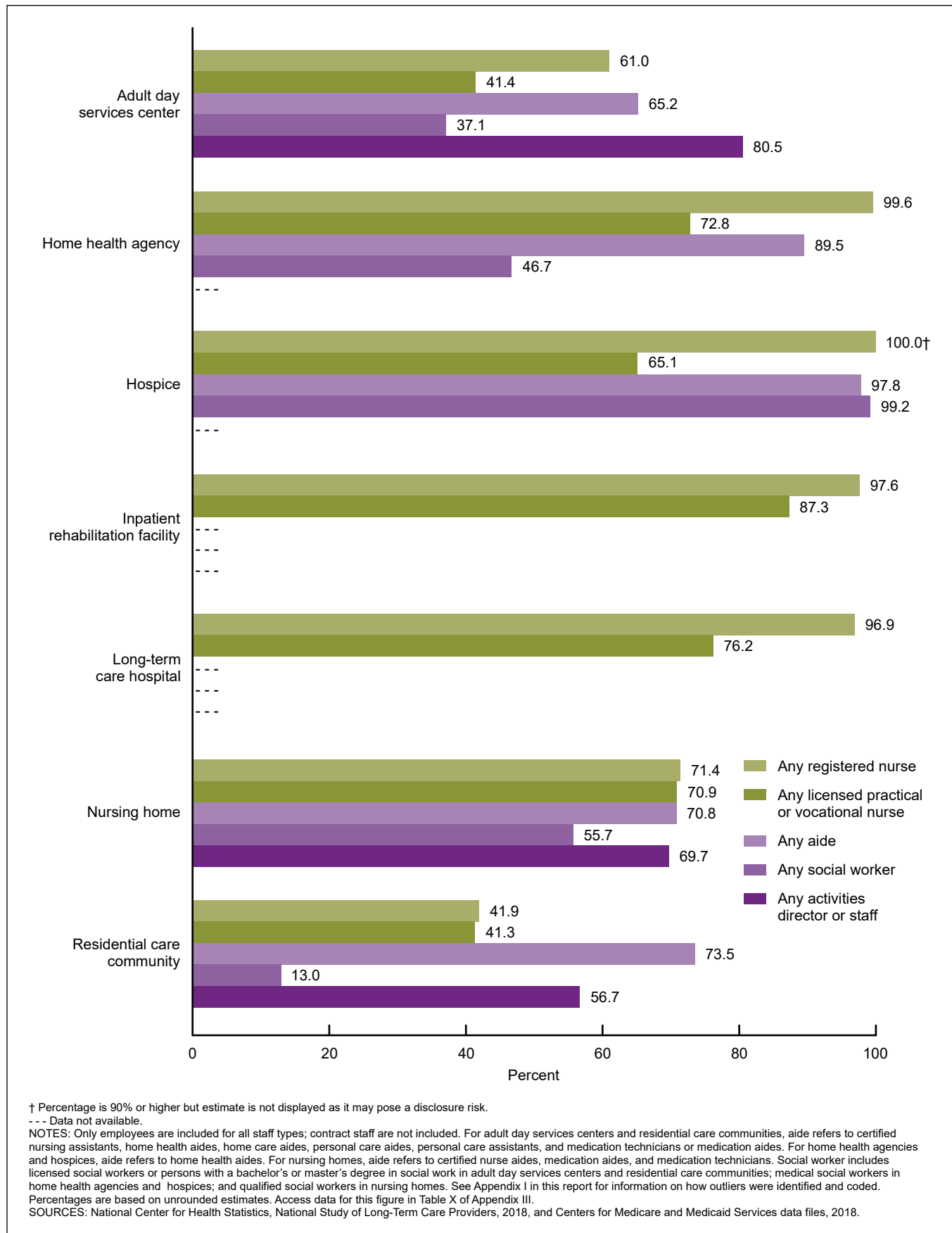
The administrative data used in this report for the home health, hospice, and nursing home sectors used less-inclusive wording to capture aides than was used in the questionnaire data for adult day services centers and residential care communities. Consequently, estimates using the administrative data may undercount the number of aides employed by providers in those sectors. See Appendix II for how aide was defined for each sector.

Providers employing any nursing, social work, or activities staff

Among the different staff types, RNs and LPNs or LVNs were employed in all seven sectors. Aides and social workers were employed in five sectors: adult day services centers, home health agencies, hospices, nursing homes, and residential care communities.

Most providers in all sectors except residential care communities employed licensed nursing staff (RNs and LPNs or LVNs). Virtually all home health agencies (99.6%), hospices (100.0%), inpatient rehabilitation facilities (97.6%), and long-term care hospitals (96.9%) employed at least one RN (Figure 10). In contrast, 71.4% of nursing homes, 61.0% of adult day services centers, and 41.9% of residential care communities directly employed at least one RN. Most inpatient rehabilitation facilities (87.3%), long-term care hospitals (76.2%), home health agencies (72.8%), nursing homes (70.9%), and hospices (65.1%) employed at least one LPN or LVN, while a minority of adult day services centers (41.4%) and residential care communities (41.3%) directly employed at least one LPN or LVN.

Figure 10. Percentage of post-acute and long-term care services providers with any full-time equivalent employees, by sector and staff type: United States, 2018



Among the four staff types (RNs, LPNs or LVNs, aides, and social workers) examined across the five sectors where they were employed, most providers employed aides: hospices (97.8%) were most likely and adult day services centers (65.2%) were least likely to have any aides on staff. Use of aide staff was not examined for inpatient rehabilitation centers or long-term care hospitals because this information was not available.

Employing any social workers showed the most variation across the five sectors where they were employed. Virtually all hospices employed social workers (99.2%), as did most nursing homes (55.7%). About 46.7% of home health agencies and 37.1% of adult day services centers employed social workers, but only 13.0% of residential care communities directly employed social workers. Use of social worker staff was not examined for inpatient rehabilitation facilities or long-term care hospitals because this information was not available.

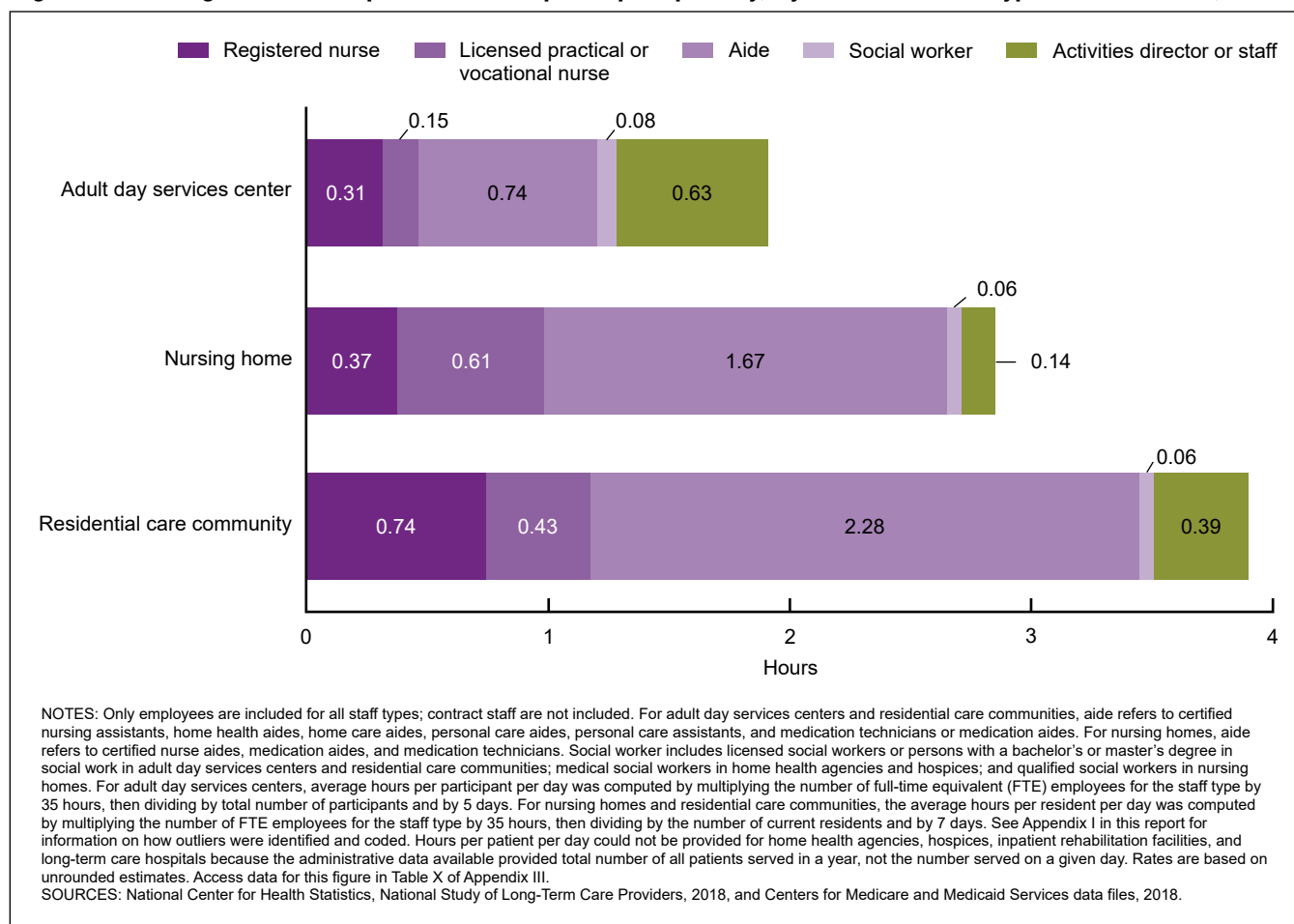
Most adult day services centers (80.5%), nursing homes (69.7%), and residential care communities (56.7%) directly employed an activities director or activities staff. Use of activities staff was not examined for home health agencies, hospices, inpatient rehabilitation facilities, or long-term care hospitals because this information was not available.

Staffing hours for nursing, social work, and activities staff

To provide a measure by which to compare staffing levels across sectors, hours per user (resident or participant) per day are provided in this report. See Appendixes I and II for details on how hours per resident or participant per day were computed for adult day services centers, nursing homes, and residential care communities. Hours per patient per day could not be provided for home health agencies, hospices, inpatient rehabilitation facilities, or long-term care hospitals because the administrative data available provided the total number of all patients served in a year rather than the number served on a given day, which is needed to produce this estimate.

For both licensed nursing staff types examined (RN and LPN or LVN), the average staff hours per resident or participant per day was higher in residential care communities than in nursing homes and adult day services centers (Figure 11). The average total nursing hours (combining RNs, LPNs or LVNs, and aides) per resident or participant per day was 3.45 (3 hours and 27 minutes) for residential care community residents, 2.65 (2 hours and 39 minutes) for nursing home residents, and 1.20 (1 hour and 12 minutes) for adult day

Figure 11. Average staff hours per resident or participant per day, by sector and staff type: United States, 2018



participants. The average total nursing hours per resident per day in adult day services centers was one-half the size of the ratio for nursing homes and less than one-third for residential care communities.

The average total licensed nursing hours (combining RNs with LPNs or LVNs) per resident or participant per day was 1.17 (1 hour and 10 minutes) for residential care community residents, 0.98 (59 minutes) for nursing home residents, and 0.46 (28 minutes) for adult day participants. The average total licensed nursing hours per resident or participant per day in residential care communities was almost three times the size of the corresponding ratio for adult day services centers.

The average social work staff hours per resident or participant per day was similar in residential care communities (0.06 hours, or 4 minutes) and in adult day services centers (0.08 hours, or 5 minutes) and nursing homes (0.06 hours, or 4 minutes). The average activities staff hours per resident or participant per day in adult day services centers (0.63 hours, or 38 minutes) was more than residential care communities (0.39 hours, or 23 minutes) or nursing homes (0.14 hours, or 8 minutes).

Services Provided

This section provides information on what percentage of providers in each sector (where data were applicable and available) offered each of seven services: social work, mental health or counseling, therapies (physical, occupational, and speech), skilled nursing or nursing, pharmacy or pharmacist, hospice, and dietary and nutrition. Services could be provided directly by the provider or by others through arrangements made by the provider (Appendix III, [Table XI](#)). These seven services were chosen because they are commonly provided by Medicare- and Medicaid-certified long-term care services providers, and administrative data were available for most sectors. However, the available administrative data did not have information on whether home health agencies, inpatient rehabilitation facilities, or long-term care hospitals provided mental health or counseling services, or on whether hospices provided pharmacy or pharmacist services. Data on inpatient rehabilitation facilities and long-term care hospitals also did not have information about skilled nursing and hospice services. In addition to the seven services listed, the provision of dementia care units is also included. See Appendix II for definitions of services included for each sector.

As was done for the 2014 and 2016 adult day and residential care community questionnaires—but in contrast to the 2012 adult day and residential care community questionnaires—for each service in the 2018 questionnaires, if an adult day services center or residential care community reported offering only referrals to participants or residents, respectively, the provider was considered as not providing the service. See Appendix I for more information on differences

in how services were measured in 2012 compared with the 2014, 2016, and 2018 adult day and residential care community measurements.

Social work services

Most providers in all sectors offered social work services ([Figure 12](#)). All hospices provided social work services (100.0%), as did most inpatient rehabilitation facilities (97.5%), long-term care hospitals (88.2%), home health agencies (81.7%), and nursing homes (63.8%), likely because providing these services is required for Medicare certification. A majority of residential care communities (62.8%) provided social work services, but fewer adult day services centers (50.2%) did so.

Mental health or counseling services

Mental health or counseling services were offered by most hospices (97.3%) and a majority of nursing homes (63.6%) and residential care communities (62.0%), while just over one-third of adult day services centers (37.7%) reported offering these services ([Figure 13](#)).

Therapeutic services

Virtually all inpatient rehabilitation facilities (99.8%), long-term care hospitals (99.5%), hospices (97.9%), and home health agencies (95.8%) offered therapeutic services, as did more than seven-tenths of residential care communities (71.7%) and nursing homes (71.7%) and almost one-half of adult day services centers (45.4%) ([Figure 14](#)).

Skilled nursing or nursing services

All home health agencies and hospices (100.0%) offered skilled nursing or nursing services, as did most nursing homes (71.6%), residential care communities (70.8%), and adult day services centers (62.0%) ([Figure 15](#)).

Pharmacy or pharmacist services

Nearly all inpatient rehabilitation facilities (99.0%) and long-term care hospitals (98.0%) and most residential care communities (84.5%) and nursing homes (70.1%) offered pharmacy or pharmacist services. Fewer adult day services centers (30.9%) and home health agencies (4.5%) provided these services ([Figure 16](#)).

Hospice services

About 83.0% of nursing homes offered hospice services, compared with 66.8% of residential care communities, 12.6% of adult day services centers, and 5.4% of home health agencies ([Figure 17](#)).

Figure 12. Percentage of post-acute and long-term care services providers that provide social work services, by sector: United States, 2018

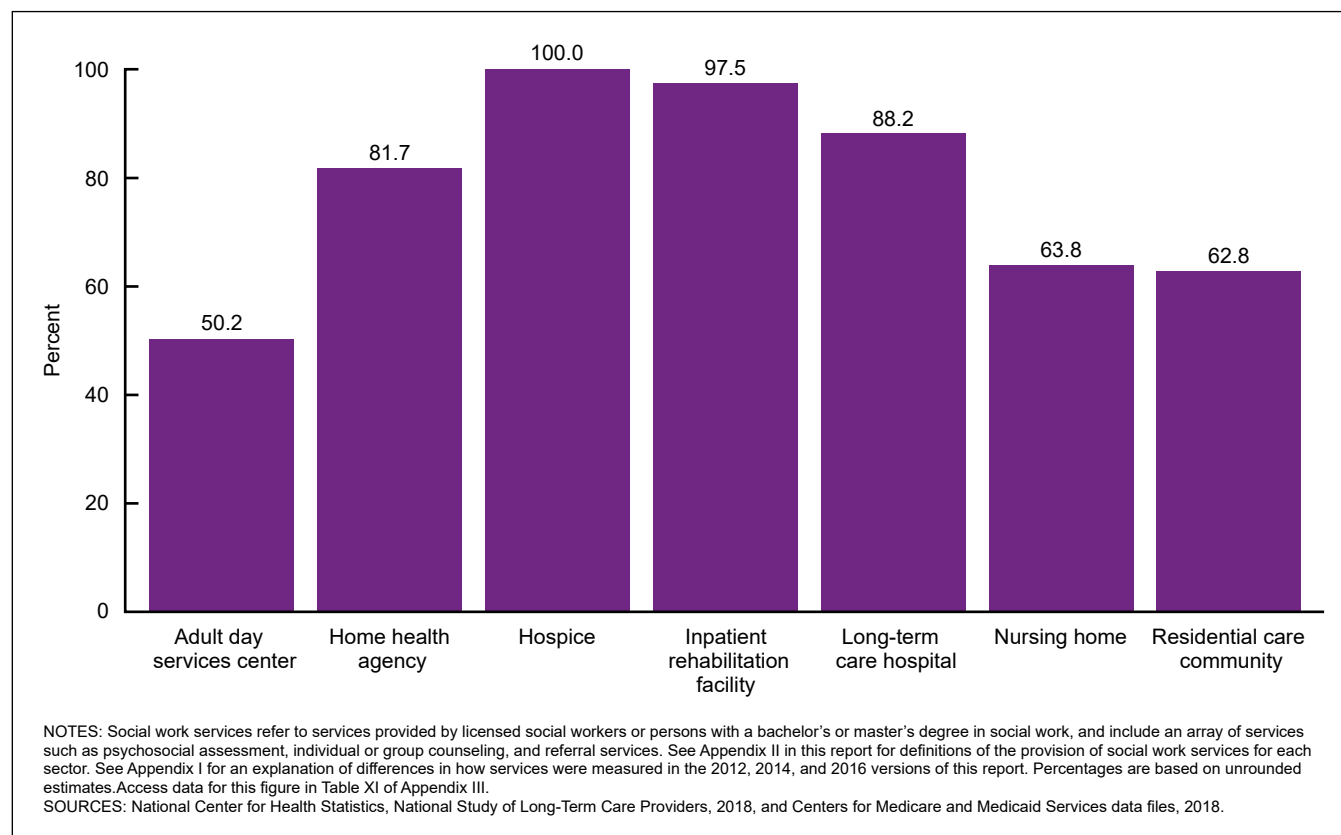


Figure 13. Percentage of post-acute and long-term care services providers that provide mental health or counseling services, by sector: United States, 2018

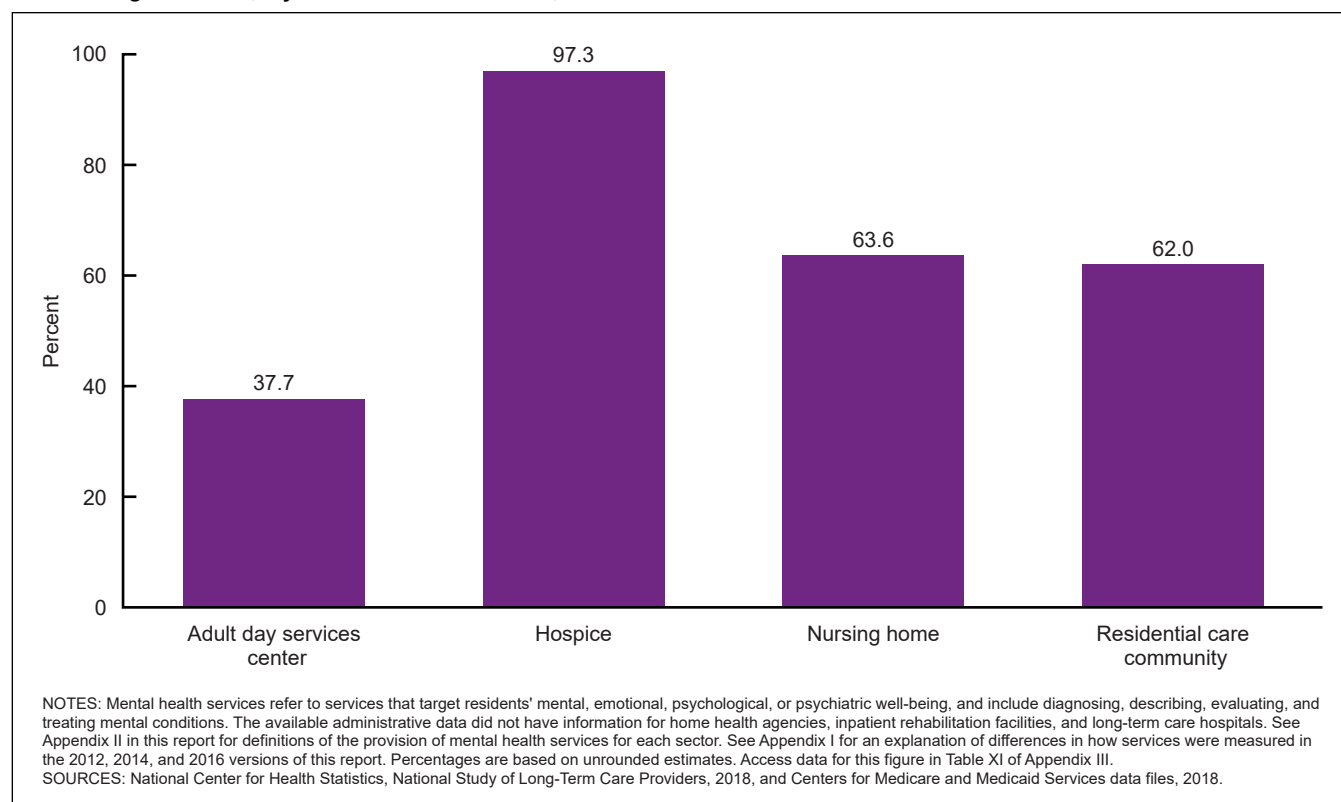


Figure 14. Percentage of post-acute and long-term care services providers that provide any therapeutic services, by sector: United States, 2018

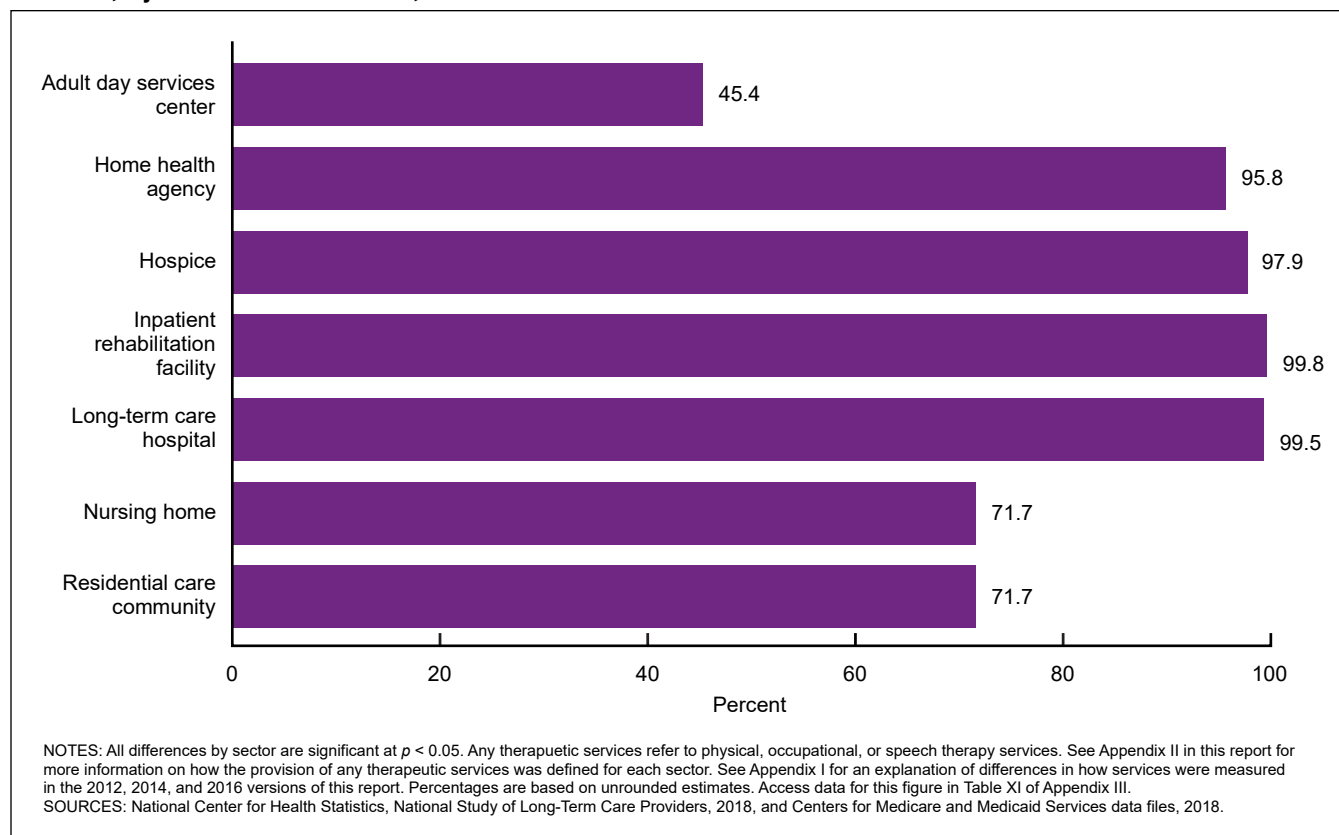


Figure 15. Percentage of post-acute and long-term care services providers that provide skilled nursing or nursing services, by sector: United States, 2018

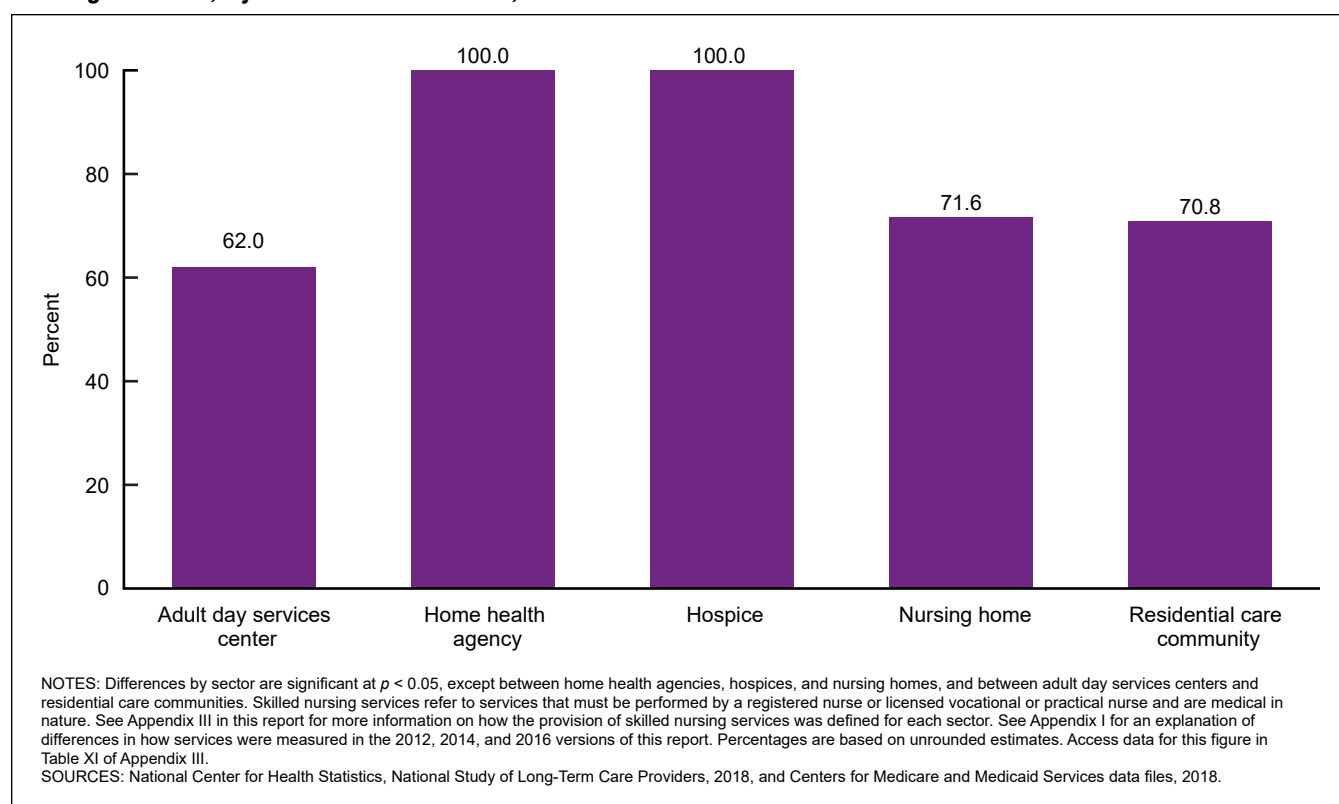


Figure 16. Percentage of post-acute and long-term care services providers that provide pharmacy or pharmacist services, by sector: United States, 2018

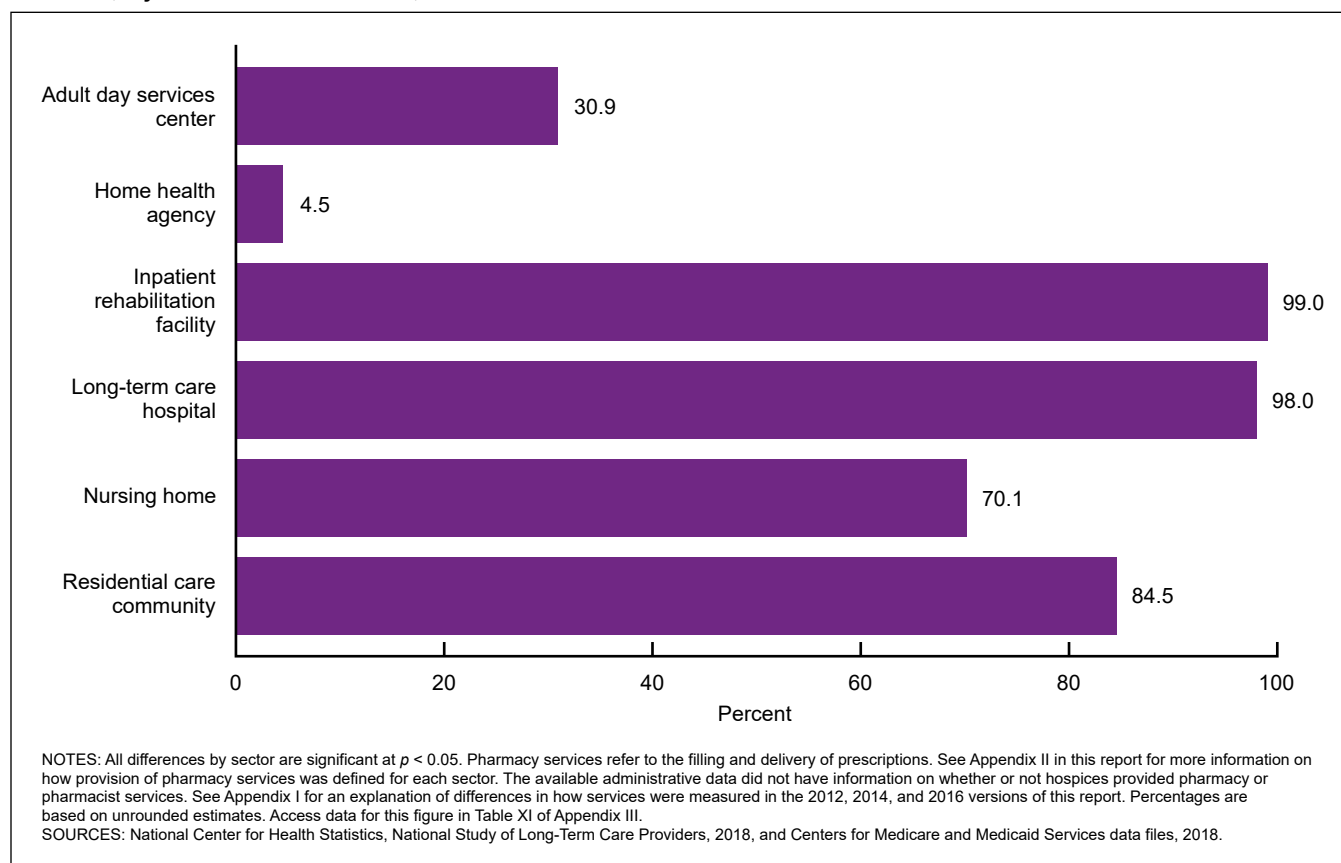


Figure 17. Percentage of post-acute and long-term care services providers that provide hospice services, by sector: United States, 2018

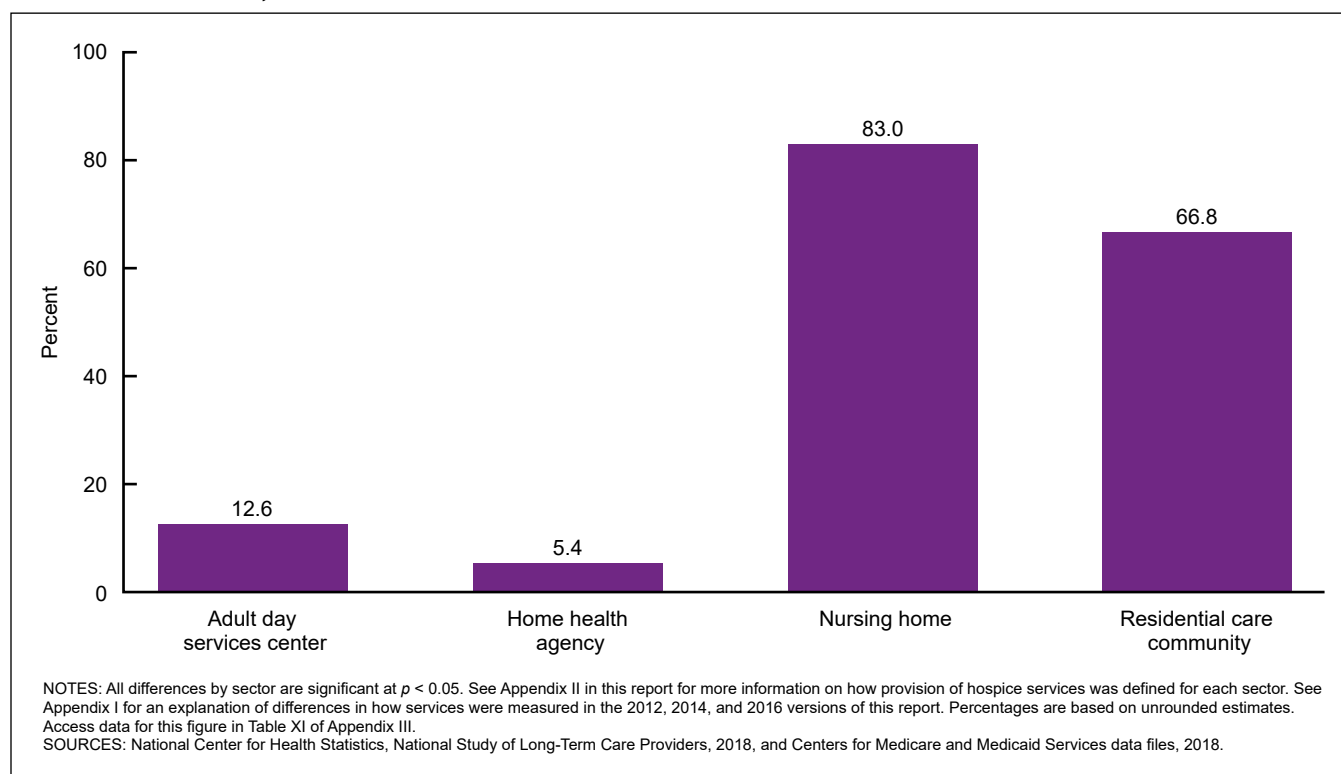
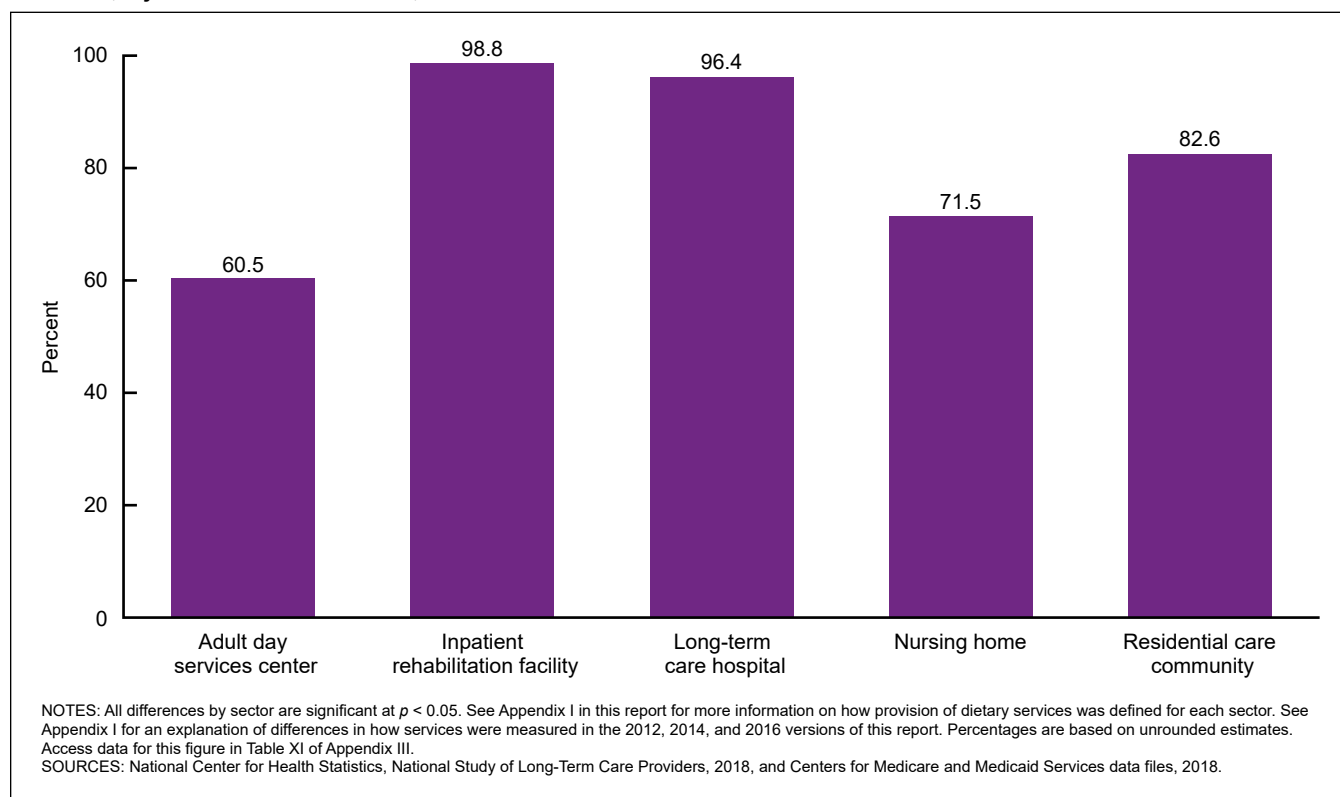


Figure 18. Percentage of post-acute and long-term care services providers that provide dietary and nutritional services, by sector: United States, 2018



Dietary and nutritional services

Nearly all inpatient rehabilitation facilities (98.8%) and long-term care hospitals (96.4%) and most residential care communities (82.6%) and nursing homes (71.5%) offered dietary and nutritional services, while 60.5% of adult day services centers provided these services (Figure 18).

Dementia care units

About 19.4% of residential care communities and 13.4% of nursing homes offered a dementia care unit within a larger facility or community (Figure 19). While another 6.0% of residential care communities served only residents with dementia, few nursing homes (0.3%) did so. Dementia care units or dementia-only providers were not examined for adult day services centers, home health agencies, hospices, inpatient rehabilitation facilities, or long-term care hospitals because these topics are more relevant for residential sectors, such as nursing homes and residential care communities.

National Profile of Post-acute and Long-term Care Services Users

Together, the seven post-acute and long-term care services sectors served almost 9.5 million (9,490,000) people in 2017 and 2018. This estimate is the sum of the estimates of the

people served in each sector in one year (2017 or 2018) and is an approximation. Data used for each sector captured services users in different ways, and the year for the data used in each sector varied across sectors. The estimated number of adult day services center participants represents current participants on a given day in 2018. The estimated number of home health patients represents patients who ended care in 2017 (discharges). The estimated number of hospice, inpatient rehabilitation facility, and long-term care hospital patients represents Medicare beneficiaries who received care at any time in 2017. The estimated numbers of nursing home residents and residential care community residents each represent current residents on any given day in 2018. In this report, “current” participants or residents in 2018 refers to those participants enrolled in an adult day services center, or residents living in a nursing home or residential care community, on the day of the data collection in 2018, rather than the total number of participants ever enrolled in a center or residents ever living in a nursing home or residential care community at any time throughout the 2018 calendar year.

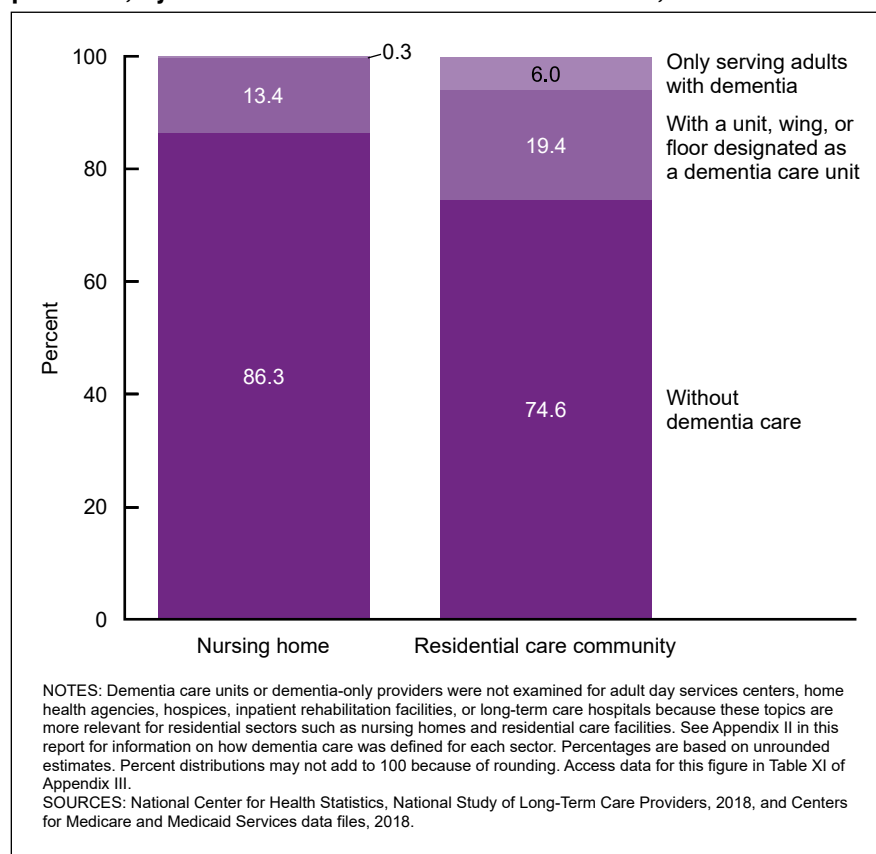
The same person may be included more than once in the sum of services users among the seven sectors if a person received care in more than one sector in a similar time period (such as a residential care resident receiving care from a home health agency). Given that the estimate for the number of current adult day center, nursing home, and residential care services users in a given day is likely to be less

than the number of all services users in these sectors throughout that year, the estimate of all services users in all seven sectors as of 2018 is expected to be at least 9.5 million, despite the possibility of double-counting the same person across sectors.

In 2018, NCHS collected post-acute and long-term care user information about a sample of participants and residents in each of the centers and communities surveyed, which differs from data collection methods in the 2012, 2014, and 2016 surveys. See Appendix I for more information on data collection of services users and the data sources used for each sector.

In 2018, an estimated 251,100 current participants were enrolled in adult day services centers and 918,700 current residents were living in residential care communities (Appendix III, [Table XII](#)). Nursing home resident information is based on two data sources from CMS. The estimated overall number of residents are from the Certification and Survey Provider Enhanced Reports (CASPER) nursing home data source, but the number of nursing home residents by length of stay are from the Minimum Data Set Active Resident Episode Table (MARET), resulting in a difference between the estimated overall total number of residents (Appendix III, [Table XII](#)) and number of residents by length of stay (Appendix III, [Table XIII](#)) (see Appendix I for more information about nursing home resident data). About 1,321,200 current residents were reported in CASPER, and of the 1,372,500 current residents reported in MARET, 598,700 (43%) had a stay of fewer than 100 days (short stay) and 773,800 (57%) had a stay of 100 days or longer (long stay) (Appendix III, [Table XIII](#)). In 2017, about 4,940,300 patients received services and were discharged from home health agencies, and 1,562,500 patients received services from hospices. About 380,400 patients received services at inpatient rehabilitation facilities, and 115,800 patients received services at long-term care hospitals (Appendix III, [Table XII](#)).

Figure 19. Percent distribution of post-acute and long-term care services providers, by sector and dementia care: United States, 2018



This section provides an overview of the demographic, health, and functional composition of users of post-acute and long-term care services, and their experience of adverse events, by sector. Demographic measures include age, race and ethnicity, and sex. Medicaid as a payer source is used to measure payment characteristics. Measures of health status include diagnoses of Alzheimer disease and other dementias, arthritis, asthma, chronic kidney disease, chronic obstructive pulmonary disease (COPD), depression, diabetes, heart disease, high blood pressure or hypertension, and osteoporosis. Measures of functional status include needing assistance with selected activities of daily life (ADLs) (bathing, dressing, toileting, walking or locomotion, transferring in and out of a chair or bed, and eating). Measures of adverse events include overnight hospital stays, emergency department visits, and falls.

Use of Post-acute and Long-term Care Services

Given the data available, daily-use rates were compared for adult day services center participants, nursing home residents, and residential care community residents, while annual-use rates were compared for home health agency, hospice, inpatient rehabilitation facility, and long-term care hospital patients. Use of services by people aged 65 and over per 1,000 people aged 65 and over varied by sector. The daily-use rate was higher for nursing homes (21 per 1,000), compared with residential care communities (16 per 1,000) and adult day services centers (3 per 1,000). The annual-use rate was higher for home health agencies (78 per 1,000) compared with hospices (28 per 1,000), inpatient rehabilitation facilities (6 per 1,000), and long-term care hospitals (2 per 1,000).

Demographic Characteristics of Post-acute and Long-term Care Services Users

Services users by age

Most services users were aged 65 and over: 94.8% of hospice patients, 92.5% of residential care residents, 87.9% of inpatient rehabilitation patients, 83.1% of nursing home residents, 82.6% of home health patients, 74.3% of long-term care hospital patients, and 60.5% of participants in adult day services centers (Figure 20). Among nursing home residents, 81.1% of short-stay residents and 84.6% of long-stay residents were aged 65 and over (Appendix III, Table XIII).

The age composition of services users varied by sector, with residential care communities (54.9%), hospices (48.0%), and nursing homes (36.4%) serving more people aged 85 and over, and adult day services centers (39.4%) and long-term care hospitals (25.7%) serving more people under age 65 than other sectors. Among nursing home residents, 30.7% of short-stay residents and 40.9% of long-stay residents were aged 85 and over (Appendix III, Table XIII).

Services users by sex

In all sectors except long-term care hospitals, where 51.8% of patients were men, the majority of users were women, with residential care communities having the highest percentage (67.4%) (Figure 21). Among nursing home residents, 59.0% of short-stay residents and 66.6% of long-stay residents were women (Appendix III, Table XIII).

Services users by race and ethnicity

The percentage of non-Hispanic White people was highest in residential care communities (89.4%), followed by hospices (82.3%), inpatient rehabilitation facilities (79.9%), home health agencies (76.8%), nursing homes (73.9%), and long-term care hospitals (66.3%) (Figure 22). Less than one-half of the participants in adult day services centers were non-Hispanic White (44.8%). Adult day services centers were the most racially and ethnically diverse among the seven sectors: 16.8% of center participants were non-Hispanic Black and 22.2% were Hispanic. Long-term care hospitals (19.8%), adult day services centers (16.8%), and nursing homes (14.9%) had the highest percentage of non-Hispanic Black services users. About one-tenth of home health patients (12.1%), inpatient rehabilitation facility patients (10.8%),

Figure 20. Percent distribution of post-acute and long-term care services users, by sector and age group: United States, 2017 and 2018

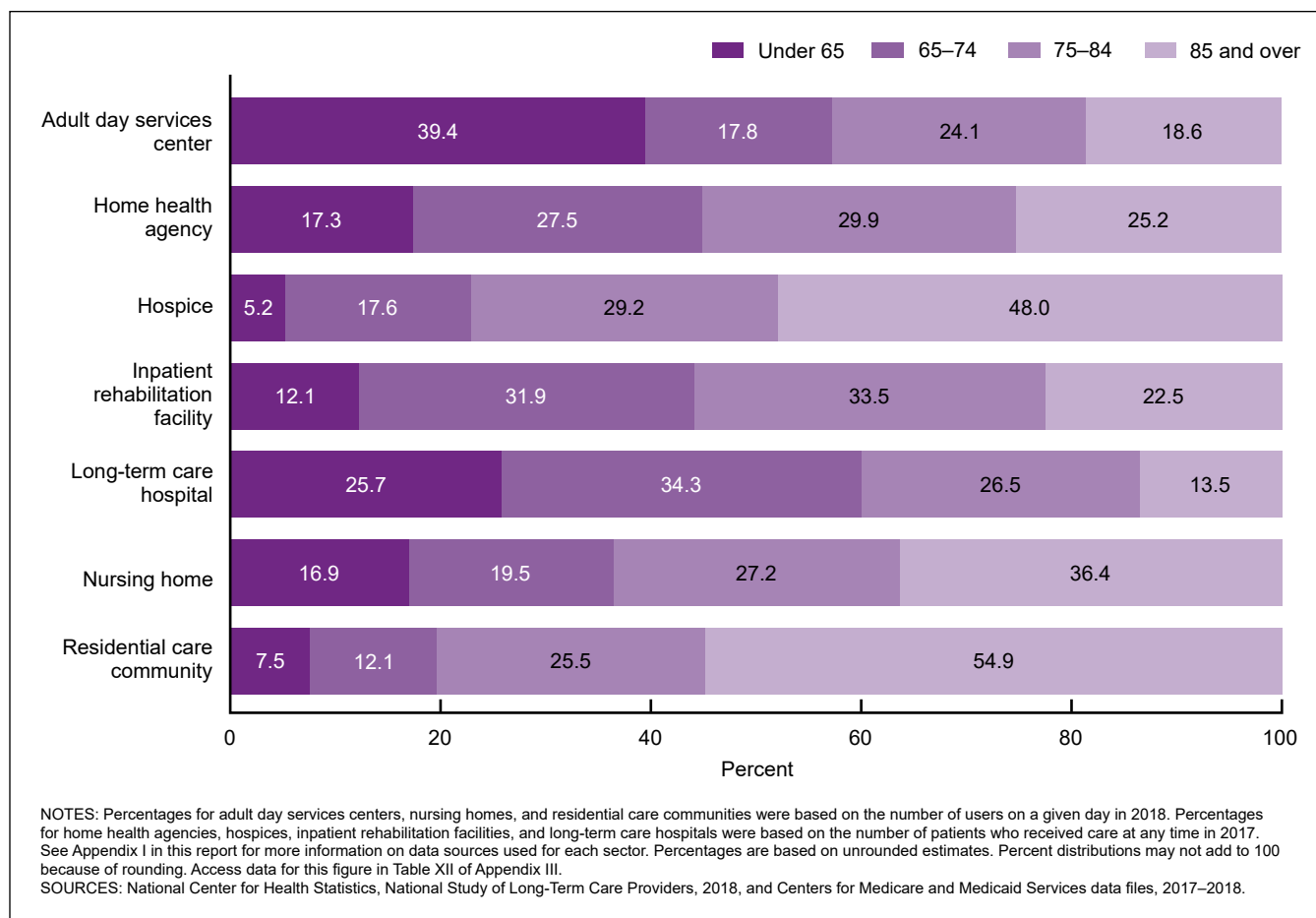
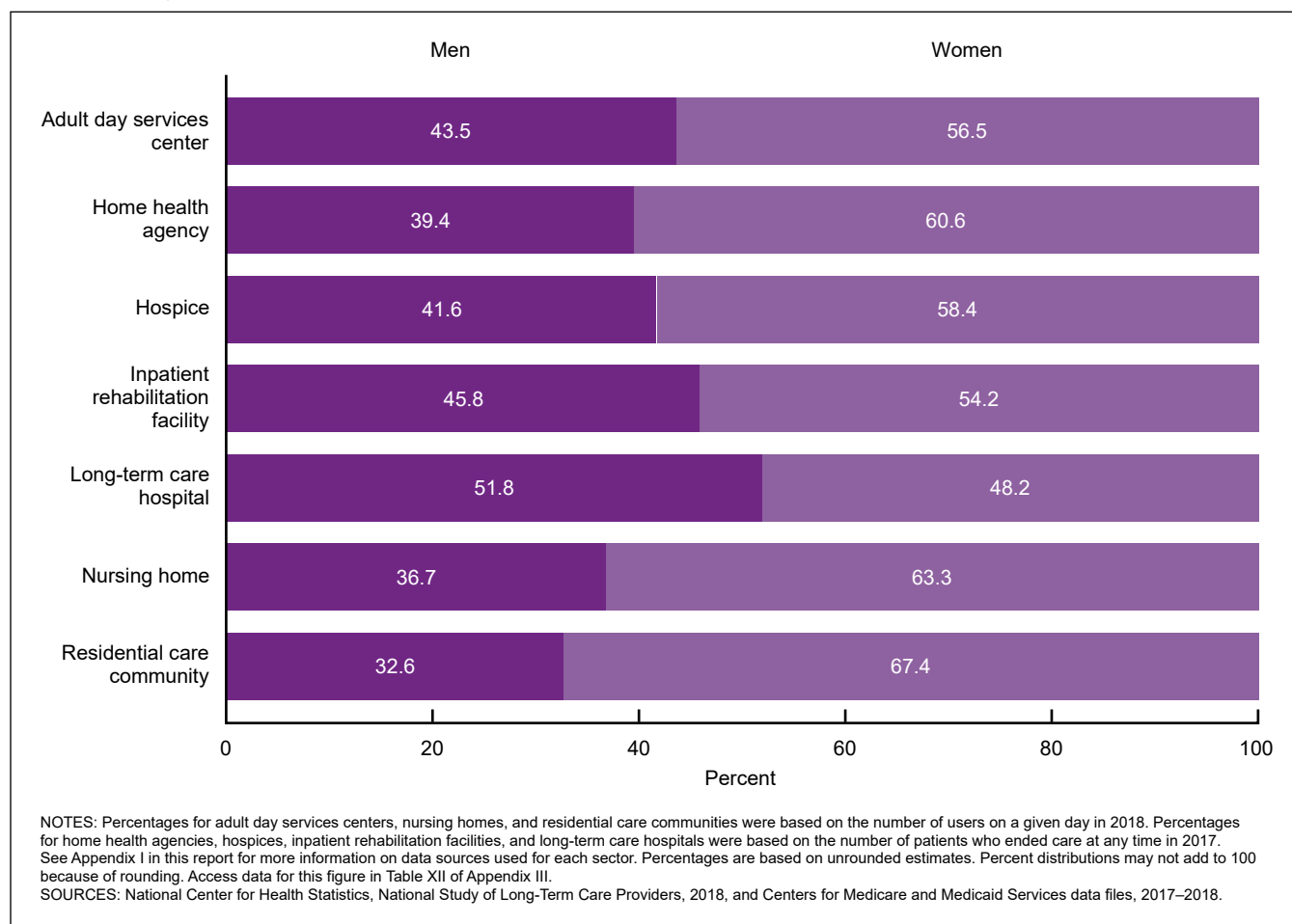


Figure 21. Percent distribution of post-acute and long-term care services users, by sector and sex: United States, 2017 and 2018



hospice patients (8.3%), and residential care residents (5.9%) were non-Hispanic Black. In nursing homes, 73.3% of short-stay residents and 74.4% of long-stay residents were non-Hispanic White, followed by non-Hispanic Black (14.6% and 15.2% of short- and long-stay residents, respectively) (Appendix III, [Table XIII](#)).

Services users by use of Medicaid as a payer source

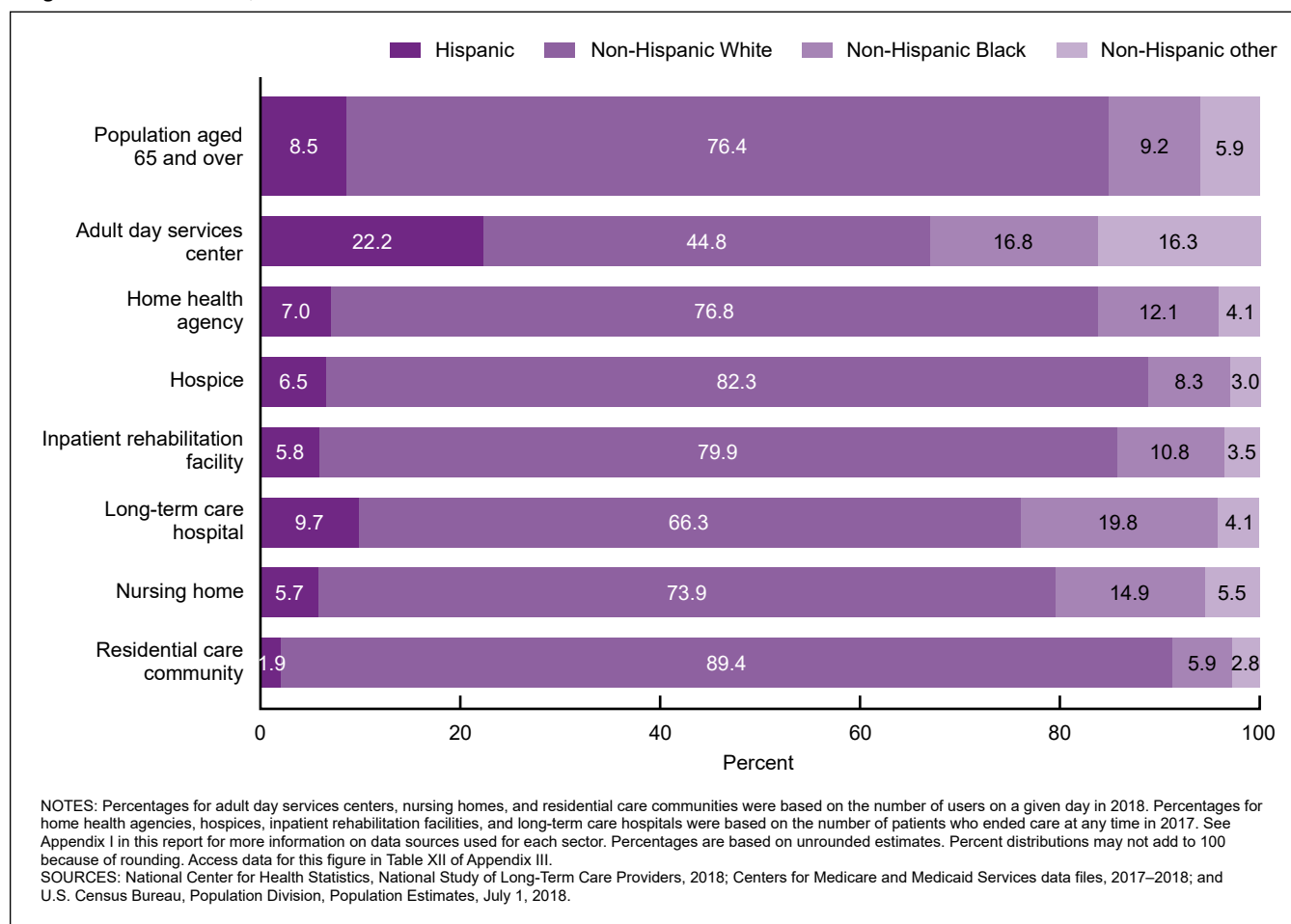
The percentage of services users using Medicaid as a payer source was highest in adult day services centers (72.3%) and nursing homes (62.0%) ([Figure 23](#)). Among residential care residents, 18.1% used Medicaid as a payer source, followed by 9.1% of home health patients. Data on Medicaid as payer source were not available for hospice, inpatient rehabilitation, and long-term care hospital patients.

Health and Functional Characteristics of Post-acute and Long-term Care Services Users

Diagnosed chronic conditions in services users

Alzheimer disease or other dementias were most prevalent in nursing home residents (49.1%), followed by hospice patients (46.3%) and long-term care hospital patients (45.5%), and were least prevalent in adult day services center participants (27.8%) ([Figure 24](#)). The percentage of nursing home residents with a diagnosis of Alzheimer disease was higher in long-stay residents (57.6%) than short-stay residents (35.8%) (Appendix III, [Table XIII](#)). Arthritis was most prevalent in patients in inpatient rehabilitation facilities (62.8%), followed by home health patients (61.7%), and was least prevalent in adult day participants (18.5%) (Appendix III, [Table XII](#)). The percentage of services users with a diagnosis of asthma was highest in long-term care hospital patients (13.9%) and lowest in residential care community residents (2.0%). A diagnosis of chronic kidney disease was most common in long-term care hospital patients (81.4%) and least common in adult day services center participants (5.7%) and residential care community residents (6.5%).

Figure 22. Percent distribution of post-acute and long-term care services users, by sector and race and Hispanic origin: United States, 2017 and 2018



Similarly, COPD was most common in long-term care hospital patients (55.4%) and least prevalent in adult day services center participants (6.8%).

The percentage of services users with a diagnosis of depression was highest in long-term care hospitals (51.8%), followed by inpatient rehabilitation facilities (49.2%) and nursing homes (48.8%), and lowest in adult day centers (21.8%) and hospices (23.7%) (Figure 24). In nursing home residents, the prevalence of a diagnosis of depression was higher in long-stay residents (52.7%) than short-stay residents (42.8%) (Appendix III, Table XIII). A diagnosis of diabetes was most prevalent in long-term care hospital patients (64.2%) and least prevalent in residential care community residents (20.4%). A diagnosis of heart disease was most common in long-term care hospital patients (68.3%), followed by patients in inpatient rehabilitation facilities (59.8%) and home health patients (54.4%). More than one-half of services users in all seven sectors had a diagnosis of hypertension, with the highest percentage in patients in inpatient rehabilitation facilities (93.6%) and long-term care hospitals (93.5%), followed by home health care patients (89.2%). The percentage of services users with a diagnosis of

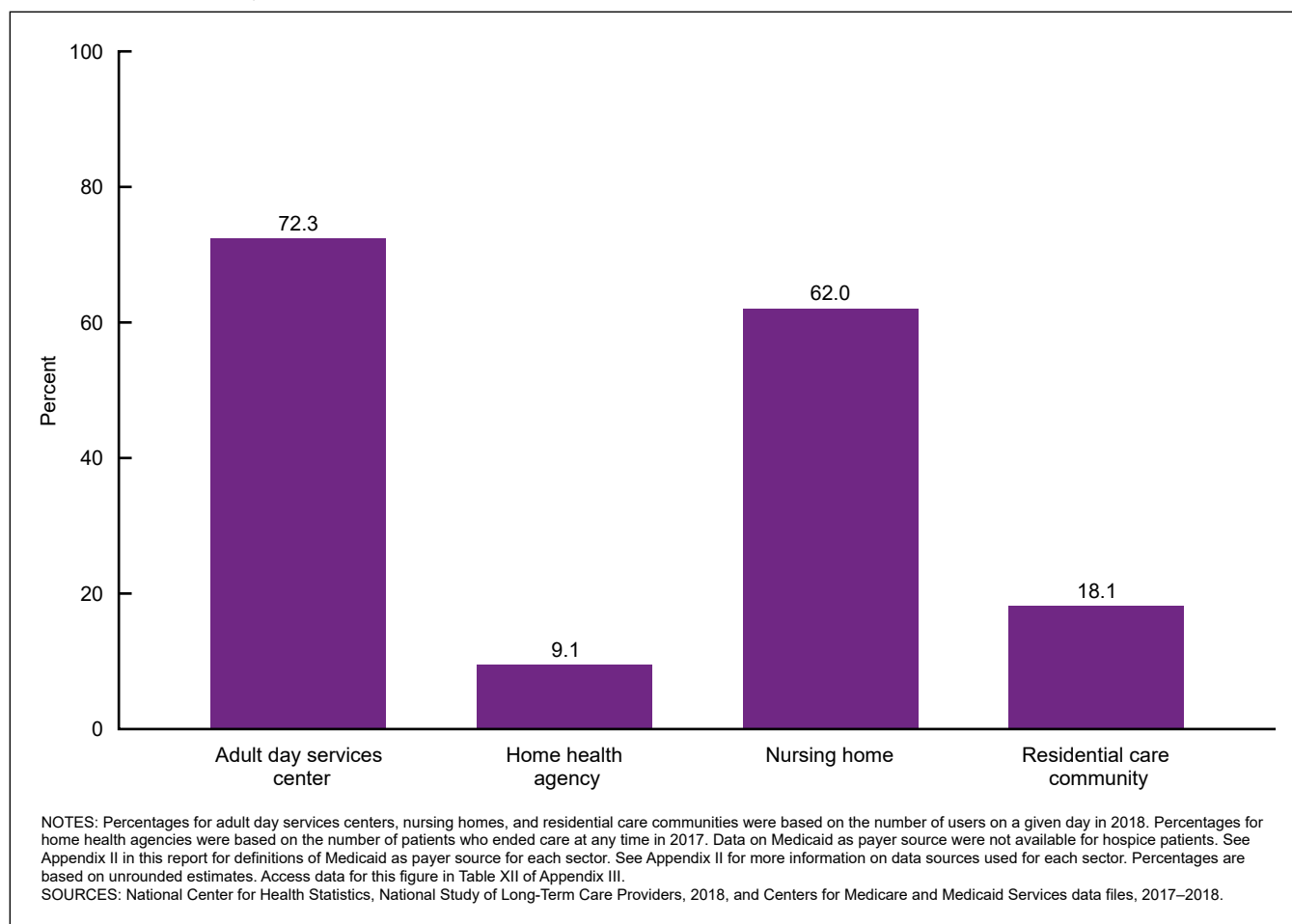
osteoporosis was highest in inpatient rehabilitation facilities (17.4%) and lowest in hospices (6.4%).

Need for assistance with ADLs in services users

This report uses the need for assistance with six ADLs—bathing, dressing, toileting, walking or locomotion, transferring in and out of a chair or bed, and eating—to measure physical and cognitive functioning in adult day services center participants, home health patients, residents in nursing homes and residential care communities, and inpatient rehabilitation facility patients. Data on need for assistance with ADLs were not available for hospice patients and long-term care hospital patients.

Overall, functional ability varied by sector (Figure 25). Within each sector, the need for assistance with bathing was most common. Fewer adult day services center participants needed assistance with bathing (74.8%) compared with services users in the other four sectors. Therefore, while the prevalence of ADL needs differed by sector, at minimum, 74.8% of services users across all sectors needed assistance with at least one of the six ADLs. The need for assistance with eating was least common in each of the five sectors.

Figure 23. Percentage of post-acute and long-term care services users with Medicaid as payer source, by sector: United States, 2017 and 2018



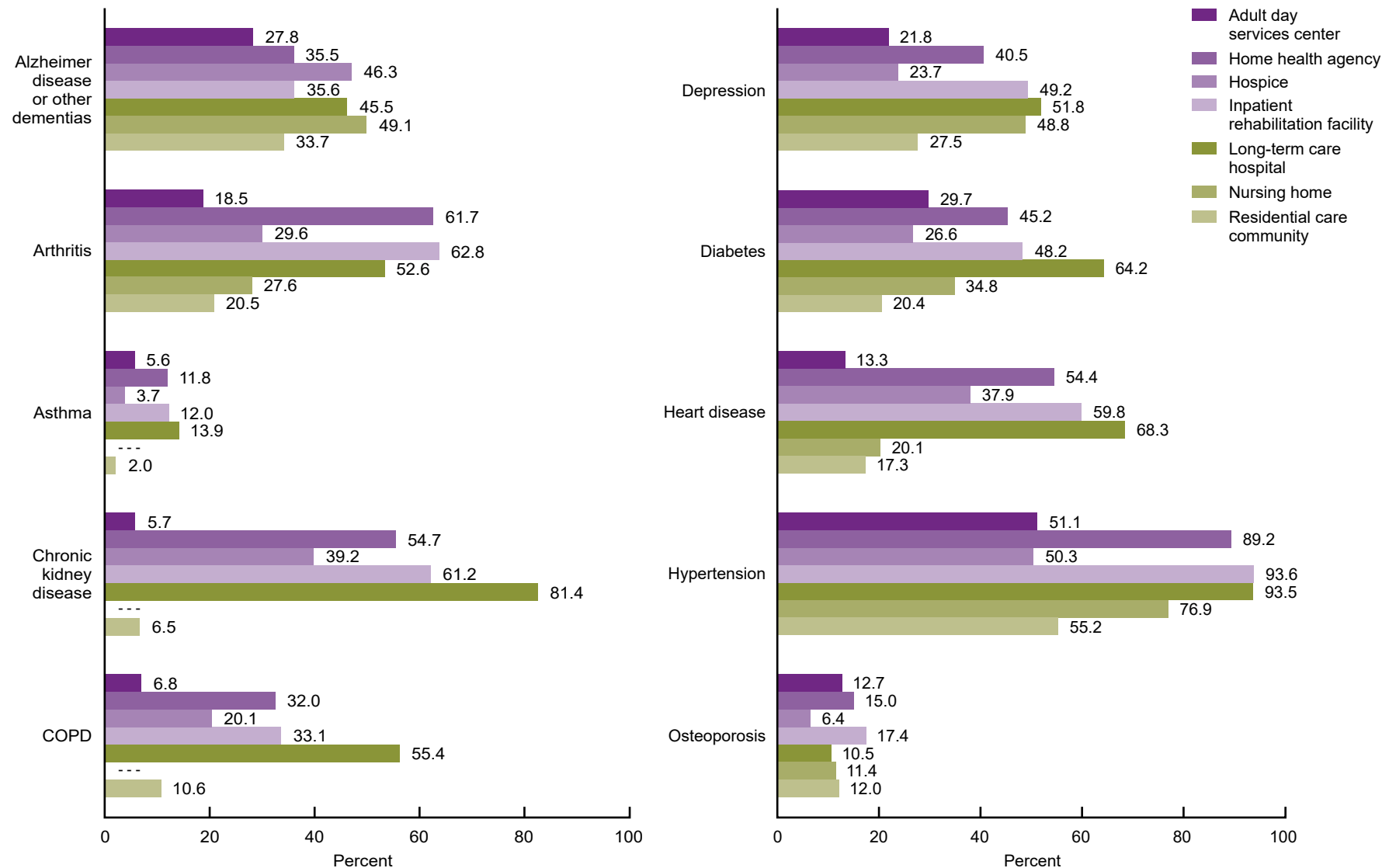
Residential care communities had the fewest residents that needed assistance with dressing, toileting, transferring in and out of bed or chair, and eating than services users in other sectors. Nearly all patients in inpatient rehabilitation facilities needed assistance with bathing, dressing, toileting, locomotion, and transferring.

Adverse events in services users

This report estimates the prevalence of overnight hospitalizations, emergency department visits, and falls as indicators of adverse, potentially avoidable events. For adult day services centers and residential care communities, adverse event refers to a period of 90 days before the survey. For home health agencies, adverse event refers to a period since the last Outcome and Assessment Information Set (OASIS) assessment. For nursing homes, overnight hospitalization and fall refer to the period since admission or since the prior assessment, whichever is more recent. Varying reference periods by sector do not allow for direct comparisons between sectors.

Similar percentages of home health patients had overnight hospital stays (15.0%) and emergency department visits

(16.1%) (Figure 26). About 14.6% of nursing home residents had overnight hospital stays; more short-stay residents had overnight hospital stays (23.0%) than long-stay residents (8.2%) (Appendix III, Table XIII). About 7.7% of residential care community residents and 5.4% of adult day services center participants had overnight hospital stays. About 9.7% of adult day services center participants and 12.1% of residential care residents had emergency department visits. About 29.6% of residential care community residents, 17.0% of nursing home residents, and 14.4% of adult day services center participants had falls. More long-stay nursing home residents (19.3%) than short-stay residents (13.5%) had falls. For home health patients, data for falls were not available. For nursing home residents, data for emergency department visits were not available. For hospice patients, long-term care hospital patients, and patients in inpatient rehabilitation facilities, data for emergency department visits, overnight hospital stays, and falls were not available.

Figure 24. Percentage of post-acute and long-term care services users with selected diagnoses, by sector: United States, 2017 and 2018

--- Data not available.

NOTES: Percentages for adult day services centers, nursing homes, and residential care communities were based on the number of users on a given day in 2018. Percentages for home health agencies, hospices, inpatient rehabilitation facilities, and long-term care hospitals were based on the number of patients who ended care at any time in 2017. Available data for nursing homes could not produce estimates for asthma, chronic kidney disease, and chronic obstructive pulmonary disease (COPD), because asthma and COPD were grouped together and only end-stage renal disease was available. See Appendix II in this report for definitions of conditions used for each sector. See Appendix I for more information on data sources used for each sector. Percentages are based on unrounded estimates. Access data for this figure in Table XII of Appendix III.

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2018, and Centers for Medicare and Medicaid Services data files, 2017–2018.

Figure 25. Percentage of post-acute and long-term care services users needing any assistance with activities of daily living, by sector and activity: United States, 2017 and 2018

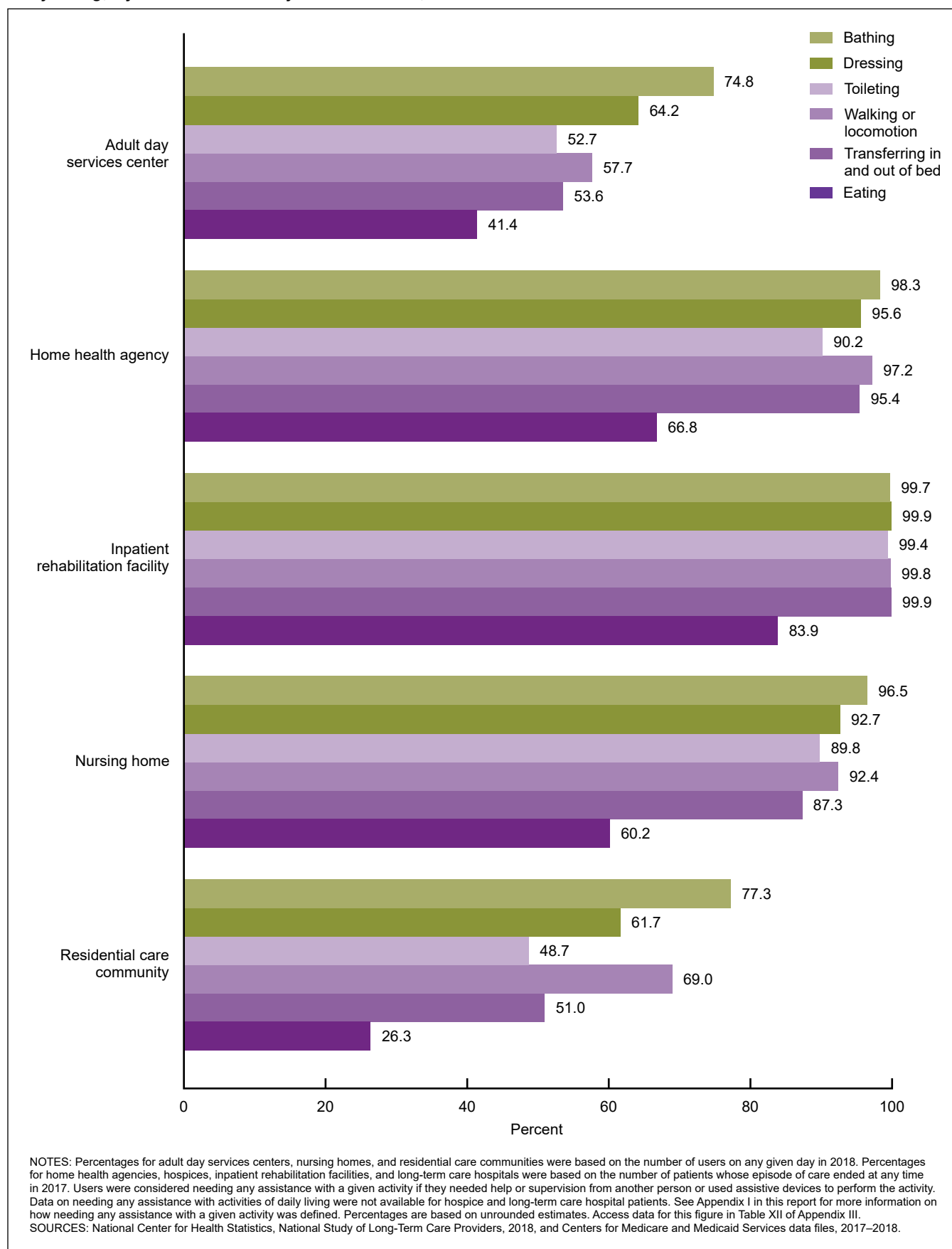
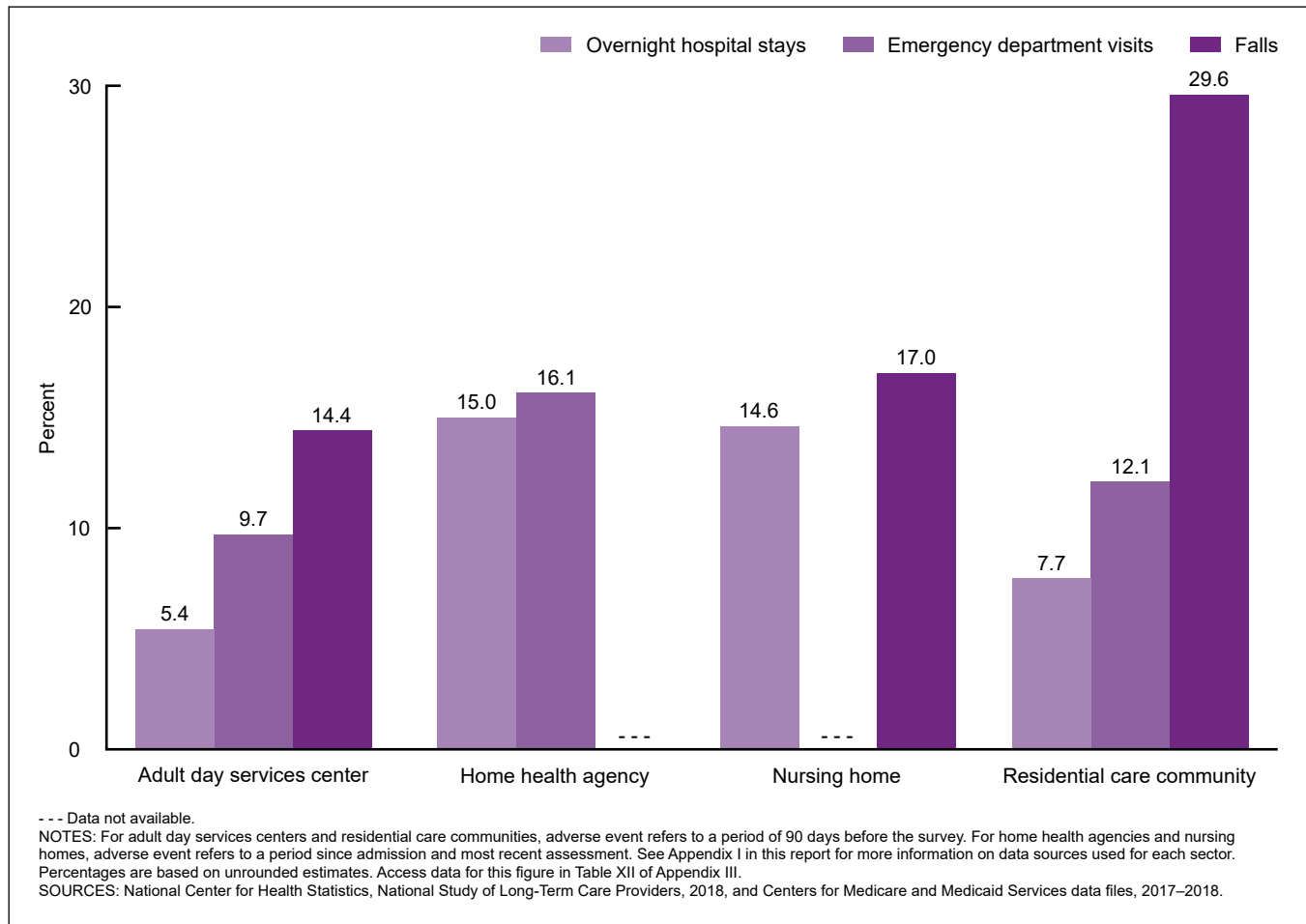


Figure 26. Percentage of post-acute and long-term care services users with overnight hospital stays, emergency department visits, and falls, by sector: United States, 2017 and 2018



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Appendix I. Technical Notes

Data Sources

This report uses data from multiple sources, including two main sources: 1) administrative data, including certification, assessment, and claims from the Centers for Medicare & Medicaid Services (CMS) on home health agencies, hospices, nursing homes, inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs); and 2) establishment-based survey data from the National Center for Health Statistics (NCHS) for residential care communities (RCCs) and adult day services centers (ADSCs). Data for all seven sectors were obtained for comparable time periods, where feasible.

Study Redesign

In 2018, the two survey sectors (ADSC and RCC) of the National Study of Long-Term Care Providers (NSLTCP) were redesigned to provide only national estimates, and a separate module was added that was designed to randomly sample two services users from eligible and participating providers. This redesign also changed the way estimates from CMS administrative person-level data sources were managed and how the estimates were derived compared with 2012, 2014, and 2016. These methodological changes may affect comparisons with estimates from earlier versions of this report. The methodological changes and their implications are addressed in this appendix.

Administrative Data: Home Health Agencies, Hospices, Nursing Homes, IRFs, and LTCHs

Provider-level data

Provider-level data files were from the Certification and Survey Provider Enhanced Reports (CASPER) system. CASPER data are collected to support the survey and certification regulatory functions of CMS, and every home health agency, hospice, nursing home, IRF, and LTCH in the United States that is certified to provide services under Medicare, Medicaid, or both is included. The CASPER data used in this report includes active providers up to the third quarter of 2018. Providers are located in the United States and District of Columbia; this report excludes American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands. The availability of variables in each file and frequency of data collection varies by sector because of different reporting requirements and time intervals for certification for each of the providers. For most sectors, CASPER files provided data on the number of providers, U.S. census regions, metropolitan statistical area derived from zip codes, ownership type, certification

status, chain status, staffing levels, and services provision. Like previous versions of this report, except for nursing homes, all CASPER data files were merged with aggregated user-level data files to calculate the average number of people served annually and the categories of the number of people served (size), and to replace outliers in staffing levels using size-specific means. For these variables, missing data is minimal for providers that were not represented in the respective user-level file. The nursing home CASPER data file was not merged with user data files because it included the number of residents (census) that could be used to calculate the above-mentioned estimates.

Home health agency file—Included 11,499 home health agencies; about 77.5% were Medicare- and Medicaid-certified, 21.4% were Medicare-certified only, and 1.4% were Medicaid-certified only. About 82.5% of these home health agencies completed a certification survey during the last 3 years (including 55.6% during the last 2 years).

Hospice file—Included 4,693 hospices; information on the type of certification (Medicare-only, Medicaid-only, or both) was not available. CMS requires certification surveys of Medicare hospices every 6–8 years, on average (44). However, most Medicare hospices (83.1%) completed a certification survey during the last 3 years (including 57.2% during the last 2 years).

Nursing home file—Included 15,595 nursing homes; about 93.0% were Medicare- and Medicaid-certified, 4.6% were Medicare-certified only, and 2.3% were Medicaid-certified only. Nearly all of these nursing homes (98.9 %) completed a certification survey during the last 18 months (including 83.0% during the last 12 months).

IRF file—Included 1,157 facilities; about 96.0% were Medicare- and Medicaid-certified, 4.2% were Medicare-certified only, and no facilities were Medicaid-certified only. About 35% completed a certification survey during the last 3 years.

LTCH file—Included 390 hospitals; almost 77.0% were Medicare- and Medicaid-certified, 23.1% were Medicare-certified only, and no hospitals were Medicaid-certified only. About 46.4% completed certification surveys during the last 3 years.

User-level data

User-level data were obtained from different sector-specific CMS assessment and claims data sources. In this report, the user-level data for home health (from Outcome-Based Quality Improvement [OBQI]), nursing homes (from Minimum Data Set Active Resident Episode Table [MARET]), and IRF (from Inpatient Rehabilitation Facility-Patient

Assessment Instrument [IRF-PAI]) were analyzed at the person level and not merged to CASPER. The Institutional Provider and Beneficiary Summary (IPBS) claims data files (for home health agencies, hospice, IRF, and LTCH), which are provided to NCHS as aggregated data, were also analyzed separately and not merged to CASPER. Therefore, no user data are missing.

Home health patients

OBQI Agency Patient-Related Characteristics Report data (formerly known as Case Mix Roll-up data) are aggregated episode-level data from the Outcome and Assessment Information Set (OASIS). OBQI data were used as the primary source of information on home health patients whose episode of care ended at any time in calendar year 2017 (discharges), regardless of payment source. These data included home health patients who received services from Medicare- and Medicaid-certified home health providers in states where those agencies were required to meet the Medicare Conditions of Participation.

A total of 4,940,270 patients from 11,180 agencies were included. The file was used to estimate the number of annual home health patients, agency size, use rates, and the percentages of home health patients by age, sex, Medicaid assistance recipient status, needing any assistance with activities of daily living (ADLs), having any hospitalizations, and having any emergency department visits.

IPBS home health data were also used because OBQI data did not use racial and ethnic categories and information on patients' diagnoses that were comparable to those available in data sources for other sectors in this report. The IPBS data file contained information on home health patients for whom Medicare-certified home health agencies submitted a Medicare claim at any time in calendar year 2017. The data file includes 4,082,193 patients from 10,857 agencies. This file was used to estimate percentages of home health patients by race and ethnicity and selected diagnosed conditions.

Hospice patients

The **IPBS hospice data file** contained information on hospice patients for whom Medicare-certified hospice agencies submitted a Medicare claim at any time in calendar year 2017. Given that 93.0% of hospice agencies were Medicare certified in 2007 (based on findings from the 2007 National Home and Hospice Care Survey) and that no other data source was available on hospice patients, IPBS hospice data were assumed to provide current coverage and information on most hospice patients. The total number of hospice patients was 1,562,524 from 4,517 hospices. These data were used to estimate the number of annual hospice patients, hospice size, use rates, and the percentages of hospice patients by age, sex, race and ethnicity, and selected diagnosed conditions.

Nursing home residents

The **CASPER nursing home file** for the third quarter of 2018 included census information on selected measures for 1,321,184 current residents of 15,595 nursing homes. This information was collected using Form CMS-672 (Resident Census and Conditions of Residents) and represents the facility at the time of the certification survey. Resident census data were used for the number of current residents, nursing home size, use rates, and the percentages of residents with ADL limitations.

MARET data contained assessment information on all active residents who were residing in a Medicare- or Medicaid-certified nursing home on the last day of the third quarter of 2018, regardless of payment source. CMS defines an active resident as "a resident whose most recent assessment transaction is not a discharge and whose most recent transaction has a target date (assessment reference date for an assessment record or entry date for an entry record) less than 150 days old. If a resident has not had a transaction for 150 days, then that resident is assumed to have been discharged." The number obtained from MARET was 1,372,477 nursing home residents from 15,525 nursing homes. These data were used to estimate the percentages of residents by age, sex, race and ethnicity, and selected diagnosed conditions. The measurement of short-stay (43.6% of residents admitted for fewer than 100 days) and long-stay (56.4% of residents admitted for 100 days or more) nursing home residents was derived from the nursing home admission and assessment dates in MARET.

Medicare Provider Analysis and Review (MedPAR) inpatient claims data from calendar year 2018 were merged with 2018 MARET data using a unique beneficiary ID number to measure overnight hospitalizations among current nursing home residents who were also Medicare beneficiaries. This method was used because the MARET data exclude residents whose last assessment was a discharge, which would include discharges to a hospital. After merging MedPAR and MARET, a total of 591,905 Medicare beneficiaries were in both the MARET and MedPAR files. Qualifying hospitalizations were measured by having any hospital discharge that occurred after the nursing home admission date.

Inpatient rehabilitation facility patients

The **IPBS IRF data file** contained information on IRF patients for whom Medicare-certified IRFs submitted a Medicare claim at any time in calendar year 2017. The total number of IRF patients was 380,430 from 1,124 facilities. These data were used to estimate the annual number of IRF patients, facility size, use rates, and the percentages of patients by age, sex, race and ethnicity, and selected diagnosed conditions.

IRF-PAI contains data at admission and upon discharge for all Medicare Part A fee-for-service patients who received services under Part A from an IRF. Patient assessments are required for facilities classified for payment under Medicare's

IRF prospective payment system, and at least 60% of the total inpatient population must require IRF treatment for 1 or more of 13 conditions (26). The number of IRF patients was 416,416 from 1,126 facilities. This data set was used to estimate percentages of patients needing assistance with ADLs.

Long-term care hospital patients

The **IPBS LTCH data file** contained information on patients for whom Medicare-certified LTCHs submitted a Medicare claim at any time in calendar year 2017. IPBS LTCH data were assumed to provide current coverage and information on most patients. The total number of LTCH patients was 115,882 from 416 hospitals. These data were used to estimate the annual number of patients, hospital size, use rates, and the percentages of patients by age, sex, race and ethnicity, and selected diagnosed conditions.

Survey Data: ADSCs and RCCs

NCHS designed and conducted surveys for the ADSC and RCC components of the fourth wave of NSLTCP in 2018. The 2018 NSLTCP surveys of ADSCs and RCCs were conducted from July 2018 to February 2019. Documentation for the 2018 RCC and ADSC NSLTCP surveys, which includes a survey methodology report, survey-specific readme documents, and downloadable examples of the provider and services user survey questionnaires, is available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm#tabs-1-2>. The NSLTCP questionnaires consist of topics common or comparable across all seven sectors (core topics) and topics that are specific to a particular sector (sector-specific topics). To make comparisons across sectors easier, the core topics for the primary data collection for ADSCs and RCCs were designed to be as similar as possible to the core topics and wording available through the CMS administrative data.

The 2018 RCC and ADSC surveys differed from previous waves in that they comprised three survey components for each sector:

1. *Eligibility screener*—Administered to sampled ADSCs and RCCs via computer-assisted telephone interview (CATI) to determine eligibility before mailing the Provider Module questionnaire.
2. *Provider module*—Questionnaire was sent to eligible respondents via mail, or respondents were asked to complete the survey online.
3. *Services user module*—Questionnaire was administered via CATI. Telephone interviewers instructed respondents to randomly sample two of all currently enrolled participants or current residents. Respondents then answered interview questions about each of the two randomly sampled users.

Eligibility screener

Unlike previous waves, the 2018 NSLTCP used a separate screener questionnaire, which was administered by CATI. The instrument was designed to assess whether ADSCs and RCCs met the study definition and were eligible to participate. The ADSC screener included questions about licensure, average daily attendance, and enrollment. The RCC screener included seven questions about licensure, number of beds and residents, provision of 24-hour supervision, number of meals, assistance with activities of daily living, and whether they exclusively serve people with intellectual disabilities or severe mental illnesses.

Provider and services user questionnaires

The ADSC and RCC provider questionnaires were administered by mail and Internet, with nonresponse follow-up by telephone. They collected information about the operations, practices, user demographics, services offered, and staffing profile of sampled ADSCs and RCCs. The services user questionnaire was administered by telephone using CATI. The respondents were instructed on the methodology for randomly selecting two services users. The services user questionnaire included questions about demographics, length of stay, charges and payment sources, health and functional status, health care use, and service use. Most of the questions were the same for ADSCs and RCCs; however, a few sector-specific questions were included as well.

ADSCs

The sampling frame obtained from the National Adult Day Services Association (NADSA) contained ADSCs that self-identified as adult day care, adult day services, or adult day health services centers that were in operation as of November 2017. After removing duplicates, the final frame consisted of 5,478 ADSCs that were included in data collection efforts. The set of eligibility criteria for study participation was determined by self-report in the screener section of the questionnaire. To be eligible, ADSCs had to:

- Be licensed or certified by the state specifically to provide adult day services or accredited by the Commission on Accreditation of Rehabilitation Facilities, or authorized or otherwise set up to participate in Medicaid (Medicaid state plan, Medicaid waiver, or Medicaid managed care), or as part of a Program of All-Inclusive Center for the Elderly.
- Have an average daily attendance of at least one participant based on a typical week.
- Have at least one participant enrolled at the designated center at the time of the survey.

As a result of using these eligibility criteria, all responding eligible centers participated in Medicaid or were in some way regulated by the state. From a frame of 6,361 ADSCs, 1,650 were randomly selected for the survey. Of the 1,650 sampled ADSCs, eligibility could not be determined for 543.

Among those cases where eligibility could be determined (1,107), 917 (83%) were eligible and 190 (17%) were ineligible because they did not meet the survey criteria or were out of business. However, 543 ADSCs (33%) could not be contacted, so the final eligibility status of these centers was unknown. Eligibility rate was calculated by the number of known eligible ADSCs divided by the total number of ADSCs with known eligibility status. ADSCs that were invalid or out of business and those that screened out as ineligible were classified as “known ineligibles.” Using the eligibility rate of 83%, a proportion of these ADSCs of unknown eligibility was estimated to be eligible; therefore, 450 ADSCs of unknown eligibility were assumed as eligible. The total number of eligible ADSCs was estimated as 1,367 (917 plus 450). Of the 1,367 in-scope and presumed in-scope ADSCs, 672 of them completed the provider questionnaire, for a weighted response rate (for differential probabilities of selection) of 50%. To account for ADSCs of unknown eligibility, the weights of the ADSCs with known eligibility were adjusted upward based on the proportion of ADSCs that were actually known to be eligible. Adjustments were also made to account for nonresponse. Response rates are calculated using standards set by American Association of Public Opinion Research (AAPOR). AAPOR Response Rate #4 calculations include assumptions of eligibility among potential respondents that are not interviewed. AAPOR Response Rate #4 formula was used to calculate response rates for ADSCs (completed questionnaires divided by [completed eligible questionnaires] plus [eligibility rate multiplied by cases of unknown eligibility]).

Two participants were randomly selected from eligible ADSCs that agreed to participate in the study. A questionnaire was completed for a total of 1,255 participants from 630 ADSCs, resulting in a participant response rate of 46%. About 66% of ADSCs completed both provider and at least one participant module, and the rest of the ADSCs completed either the provider or the participant module.

RCCs

The sampling frame was constructed from lists of licensed RCCs obtained from the state licensing agencies in each of the 50 states and the District of Columbia. The 2018 NSLTCP used the same definition of RCC and the same approach to create the sampling frame (45) that was used for the 2010 National Survey of Residential Care Facilities (NSRCF) (46). To be eligible for the study, an RCC must be licensed, registered, listed, certified, or otherwise regulated by the state to:

- Provide room and board with at least two meals a day and around-the-clock, onsite supervision.
- Help with personal care, such as bathing and dressing or health-related services, such as medication management.
- Have four or more licensed, certified, or registered beds.
- Have at least one resident currently living in the RCC.
- Serve a predominantly adult population.

RCCs licensed to exclusively serve people with severe mental illnesses, intellectual disability, or developmental disability, as well as nursing homes, were excluded.

From a frame of 43,770 RCCs, 2,090 were randomly selected for the survey. Of the 2,090 sampled RCCs, eligibility could not be determined for 977. Among those for which eligibility could be determined (1,113), 857 (77%) were eligible and 256 (23%) were ineligible because they did not meet the survey criteria or were out of business. However, 977 RCCs (33%) could not be contacted; therefore, the final eligibility status of these RCCs was unknown. The eligibility rate is calculated by the number of known eligible RCCs divided by the total number of RCCs with known eligibility status. RCCs that were invalid or out of business and RCCs that screened out as ineligible were classified as known ineligibles. Using the eligibility rate of 77%, a proportion of these RCCs of unknown eligibility was estimated to be eligible; 752 RCCs of unknown eligibility were assumed to be eligible. The total number of eligible RCCs was estimated as 1,609 (857 plus 752). Of the 1,609 in-scope and presumed in-scope RCCs, 503 completed the provider questionnaire, for a weighted response rate (for differential probabilities of selection) of 30%. Response rates are calculated using standards set by AAPOR, specifically AAPOR’s Response Rate #4. AAPOR Response Rate #4 calculations include assumptions of eligibility among potential respondents that are not interviewed. AAPOR Response Rate #4 formula was used to calculate response rates for RCCs (completed questionnaires divided by [completed eligible questionnaires] plus [eligibility rate multiplied by cases of unknown eligibility]). To account for the RCCs of unknown eligibility, the weights of the RCCs with known eligibility were adjusted upward based on the proportion of communities that were actually known to be eligible. Adjustments were also made to account for nonresponse.

Two residents were randomly selected from eligible RCCs that agreed to participate. A questionnaire was completed for a total of 904 residents from 452 RCCs, resulting in a response rate of 28%. About 48.9% of RCCs completed both the provider and at least one resident module, and the remaining RCCs either completed the provider module or the resident module.

Differences in number of RCCs estimated in 2010, 2012, 2014, 2016, and 2018

Estimates of the number of RCC providers varied between the 2010 NSRCF and the 2012 NSLTCP. NCHS assessed these differences and concluded that they were largely related to the eligibility differences between the 2010 NSRCF and the 2012 NSLTCP. While both surveys used the same eligibility criteria, overall screener-based eligibility dropped from 81.0% in the 2010 NSRCF to 67.1% in the 2012 NSLTCP (Table I). The screener-based eligibility rate was computed based on RCCs that completed the screening questions

Table I. Eligibility rate among residential care communities, by bed size and survey year

Eligible community	National Study of Long-Term Care Providers				2010 National Survey of Residential Care Facilities
	2018	2016	2014	2012	
Overall	77.0	73.8	80.7	67.1	81.0
Bed size			Percent		
Small (4–10 beds)	61.3	55.5	Rate	45.8	63.6
Medium (11–25 beds)	75.0	74.5	65.3	68.5	82.8
Large (26–100 beds)	85.1	86.9	81.0	82.4	94.5
Extra large (more than 100 beds)	92.1	91.2	91.7	85.5	95.9
			93.8		

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2012, 2014, 2016, and 2018, and National Survey of Residential Care Facilities, 2010.

(completed eligible divided by [completed eligible plus completed ineligible]).

This decrease in the screener-based eligibility rate was most pronounced for providers with small bed sizes (4–10 beds): a decrease from 63.6% in 2010 to an estimated 45.8% in 2012. Given that the 2012 NSLTCP ($n = 11,690$) had a much larger sample than NSRCF ($n = 3,605$), and that small bed size providers make up the largest proportion of all RCCs, the lower eligibility rate in 2012 compared with 2010 among small-sized RCCs had a large effect on the differences in the eligibility rate for the two surveys.

The discrepancy in eligibility between the 2010 NSRCF and the 2012 NSLTCP was likely due to differences in data collection modes used in 2010 (interviewer-administered CATI screener followed by an in-person interview for eligible communities) and 2012 (primarily respondent self-administered screener and questionnaire completed by mail or Internet), and the resulting differences in how the respondents who self-administered the questionnaire interpreted the eligibility questions. In the 2012 NSLTCP, the most common eligibility criterion that providers, particularly small bed size RCCs, did not meet was provision of onsite, 24-hour supervision. Some respondents using the self-administered modes (hard-copy questionnaire or Internet questionnaire) likely did not fully understand this question and may have screened themselves out of the study erroneously. For more information, see “Long-Term Care Services in the United States: 2013 Overview” (available from: https://www.cdc.gov/nchs/data/series/sr_03/sr03_037.pdf) and the 2012 RCC data file (available from: https://www.cdc.gov/nchs/data/nsltcp/NSLTCP_RCC_Readme_RDC_Release.pdf). Cognitive testing was conducted to assess these eligibility questions, and preliminary findings supported this hypothesis. To address these differences, NCHS revised the NSLTCP eligibility question on whether the RCC provided 24-hour supervision. The eligibility question asking whether the RCC provided 24-hour supervision is Question 4 on the 2012 questionnaire (https://www.cdc.gov/nchs/data/nsltcp/2012_NSLTCP_Residential_Care_Communities_Questionnaire.pdf) and Question 6 on the 2014 questionnaire (https://www.cdc.gov/nchs/data/nsltcp/2014_NSLTCP_Residential_Care_Communities_Questionnaire.pdf).

[gov/nchs/data/nsltcp/2014_NSLTCP_Residential_Care_Communities_Questionnaire.pdf](https://www.cdc.gov/nchs/data/nsltcp/2014_NSLTCP_Residential_Care_Communities_Questionnaire.pdf).

Results from the 2014 wave indicated that the overall eligibility rate increased to 80.7%, similar to the 2010 NSRCF rate. However, the 2014 eligibility rates for all bed size categories except small providers (4–10 beds) were slightly lower compared with the 2010 NSRCF (Table I) which may be attributed to mode differences between 2010 and 2014. In 2016, the overall eligibility rate decreased to 73.8%. Decline in eligibility was observed in all bed size categories, but mostly among the small and medium categories. In 2018, the overall eligibility rate increased to 77%, and the eligibility rate for small RCCs was similar to the 2010 eligibility rate. The estimated national number of RCCs ranged from 31,100 in 2010; 22,200 in 2012; 30,200 in 2014; and 28,900 in 2016 to 31,400 in 2018. The number of beds were estimated at 971,900 in 2010; 851,400 in 2012; 1,006,300 in 2014; 996,100 in 2016; and 1,183,600 in 2018 (Table II). For more information about differences in eligibility rates over survey years, see “Eligibility Rate Differences Among Residential Care Communities: 2010 National Survey of Residential Care Facilities and 2012–2018 National Study of Long-Term Care Providers” (available from: <https://dx.doi.org/10.15620/cdc.115807>).

Population Bases for Computing Rates

Populations used for computing rates of national supply by region (Figure 3) and use of services by people aged 65 and over per 1,000 people aged 65 and over were obtained from the U.S. Census Bureau’s Population Estimates Program. The program produces estimates of the population for the United States, its states, counties, cities, and towns, and for the Commonwealth of Puerto Rico and its municipalities. Demographic components of population change (births, deaths, and migration) were produced at the national, state, and county levels of geography. Additionally, housing unit estimates were produced for the country, states, and counties. Population estimates for each state and territory were not subject to sampling variation because the sources

Table II. Weighted number and percent distribution of residential care communities, by bed size and survey year

Characteristic	National Study of Long-Term Care Providers								2010 National Survey of Residential Care Facilities	
	2018		2016		2014		2012		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Number of residential care communities.	31,400	100.0	28,900	100.0	30,200	100.0	22,200	100.0	31,100	100.0
Small (4–10 beds)	14,700	46.7	13,200	45.6	14,500	47.9	9,300	41.7	15,400	50.0
Medium (11–25 beds)	4,000	12.8	4,400	15.3	4,500	14.9	3,700	16.8	4,900	16.0
Large (26–100 beds)	9,800	31.1	9,100	31.5	9,100	30.1	7,300	32.7	8,700	28.0
Extra large (more than 100 beds)	2,900	9.3	2,200	7.7	2,100	7.0	1,900	8.7	2,100	7.0
Number of beds	1,183,600	100.0	996,100	100.0	1,006,300	100.0	851,400	100.0	971,900	100.0
Small (4–10 beds)	90,400	7.6	81,800	8.2	89,600	8.9	64,700	7.6	96,700	9.9
Medium (11–25 beds)	71,900	6.1	76,500	7.7	76,900	7.6	86,900	10.2	86,800	8.9
Large (26–100 beds)	565,300	47.8	518,300	52.0	522,600	51.9	434,800	51.1	493,800	50.8
Extra large (more than 100 beds)	456,000	38.5	319,500	32.1	317,200	31.5	265,000	31.1	294,600	30.3

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2012, 2014, 2016, and 2018, and National Survey of Residential Care Facilities, 2010.

used in the demographic analysis were complete counts. For a more detailed description of the methodology, see: <https://www.census.gov/programs-surveys/popest.html>.

Comparing NSLTCP Estimates With Estimates From Other Data Sources

Administrative data

Home health agencies—Available estimates from the 2017–2018 data files were compared with estimates from 2015–2016 CASPER and OBQI home health data in NSLTCP (5), the 2020 and 2019 Medicare Payment Advisory Commission (MedPAC) Medicare Payment Policy report to Congress using 2018 and 2017 data, respectively (2,47), and CMS Home Health Compare data in 2018 (48). The 2018 CASPER included 700 fewer agencies compared with 2016 CASPER data, but the number of agencies in MedPAC and Home Health Compare were similar. In 2018 CASPER, 82% of agencies were for profit compared with 81% in 2016 CASPER, 88% in 2018 MedPAC (2), and 81.7% in 2018 Home Health Compare. The percentages of agencies with social work, therapeutic, and skilled nursing services were similar in the 2018 and 2016 NSLTCP and Home Health Compare. More than 4.9 million patients were included in the 2017 OBQI compared with 4.5 million in the 2015 OBQI and 3.4 million Medicare beneficiaries using home health care in MedPAC in 2017 (47).

Hospices—Selected estimates from the 2017–2018 hospice data files were compared with 2016 CASPER and 2015 IPBS hospice data (5), 2017 and 2018 MedPAC data (2,47), and CMS Hospice Compare in 2018 (49). About 350 more agencies were included in 2018 CASPER compared with 2016 CASPER (4,350 agencies), but a similar number of home health agencies in MedPAC (2) and Hospice Compare in 2018. Similar percentages of for-profit agencies were seen

across all sources. About 1.6 million patients were included in the 2017 IPBS compared with 1.5 million patients in the 2017 MedPAC (47) and 1.4 million in the 2015 IPBS.

Nursing homes—Available estimates from the 2018 nursing home files were compared with 2016 NSLTCP data (5), 2018 data in MedPAC (2), and 2018 CMS Nursing Home Compare (50). The number of nursing homes in 2018 CASPER, 2016 CASPER, and 2018 Nursing Home Compare data were similar; however, the number of nursing homes was about 600 fewer as reported in MedPAC, which is limited to Medicare-certified nursing homes. The percentage of for-profit, metropolitan, and Medicare- and Medicaid-certified nursing homes were similar across all data sources. More than 1.3 million residents were reported on a given day in 2018 CASPER and 2018 Nursing Home Compare compared with 1.4 million in 2016 CASPER and 1.5 million Medicare beneficiaries in MedPAC in 2018.

Staffing information obtained from 2018 CASPER is statistically significantly lower compared with 2016 CASPER because, beginning in 2018, CMS required nursing homes to upload payroll information to the Payroll Based Journal (PBJ) system (51). According to requirements of the Affordable Care Act (Section 6106), this new method of reporting requires facilities to submit agency and contract care staffing data based on payroll rather than self-reported information. Comparisons show that previous reports of CASPER staffing levels were statistically significantly higher than PBJ staffing information (52), which is consistent with comparisons between 2018 data in this report (Appendix III, [Table X](#)) and the previous report (4).

IRF—Selected estimates from the 2017–2018 IRF files were compared with estimates in MedPAC (2,47) and 2018 IRF CMS Compare data (53). The number of IRFs and percentage of for-profit IRFs were similar across all three data sources. A total of 375,100 patients were reported in 2017 IPBS data and 355,000 patients were reported in 2017 MedPAC (47).

LTCH—Selected estimates from the 2017–2018 LTCH files were compared with MedPAC (2,47) and 2018 LTCH CMS Compare data (54). The number of LTCHs was lower in MedPAC in 2018 (374) than in CASPER (390) and LTCH Compare (401), with a similar average capacity in CASPER and LTCH Compare. The percentage of for-profit hospitals was similar in CASPER (67.2%) and LTCH Compare (65.8%), compared with 78.0% in MedPAC in 2018 (2). About 116,000 LTCH patients were in 2017 IPBS data compared with about 103,000 patients in MedPAC 2017 data (47).

Survey data

Estimates from the 2018 ADSC and RCC components of NSLTCP were compared with estimates from the earlier waves of NSLTCP. Differences between the 2010 NSRCF and the 2012, 2014, 2016, and 2018 NSLTCP RCC survey estimates for the number of RCCs, beds, and residents are discussed earlier in this appendix. The 2018 estimates for selected provider and user characteristics for both ADSCs and RCCs were found to be comparable with earlier waves of the study, with a few exceptions.

Differences Between Survey Waves

The ADSC and RCC components of NSLTCP have evolved over the four waves of the study in terms of new questions, changes in question wording and response categories, as well as data editing. A comparison of the questions used in the four waves lists all of the new items added to NSLTCP (<https://www.cdc.gov/nchs/data/npals/2012-2018-Survey-Content-Crosswalk-508.pdf>). In addition to new questions, the question wording and response categories for several questions were revised in the 2018 wave, as listed here. Some of these differences may have led to differences in data editing methods, as well as differences in estimates between the waves.

- Response categories for the revenue source question in the ADSC questionnaires (Questions 11 in 2012, 9 in 2014, and 10 in 2016 and 2018) were revised after each wave. The 2012 and 2014 questions included six response categories: Medicaid, Medicare, other government, out-of-pocket payment by the participant family, private insurance, and other. In 2014, a brief definition was added to the Medicaid response category to specify that this category include Medicaid managed care programs. In 2016, the number of response categories increased to eight, with the “other government” category broken into three separate categories: Older Americans Act, Veterans Administration, and other federal, state, or local government. The Medicaid category definition was also revised to include revenue from a Medicaid state plan, Medicaid waiver, Medicaid managed care, or California regional center. In 2018, another response category was added, “Program of All-Inclusive Care for the Elderly (PACE).”

- Response categories for questions on services provided in the ADSC questionnaires (Questions 19 in 2012, 12 in 2014, 30 in version A and 27 in version B in 2016, and 23 in 2018) and the RCC questionnaires (Questions 16 in 2012, 15 in 2014, 28 in version A and 29 in version B in 2016, and 26 in 2018) were revised after each wave. In 2012, each service item had four response categories indicating that the service was “not provided,” “provided only by residential care community/adult day services center employees,” “provided only by others through arrangement,” or “provided by both residential care community/adult day services center employees and others through arrangement.” In 2014, respondents were asked to mark one or more of five categories indicating that the service was provided by “paid residential care community/adult day services center employees,” “arranging for and paying outside vendors,” “arranging for outside vendors paid by others,” “referral,” or “none of these apply/not provided.” In 2016, the response options were revised to four categories indicating that an RCC or ADSC “provides the service by paid residential care community/adult day services center employees,” “arranges for the service to be provided by outside services,” “refers residents/participants or family to outside service providers,” or “does not provide, arrange, or refer for this service.” These response options stayed the same in the 2018 questionnaire.
- Formatting and wording for staffing questions in the ADSC (Questions 23 in 2012, 14 in 2014, 31–33 in version A and 28–30 in version B in 2016, and 28 and 37 in 2018) and RCC (Questions 26 in 2012, 17 in 2014, 29–31 in version A and 30–32 in version B in 2016, and 31 and 41 in 2018) questionnaires changed between the four waves. In 2012, respondents had the option of providing either the separate numbers of full-time and part-time staff or the number of full-time equivalent (FTE) staff. In 2014, the response categories included only the number of full-time staff and the number of part-time staff (not FTEs). In both 2012 and 2014, the staffing questions were formatted as a block to include both employees and contract staff. In 2016, respondents continued to provide the number of full-time and part-time staff (not FTEs), but the questions were formatted in two separate blocks for employees and contract staff. Also in 2016, respondents could skip the contract staff block if they answered “no” to a stem question about having any contract or agency staff. The 2018 questions repeated the 2016 version but included an additional set of questions about turnover.

The differences in formatting in 2016 led to some methodological changes to the staffing data edits in 2016 compared with previous waves. Details about differences in how the staffing data were edited in 2014 and 2016 are provided in the “Data Description and Usage (Readme)” documents for the ADSC survey (https://www.cdc.gov/nchs/data/nsltcp/NSLTCP_2016_ADSC_Readme_RDC.pdf) and

the RCC survey (https://www.cdc.gov/nchs/data/nsltcp/NSLTCP_2016_RCC_Readme_RDC.pdf).

- For the first three waves of NSLTCP, the services user questions were aggregated at the provider level, and variation occurred in how the aggregate questions were asked. The ADL question about walking or locomotion in the ADSC (Questions 32g in 2012, 19f in 2014, and 16f in 2016) and RCC (Questions 34g in 2012, 22f in 2014, and 17f in 2016) questionnaires changed. The 2012 and 2016 waves included a brief description stating that assistance with locomotion or walking included using a cane, walker, wheelchair, or help from another person; this description was not included in the 2014 wave.
- The question on falls in the ADSC (Questions 22 in 2014 and 25 in version A in 2016) and RCC (Questions 25 in 2014 and 23 in version A in 2016) questionnaires changed. The 2014 wave asked about the number of falls (any) in the last 90 days and directed respondents to include onsite and offsite falls. The 2016 wave added instructions for respondents to include falls that occurred in the RCC or ADSC or offsite, whether the resident or participant was injured, and whether anyone saw the resident or participant fall or caught them. Respondents were also asked to count only one fall per resident or participant who fell, even if the resident or participant fell more than once, and to include a resident or participant who had a fall in the last 90 days even if they were currently in a hospital or rehabilitation facility.
- In 2018, a separate services user module was used to ask questions about two randomly selected services users in each eligible and participating ADSC and RCC. Using a separate services user module may have resulted in differences in services user estimates between 2018 and earlier years of the study. To assess if estimates of services user characteristics varied by source of services user data (aggregated services user questions or a separate services user module), a small set of questions about services users was included in the provider module (as in previous years) and the services user module. These included questions about the age and sex of services users and whether they needed assistance with bathing and eating. Differences in estimates of age and sex did not vary significantly by source of services user data (provider module or services user module). However, estimates of need for assistance with bathing varied significantly for both sectors, and estimates of need for assistance with eating varied significantly for ADSCs by source of data (provider module or services user module). The ADSC provider module estimated 27.4% and 35.0% of participants needing assistance with eating and bathing, respectively; 41.4% and 74.8% of participants in the services user module were reported to need assistance with eating and bathing, respectively. For RCCs, 64.6% and 77.3% of residents were reported as needing assistance with bathing in the provider or services user module, respectively. These differences indicate an underestimation of need for assistance for the selected

ADLs in the provider module. Similar underestimation of other services user characteristics may exist but was difficult to assess in the absence of comparable variables in the provider and services user modules.

Data Analysis

Results describing providers were analyzed at the agency or facility level, and most user-level data were analyzed at the individual level, except for some aggregated user-level data files in the administrative data sectors as described previously. Findings from administrative data were treated as sample based, and population standard errors were calculated to account for some random variability associated with the data.

For the survey data, point estimates and standard errors were calculated using appropriate design and weight variables to account for complex sampling, when applicable. Statistical analysis weights were computed as the product of two components: the sampling weight and adjustment for unknown eligibility due to nonresponse. To adjust the ADSC and RCC weights for unknown eligibility, the SUDAAN procedure WTADJUST (47) was used; the procedure uses a constrained logistic model to predict known eligibility and to compute the unknown eligibility adjustment factors for the weights. Standard errors for survey data were computed using Taylor series linearization. All estimates meet NCHS guidelines for reliability or proportions (55).

Variance Estimates

Administrative data

The home health, hospice, nursing home, IRF, and LTCH data files were created using CMS administrative data. The files represented 100% of the CMS regulated providers and users or beneficiaries of those providers at the specific time that the data set was constructed, and they were not subject to sampling variability. Therefore, the standard errors could be seen as being zero. However, there might be some random variability associated with the numbers. For example, if the administrative data were drawn at a different time, the estimates might be different. The data also are subject to potential data entry and other reporting errors. To account for these types of variability, the administrative data estimates were treated as a simple random sample, providing conservative standard errors for the random variation that might be associated with the data.

Survey data: ADSCs and RCCs

Data for ADSCs and RCCs were collected using nationally representative samples. Consequently, the RCC and ADSC estimates were subject to sampling variability and nonresponse variability. The variability for the ADSC and RCC estimates was treated as if they were from stratified

samples without replacement. The initial estimation strata for ADSCs are defined by region and metropolitan statistical area (MSA), and for RCCs the initial estimation strata were defined by region, size, and MSA.

Statistical Significance Tests

All statements in this report describing differences in estimates indicate that statistical testing was performed, and the differences between two-point estimates were determined to be statistically significant at the 0.05 level. Differences among sectors were evaluated using *t* tests. All statistical significance tests were two sided using $p < 0.05$ as the significance level. Lack of comment regarding the difference between any two statistics does not necessarily mean that the difference was tested and found not to be statistically significant. Data analyses were performed using SAS version 9.3, the SAS-callable SUDAAN version statistical package (56), and Stata/SE 14.0 (57). Individual estimates may not sum to totals because estimates were rounded.

Data Editing

Data files were examined for missing values and inconsistencies. To minimize cases with missing values and inconsistencies, RCC and ADSC survey instruments were programmed to show critical items with missing values in the CATI and Internet applications, to inform respondents that an answer was required, and to include data validations such as asking respondents to check an answer if it was not the expected number. For instance, if responses to items that needed to total the number of RCC residents or ADSC participants did not match the total, respondents were reminded to check their responses.

For the ADSC and RCC survey data, selected resident- or participant-level variables were imputed (such as age, race, and sex). Although administrative data were also reviewed for missing values and inconsistencies, the files did not go through the same data cleaning and editing as the survey data.

For both survey and administrative data, staffing information was edited in the same manner. Outliers were defined as values two standard deviations above or below the size-specific mean for a given staff type, where size was defined as number of people served. When calculating the size-specific mean for a given staff type, cases were coded as missing if the number of FTE registered nurse, FTE licensed practical or vocational nurse, or FTE personal care aide employees was greater than 999, or if the number of FTE social work employees or FTE activities director or staff employees was greater than 99. Additional edits were made to the staffing variables, some of which differed from earlier waves of NSLTCP. For the definitions and categories of number of people served for each sector, see Appendix II.

Missing data

Cases with missing data were excluded from analyses on a variable-by-variable basis. Variables used in this report had 10% or fewer cases with missing data.

Limitations

Differences in Question Wording Among Data Sources

While every effort was made to match question wording in the NSLTCP surveys to the administrative data available through CMS, some differences remain and may affect comparisons between these two data sources (for example, capacity and reference periods used for adverse events). When available and appropriate, findings were presented on a given topic for all sectors. However, due to two types of data-related differences, for some topics in the report, information was provided for some but not all seven sectors.

The first type of data-related difference was due to the settings served by the seven sectors. For example, home health agencies were not residential and, consequently, it was not relevant to discuss the number of beds in this sector, while it was relevant to present this data for nursing homes, RCCs, IRFs, and LTCHs.

The second difference was attributable to differences among the administrative data sources used for nursing homes, home health agencies, hospices, IRFs, and LTCHs. For example, the CASPER data did not include information on whether home health agencies offered mental health or counseling services, but they did include this information for nursing homes and hospices. The NSLTCP RCC and ADSC surveys included additional content that was not presented in this report because no comparable data existed in the CMS administrative data (such as electronic health records and health information exchange). NCHS produced *Data Briefs* and weighted estimates tables that presented additional results on ADSCs and RCCs, using survey data not included in this overview report. These latest reports are available from: <https://www.cdc.gov/nchs/npals/studyresults.htm>.

Differences in Time Frames Among Data Sources

Different data sources had different time frames or reference periods. For instance, user-level data used for home health agencies (OBQI and IPBS home health data) were from patients who received services at any time in calendar year 2017. In contrast, survey data on RCC residents and ADSC participants and CMS data on nursing home residents were from current services users in 2018. In this report, “current” participants or residents in 2018 refers to those participants enrolled in the ADSC, or residents living in the nursing home or RCC, on the day of data collection in 2018, rather than the

total number of participants ever enrolled in the center or residents ever living in the nursing home or RCC at any time throughout the 2018 calendar year. As such, the estimated number of ADSC participants represents current participants in 2018. The estimated number of home health patients represents patients who ended care in 2017 (discharges). The estimated number of hospice, IRF, and LTCH patients represents patients who received care at any time in 2017. The estimated number of nursing home residents represents current residents in 2018. The estimated number of RCC residents represents current residents in 2018. Given these differences in denominator, comparisons across all seven sectors were not feasible for some variables.

Appendix II. Crosswalk of Definitions by Sector

Table III. Geographic and organizational characteristics, by sector

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Number of providers ¹	Number of paid, regulated long-term and post-acute care services providers	Number of ADSCs based on 2018 National Study of Long-Term Care Providers (NSLTCP)	Number of assisted living and similar RCCs based on 2018 NSLTCP	Number of HHAs certified to provide services under Medicare, Medicaid, or both in third quarter 2018	Number of hospices certified to provide services under Medicare, Medicaid, or both in third quarter 2018	Number of IRFs certified to provide services under Medicare, Medicaid, or both in third quarter 2018	Number of LTCHs certified to provide services under Medicare, Medicaid, or both in third quarter 2018	Number of NHs certified to provide services under Medicare, Medicaid, or both in third quarter 2018
Region	Grouping of states into geographic areas corresponding to groups used by the U.S. Census Bureau	Four census regions 1 = Northeast 2 = Midwest 3 = South 4 = West	Four census regions 1 = Northeast 2 = Midwest 3 = South 4 = West	Derived from: [STATE_CD] 1 = Northeast 2 = Midwest 3 = South 4 = West	Derived from: [STATE_CD] 1 = Northeast 2 = Midwest 3 = South 4 = West	Derived from: [STATE_CD] 1 = Northeast 2 = Midwest 3 = South 4 = West	Derived from: [STATE_CD] 1 = Northeast 2 = Midwest 3 = South 4 = West	Derived from: [STATE_CD] 1 = Northeast 2 = Midwest 3 = South 4 = West
Metropolitan statistical area (MSA) and micropolitan statistical area	Geographic entities defined by 2013 Office of Management and Budget standards for delineating MSAs A metropolitan area contains a core urban area of 50,000 or more population, and a micropolitan area contains an urban core of at least 10,000 (but less than 50,000) population.	Metropolitan statistical area status 1 = Metropolitan 2 = Micropolitan 3 = Neither	Metropolitan statistical area status 1 = Metropolitan 2 = Micropolitan 3 = Neither	Derived from: [ZIP_CD] 1 = Metropolitan 2 = Micropolitan 3 = Neither	Derived from: [ZIP_CD] 1 = Metropolitan 2 = Micropolitan 3 = Neither	Derived from: [ZIP_CD] 1 = Metropolitan 2 = Micropolitan 3 = Neither	Derived from: [ZIP_CD] 1 = Metropolitan 2 = Micropolitan 3 = Neither	Derived from: [ZIP_CD] 1 = Metropolitan 2 = Micropolitan 3 = Neither

See footnotes at end of table.

Table III. Geographic and organizational characteristics, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Capacity ²	The number of beds or spaces available to the community	Q2. What is the maximum number of participants allowed at this adult day services center at this location? This may be called the allowable daily capacity and is usually determined by law or by fire code, but may also be a program decision.	Q2. At this residential care community, what is the number of licensed, registered, or certified residential care beds? Include both occupied and unoccupied beds.	...	...	Derived from: [CRTFD_BED_CNT] Number of beds in Medicare- or Medicaid-certified areas within a facility	Derived from: [CRTFD_BED_CNT] Number of beds in Medicare- or Medicaid-certified areas within a facility	Derived from: [CRTFD_BED_CNT] Number of beds in Medicare- or Medicaid-certified areas within a facility

See footnotes at end of table.

Table III. Geographic and organizational characteristics, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Ownership	Classified into three categories: for profit, nonprofit, and government and other	1 = For profit 2 = Nonprofit 3 = Government and other	1 = For profit 2 = Nonprofit 3 = Government and other	1 = For profit 2 = Nonprofit 3 = Government and other	1 = For profit 2 = Nonprofit 3 = Government and other	1 = For profit 2 = Nonprofit 3 = Government and other	1 = For profit 2 = Nonprofit 3 = Government and other	1 = For profit 2 = Nonprofit 3 = Government and other
		Derived from: [OWNERSHP]	Derived from: [OWNERSHP]	Derived from: [GNRL_CNTL_TYPE_CD]	Derived from: [GNRL_CNTL_TYPE_CD]	Derived from: [GNRL_CNTL_TYPE_CD]	Derived from: [GNRL_CNTL_TYPE_CD]	Derived from: [GNRL_CNTL_TYPE_CD]
		Q3. What is the type of ownership of this adult day services center? 1 = Private, nonprofit 2 = Private, for profit 3 = Publicly traded company or limited liability company (LLC) 4 = Government—federal, state, county, local	Q3. What is the type of ownership of this adult day services center? 1 = Private, nonprofit 2 = Private, for profit 3 = Publicly traded company or limited liability company (LLC) 4 = Government—federal, state, county, local	01 = Voluntary NP, religious affiliation 02 = Voluntary NP, private 03 = Voluntary NP, other 04 = Proprietary 05 = Government, state or county 06 = Government, combination 07 = Government, voluntary 08 = Government, local	01 = Nonprofit, church 02 = Nonprofit, private 03 = Nonprofit, other 04 = Proprietary, individual 05 = Proprietary, partnership 06 = Proprietary, corporation 07 = Proprietary, other 08 = Government, state 09 = Government, county 10 = Government, city 11 = Government, city or county 12 = Combination government and NP 13 = Other	01 = Church 02 = Private (not for profit) 03 = Other 04 = Private (for profit) 05 = Federal 06 = State 07 = Local 08 = Hospital district or authority 09 = Physician ownership 10 = Tribal	01 = Church 02 = Private (not for profit) 03 = Other 04 = Private (for profit) 05 = Federal or local 06 = State 07 = Federal or local 08 = Hospital district or authority 09 = Physician ownership 10 = Tribal	01 = For profit, individual 02 = For profit, partnership 03 = For profit, corporation 04 = Nonprofit, church related 05 = Nonprofit, corporation 06 = Nonprofit, other 07 = Government, state 08 = Government, county 09 = Government, city 10 = Government, city or county 11 = Government, hospital district 12 = Government, federal 13 = Limited liability company
		If OWNERSHP = 1, then OWN = 2; if OWNERSHP = 2 or 3, then OWN = 1; if OWNERSHP = 4, then OWN = 3.	If OWNERSHP = 1, then OWN = 2; if OWNERSHP = 2 or 3, then OWN = 1; if OWNERSHP = 4, then OWN = 3.	If GNRL_CNTL_TYPE_CD = '01', '02', or '03', then OWN = 2; if GNRL_CNTL_TYPE_CD = '04', then OWN = 1; if GNRL_CNTL_TYPE_CD = '05', '06', or '07', then OWN = 3.	If GNRL_CNTL_TYPE_CD = '01', '02', or '03', then OWN = 2; if GNRL_CNTL_TYPE_CD = '04', '05', '06', or '07', then OWN = 1; if GNRL_CNTL_TYPE_CD = '08', '09', '10', '11', '12', or '13', then OWN = 3.	If GNRL_CNTL_TYPE_CD = '01' or '02', then OWN = 2; if GNRL_CNTL_TYPE_CD = '04', then OWN = 1; if GNRL_CNTL_TYPE_CD = '03', '05', '06', '07', '08', '09', or '10', then OWN = 3.	If GNRL_CNTL_TYPE_CD = '01' or '02', then OWN = 2; if GNRL_CNTL_TYPE_CD = '04', then OWN = 1; if GNRL_CNTL_TYPE_CD = '03', '05', '06', '07', '08', '09', or '10', then OWN = 3.	If GNRL_CNTL_TYPE_CD = '01', '02', '03', or '13', then OWN = 1; if GNRL_CNTL_TYPE_CD = '04', '05', or '06', then OWN = 2; if GNRL_CNTL_TYPE_CD = '07', '08', '09', '10', '11', or '12', then OWN = 3.

See footnotes at end of table.

Table III. Geographic and organizational characteristics, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Number of people served categories	Three categories based on the number of current participants or residents in 2018 or the number of patients that received or ended care at any time in calendar year 2017	1 = 1–25 2 = 26–100 3 = 101 or more	1 = 1–25 2 = 26–100 3 = 101 or more	1 = 1–100 2 = 101–300 3 = 301 or more	1 = 1–100 2 = 101–300 3 = 301 or more	1 = 1–100 2 = 101–300 3 = 301 or more	1 = 1–100 2 = 101–300 3 = 301 or more	1 = 1–25 2 = 26–100 3 = 101 or more
		Derived from: [TOTPART]	Derived from: [TOTRES] Q17. What is the total number of residents currently living at this residential care community? Please include residents for whom a bed is being held while in the hospital. If you have respite care residents, please include them.	Derived from: [TOTPAT from OBQI] Number of home health patients discharged at any time in calendar year (CY) 2017, regardless of payment source	Derived from: [BENE_CNT in IPBS data] Number of patients with a Medicare claim for provider at any time in CY 2017	Derived from: [BENE_CNT in IPBS data] Number of patients with a Medicare claim for provider at any time in CY 2017	Derived from: [BENE_CNT in IPBS data] Number of patients with a Medicare claim for provider at any time in CY 2017	Derived from: [BENE_CNT in IPBS data] Number of patients with a Medicare claim for provider at any time in CY 2017
Medicare certification	Medicare certification	...	...	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified
				Derived from: [PGM_PRTCPTN_CD]	All hospices included in CASPER are assumed to be Medicare-certified.	Derived from: [PGM_PRTCPTN_CD]	Derived from: [PGM_PRTCPTN_CD]	Derived from: [PGM_PRTCPTN_CD]
				Indicates if the provider participates in Medicare, Medicaid, or both programs	Indicates if the provider participates in Medicare, Medicaid, or both programs	Indicates if the provider participates in Medicare, Medicaid, or both programs	Indicates if the provider participates in Medicare, Medicaid, or both programs	Indicates if the provider participates in Medicare, Medicaid, or both programs
				1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid	1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid	1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid	1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid	1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid
				If PGM_PRTCPTN_CD = 1 or 3, then MEDICARE = 1.		If PGM_PRTCPTN_CD = 1 or 3, then MEDICARE = 1.		If PGM_PRTCPTN_CD = 1 or 3, then MEDICARE = 1.

See footnotes at end of table.

Table III. Geographic and organizational characteristics, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Medicaid certification	Medicaid certification or participation status	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified	---	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified	1 = Certified 2 = Not certified
		Derived from: [MEDICAID]	Derived from: [MEDICAID]	Derived from: [PGM_PRTCPTN_CD]		Derived from: [PGM_PRTCPTN_CD]	Derived from: [PGM_PRTCPTN_CD]	Derived from: [PGM_PRTCPTN_CD]
		[SCREENER] Is this adult day services center authorized or otherwise set up to participate in Medicaid (Medicaid state plan, Medicaid waiver, or Medicaid managed care) or part of a Program of All-Inclusive Care for the Elderly (PACE)?	Q6. Is this residential care community authorized or otherwise set up to participate in Medicaid?	Indicates if the provider participates in Medicare, Medicaid, or both programs		Indicates if the provider participates in Medicare, Medicaid, or both programs	Indicates if the provider participates in Medicare, Medicaid, or both programs	Indicates if the provider participates in Medicare, Medicaid, or both programs
				1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid If PGM_PRTCPTN_CD = 2 or 3, then MEDICAID = 1.		1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid If PGM_PRTCPTN_CD = 2 or 3, then MEDICAID = 1.	1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid If PGM_PRTCPTN_CD = 2 or 3, then MEDICAID = 1.	1 = Medicare only 2 = Medicaid only 3 = Medicare and Medicaid If PGM_PRTCPTN_CD = 2 or 3, then MEDICAID = 1.

See footnotes at end of table.

Table III. Geographic and organizational characteristics, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Chain affiliation	Chain affiliation status	1 = Yes 2 = No Q4. Is this center owned by a person, group, or organization that owns or manages two or more adult day services centers? This may include a corporate chain.	1 = Yes 2 = No Q4. Is this residential care community owned by a person, group, or organization that owns or manages two or more residential care communities? This may include a corporate chain.	---	---	---	---	1 = Yes 2 = No Derived from: [MLT_OWND_FAC_ORG_SW] Owned or leased by multifacility organization Check “yes” if the facility is owned or leased by a multifacility organization, otherwise check “no.” A multifacility organization is an organization that owns two or more long-term care facilities. The owner may be an individual or a corporation. Leasing of facilities by corporate chains is included in this definition.

... Category not applicable.

--- Data not available.

¹Study-specific eligibility criteria were used to define RCCs. See Appendix I for information on eligibility criteria.

²For NH, the number of certified beds was used because current residents in Certification and Survey Provider Enhanced Reports (CASPER) are defined as those in certified beds regardless of payer source.

NOTES: For survey data (ADSC and RCC), question numbers refer to the NSLTCP provider questionnaires. Questionnaires and detailed documentation on survey variables are available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm>. For HHA, HOS, NH, IRF, and LTCH, when the data source is not specified, the source is Centers for Medicare and Medicaid Services CASPER data.

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018, and Centers for Medicare and Medicaid Services, 2017 and 2018.

Table IV. Staffing: Nursing, social work, and activities employees, by sector

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Registered nurse ¹	Number of full-time equivalent (FTE) registered nurse (RN) employees (based on a 35-hour workweek)	Derived RNFTE1 from: [RNFT1, RNPT1] Q28b. RNs: number of full-time employees; number of part-time employees	Derived RNFTE1 from: [RNFT1, RNPT1] Q31b. RNs: number of full-time employees; number of part-time employees	Derived RNFTE1 from: [RN_CNT] Number of FTE registered professional nurses employed by a provider	Derived RNFTE1 from: [RN_CNT] Number of FTE registered professional nurses employed by a provider	Derived RNFTE1 from: [RN_CNT] Number of FTE registered professional nurses employed by a provider	Derived RNFTE1 from: [RN_CNT] Number of FTE registered professional nurses employed by a provider	Derived RNFTE1 from: [RN_FLTM_CNT, RN_PRTM_CNT] Number of FTE registered nurses employed by a facility on a full-time basis; number of FTE registered nurses employed by a facility on a part-time basis
Licensed practical nurse (LPN) or licensed vocational nurse (LVN) ¹	Number of FTE licensed practical nurse or licensed vocational nurse (LPN/LVN) employees (based on a 35-hour workweek)	Derived LPNFTE1 from: [LPNFT1, LPNPT1] Q28c. LPNs/LVNs: number of full-time employees; number of part-time employees	Derived LPNFTE1 from: [LPNFT1, LPNPT1] Q31c. LPNs/LVNs: number of full-time employees; number of part-time employees	Derived LPNFTE1 from: [LPN_LVN_CNT] Number of FTE licensed practical or vocational nurses employed by a provider	Derived LPNFTE1 from: [LPN_LVN_CNT] Number of FTE licensed practical or vocational nurses employed by a provider	Derived LPNFTE1 from: [LPN_LVN_CNT] Number of FTE licensed practical or vocational nurses employed by a provider	Derived LPNFTE1 from: [LPN_LVN_CNT] Number of FTE licensed practical or vocational nurses employed by a provider	Derived LPNFTE1 from: [LPN_LVN_FLTM_CNT, LPN_LVN_PRTM_CNT] Number of FTE licensed practical or vocational nurses employed by a facility on a full-time basis; part-time basis
Aide ¹	Number of FTE aide employees (based on a 35-hour workweek) Aides refer to paid staff providing direct care and assistance to residents, participants, or patients with a broad range of activities.	Derived AIDEFTE1 from: [AIDEFT1, AIDEPT1] Q28d. Certified nursing assistants, nursing assistants, home health aides, home care aides, personal care aides, personal care assistants, and medication technicians or medication aides: number of full-time employees; number of part-time employees	Derived AIDEFTE1 from: [AIDEFT1, AIDEPT1] Q31d. Certified nursing assistants, nursing assistants, home health aides, home care aides, personal care aides, personal care assistants, and medication technicians or medication aides: number of full-time employees; number of part-time employees	Derived AIDEFTE1 from: [HH_AIDE_CNT] Number of FTE home health aides employed by a provider	Derived AIDEFTE1 from: [HH_AIDE_EMPLEE_CNT] Number of FTE home health aides employed by a provider	---	---	Derived AIDEFTE1 from: [NRS_AIDE_FLTM_CNT, NRS_AIDE_PRTM_CNT, MDCTN_AIDE_FLTM_CNT, MDCTN_AIDE_PRTM_CNT] Number of FTE certified nurse aides employed by a facility on a full-time basis; part-time basis Number of FTE medication aides or technicians employed by a facility on a full-time basis; part-time basis

See footnotes at end of table.

Table IV. Staffing: Nursing, social work, and activities employees, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Social worker ¹	Number of FTE social worker employees (based on a 35-hour workweek)	Derived SOCWFTE1 from: [SOCWFT1, SOCWPT1] Q28e. Social workers—licensed social workers or persons with a bachelor's or master's degree in social work: number of full-time employees; number of part-time employees	Derived SOCWFTE1 from: [SOCWFT1, SOCWPT1] Q31e. Social workers—licensed social workers or persons with a bachelor's or master's degree in social work: number of full-time employees; number of part-time employees	Derived SOCWFTE1 from: [SCL_WORKR_CNT] Number of FTE social workers employed by a provider	Derived SOCWFTE1 from: [MDCL_SCL_WORKR_CNT] Number of FTE social workers employed by a provider	---	---	Derived SOCWFTE1 from: [SCL_WORKR_FLTM_CNT, SCL_WORKR_PRTM_CNT] Number of FTE social workers employed by a facility on a full-time basis; part-time basis
Activities directors or activities staff ¹	Number of FTE activities directors or activities staff employees (based on a 35-hour workweek)	Derived ACTFTE1 from: [ACTFT1, ACTPT1] Q28f. Activities directors or activities staff: number of full-time employees; number of part-time employees	Derived ACTFTE1 from: [ACTFT1, ACTPT1] Q31f. Activities directors or activities staff: number of full-time employees; number of part-time employees	---	---	---	---	Derived ACTFTE1 from: [ACTVTY_PROFNL_FLTM_CNT, ACTVTY_PROFNL_PRTM_CNT, ACTVTY_STF_OTHR_FLTM_CNT, ACTVTY_STF_OTHR_PRTM_CNT] Number of FTE activity professionals employed full-time by a facility; employed part-time by a facility; number of FTE other activities staff providing therapeutic services employed full-time by a facility; part-time basis

See footnotes at end of table.

Table IV. Staffing: Nursing, social work, and activities employees, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Hours per resident or participant per day (HPRD or HPPD) ²	Number of hours providing care for one resident or participant per day for a given staff type	Derived from: [RNFTE1, LPNFTE1, AIDEFTE1, SOCWFTE1, ACTFTE1 / TOTPART]	Derived from: [RNFTE1, LPNFTE1, AIDEFTE1, SOCWFTE1, ACTFTE1 / TOTRES]	---	---	Derived from RNFTE and LPNFTE RNHPRD1 = RNFTE1 * 35 / BENE_CNT / 7 days LPNHPRD1 = (LPNFTE1 * 35) / BENE_CNT / 7 days	Derived from RNFTE and LPNFTE RNHPRD1 = RNFTE1 * 35 / BENE_CNT / 7 days LPNHPRD1 = (LPNFTE1 * 35) / BENE_CNT / 7 days	Derived from: [RNFTE, LPNFTE, AIDEFTE, SOCWFTE / CNSUS_RSDNT_CNT]
	For ADSCs, HPPD was computed by multiplying the number of FTEs by 35 hours, and dividing the total number of hours by the number of current enrolled participants and by 5 days. For RCCs, NHs, IRFs, and LTCHs, HPRD was computed by multiplying the number of FTEs by 35 hours and dividing by the number of current residents in the facility, and by 7 days.	RNHPPD1 = (RNFTE1 * 35) / TOTPART / 5 days; LPNHPPD1 = (LPNFTE1 * 35) / TOTPART / 5 days; AIDEHPPD1 = (AIDEFTE1 * 35) / TOTPART / 5 days; SOCWHPPD1 = (SOCWFTE1 * 35) / TOTPART / 5 days; ACTHPPD1 = (ACTFTE1 * 35) / TOTPART / 5 days	RNHPRD1 = (RNFTE1 * 35) / TOTRES / 7 days; LPNHPRD1 = (LPNFTE1 * 35) / TOTRES / 7 days; AIDEHPRD1 = (AIDEFTE1 * 35) / TOTRES / 7 days; SOCWHPRD1 = (SOCWFTE1 * 35) / TOTRES / 7 days; ACTHPRD1 = (ACTFTE1 * 35) / TOTRES / 7 days					RNHPRD1 = (RNFTE1 * 35) / CNSUS_RSDNT_CNT / 7 days; LPNHPRD1 = (LPNFTE1 * 35) / CNSUS_RSDNT_CNT / 7 days; AIDEHPRD1 = (AIDEFTE1 * 35) / CNSUS_RSDNT_CNT / 7 days; SOCWHPRD1 = (SOCWFTE1 * 35) / CNSUS_RSDNT_CNT / 7 days; ACTHPRD1 = (ACTFTE1 * 35) / CNSUS_RSDNT_CNT / 7 days

--- Data not available.

¹For ADSC and RCC, the number of full-time and part-time employees for a given staff type were converted into FTEs with an assumption that full time is 1.0 FTE and part time is 0.5 FTE. For HHA and HOS, the number of FTE employees by staff type is provided in data. For NH, data report the number of hours for a given staff type during the 2 weeks before their annual survey. CMS converts the number of hours into FTEs (based on a 35-hour workweek). For all provider types, outliers are defined as cases with FTEs that are two standard deviations above or below the mean for a given size category and recoded as the size-specific mean FTE for the given staff type. See Appendix I for more information on editing of the staffing data.

²Residential settings (as in, RCC and NH) and ADSCs operate and staff differently to serve the needs of their residents or participants; these differences between provider types are reflected in using total participants and 5 days (as opposed to current residents and 7 days when computing HPRD).

NOTES: For survey data (ADSC and RCC), question numbers refer to the National Study of Long-Term Care Providers (NSLTCP) provider questionnaires. Questionnaires and detailed documentation on survey variables are available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm>. For HHA, HOS, NH, IRF, and LTCH, when the data source is not specified, the source is Centers for Medicare and Medicaid Services Certification and Survey Provider Enhanced Reports (CASPER) data.

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018, and Centers for Medicare and Medicaid Services, 2017 and 2018.

Table V. Services provided by post-acute and long-term care services providers, by sector

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Social work services ¹	In survey data, refers to services provided by licensed social workers or persons with a bachelor's or master's degree in social work, and may include an array of services such as psychosocial assessment, individual or group counseling, and referral services	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVSOCW1, SERVSOCW2, SERVSOCW3, SERVSOCW4]	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVSOCW1, SERVSOCW2, SERVSOCW3, SERVSOCW4]	1 = Provided 2 = Not provided Derived from: [MDCL_SCL_SRVC_CD] Indicates how medical social services are provided: 0 = Not provided 1 = Provided by staff 2 = Provided under arrangement 3 = Combination	1 = Provided 2 = Not provided Derived from: [MDCL_SCL_SRVC_CD] Indicates how medical social services are provided: 0 = Not provided 1 = Provided by staff 2 = Provided under arrangement 3 = Combination	1 = Provided 2 = Not provided Derived from: [SCL_SRVC_CD] Services: Social CD 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If SCL_SRVC_CD = 1, then SERVSOCW = 2; if SCL_SRVC_CD = 2, 3, or 4, then SERVSOCW = 1.	1 = Provided 2 = Not provided Derived from: [SCL_SRVC_CD] Services: Social CD 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If SCL_SRVC_CD = 1, then SERVSOCW = 2; if SCL_SRVC_CD = 2, 3, or 4, then SERVSOCW = 1.	1 = Provided 2 = Not provided Derived from: [SCL_WORK_SRVC_ONST_RSDNT_SW, SCL_WORK_SRVC_ONST_NRSNT_SW, SCL_WORK_SRVC_OFSITE_RSDNT_SW] Qualified social workers services: 1) Services provided onsite to residents, either by employees or contractors; 2) Services provided onsite to non-residents; 3) Services provided to residents offsite or not routinely provided onsite
	In administrative data, refers to qualified social workers services in nursing homes, and medical social services in home health agencies and hospices	Q23c. Social work services—provided by licensed social workers or persons with a bachelor's or master's degree in social work, and may include an array of services such as psychosocial assessment, individual or group counseling, and referral services	Q26c. Social work services—provided by licensed social workers or persons with a bachelor's or master's degree in social work, and may include an array of services such as psychosocial assessment, individual or group counseling, and referral services	If MCDL_SCL_SRVC_CD = 0, then SERVSOCW = 2; if MDCL_SCL_SRVC_CD > 0, then SERVSOCW = 1.	If MCDL_SCL_SRVC_CD = 0, then SERVSOCW = 2; if MDCL_SCL_SRVC_CD > 0, then SERVSOCW = 1.			
		1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service					If "no" to 1, 2, and 3, then SERVSOCW = 2; if "yes" to any, then SERVSOCW = 1.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Mental health or counseling services ¹	In survey data, refers to services that target a person's mental, emotional, psychological, or psychiatric well-being, and may include diagnosing, describing, evaluating, and treating mental conditions. For hospices, counseling services are provided to the patient and family to assist them in "minimizing the stress and problems that arise from the terminal illness, related conditions, and the dying process" (https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_m_hospice.pdf).	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVMH1, SERVMH2, SERVMH3, SERVMH4] Q23d. Mental health services—target participants' mental, emotional, psychological, or psychiatric well-being and may include diagnosing, describing, evaluating, and treating mental conditions 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVMH1, SERVMH2, SERVMH3, SERVMH4] Q26d. Mental health services—target residents' mental, emotional, psychological, or psychiatric well-being and may include diagnosing, describing, evaluating, and treating mental conditions 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	---	1 = Provided 2 = Not provided Derived from: [CNSLNG_SRVC_CD] Counseling services 0 = Not provided 1 = Provided by agency staff 2 = Provided under arrangement 3 = Combination If CNSLNG_SRVC_CD = 0, then SERVMH = 2; if CNSLNG_SRVC_CD > 0, then SERVMH = 1.	---	---	1 = Provided 2 = Not provided Derived from: [MENTL_HLTH_ONST_RSDNT_SW, MENTL_HLTH_ONST_NRSNT_SW, MENTL_HLTH_OFSITE_RSDNT_SW] Mental health services 1) Services provided onsite to residents, either by employees or contractors; 2) Services provided onsite to non-residents; 3) Services provided to residents offsite or not routinely provided onsite If "no" to 1), 2), and 3), SERVMH = 2; if "yes" to any, then SERVMH = 1.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Therapeutic services ¹	Refers to providing any of the three therapeutic services: physical therapy, occupational therapy, or speech therapy or pathology.	1 = Provided 2 = Not provided (includes referral only)	1 = Provided 2 = Not provided (includes referral only)	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided
		Derived from: [SERVTX1, SERVTX2, SERVTX3, SERVTX4] Q23e. Any therapeutic services—physical, occupational, or speech 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	Derived from: [SERVTX1, SERVTX2, SERVTX3, SERVTX4] Q26e. Any therapeutic services—physical, occupational, or speech 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	Derived from: [PT_SRVC_CD, OT_SRVC_CD, SPCH_THRPY_SRVC_CD] Physical therapy, occupational therapy, or speech therapy 0 = Not provided 1 = Provided by agency staff 2 = Provided under arrangement 3 = Combination If PT_SRVC_CD = 0 AND OT_SRVC_CD = 0 and SPCH_THRPY_SRVC_CD = 0, SERVTX = 2; else SERVTX = 1.	Derived from: [PT_SRVC_CD, OT_SRVC_CD, SPCH_PTHLGY_SRVC_CD] Physical therapy, occupational therapy, or speech pathology 0 = Not provided 1 = Provided by agency staff 2 = Provided under arrangement 3 = Combination If PT_SRVC_CD = 0 and OT_SRVC_CD = 0 and SPCH_PTHLGY_SRVC_CD = 0, SERVTX = 2; else SERVTX = 1.	Derived from: [PT_SRVC_CD, OT_SRVC_CD, SPCH_PTHLGY_SRVC_CD] 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If PT_SRVC_CD = 1 and OT_SRVC_CD = 1 and SPCH_PTHLGY_SRVC_CD = 1, then SERVTX = 2; if any 2, 3, or 4, then SERVTX = 1.	Derived from: [PT_SRVC_CD, OT_SRVC_CD, SPCH_PTHLGY_SRVC_CD] 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If PT_SRVC_CD = 1 and OT_SRVC_CD = 1 and SPCH_PTHLGY_SRVC_CD = 1, then SERVTX = 2; if any 2, 3, or 4, then SERVTX = 1.	Derived from: [PT_ONST_RSDNT_SW, PT_ONST_NRSRNT_SW, PT_OFSITE_RSDNT_SW, OT_SRVC_ONST_NRSRNT_SW, OT_SRVC_OFSITE_RSDNT_SW, SPCH_PTHLGY_ONST_RSDNT_SW, SPCH_PTHLGY_ONST_NRSRNT_SW, SPCH_PTHLGY_OFSITE_RSDNT_SW] Physical therapist services, occupational therapist services, or speech or language pathologists 1) Services provided onsite to residents, either by employees or contractors; 2) Services provided onsite to non-residents; 3) Services provided to residents offsite or not routinely provided onsite If “no” to all nine variables, then SERVTX = 2; if “yes” to any, then SERVTX = 1.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Pharmacy services ¹	Refers to services including filling of or delivery of prescriptions	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVRX1, SERVRX2, SERVRX3, SERVRX4] Q23f. Pharmacy services—including filling of or delivery of prescriptions 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVRX1, SERVRX2, SERVRX3, SERVRX4] Q26f. Pharmacy services—including filling of or delivery of prescriptions 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	1 = Provided 2 = Not provided Derived from: [PHRMCY_SRVC_CD] Pharmaceutical services 0 = Not provided 1 = Provided by agency staff 2 = Provided under arrangement 3 = Combination If PHRMCY_SRVC_CD = 0, then SERVRX_CD = 2; if PHRMCY_SRVC_CD > 0, then SERVRX = 1.	---	1 = Provided 2 = Not provided Derived from: [PHRMCY_SRVC_CD] Services: Pharmacy code 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If PHRMCY_SRVC_CD = 1, then SERVRX = 2; if PHRMCY_SRVC_CD = 2, 3, or 4, then SERVRX = 1.	1 = Provided 2 = Not provided Derived from: [PHRMCY_SRVC_CD] Services: Pharmacy code 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If PHRMCY_SRVC_CD = 1, then SERVRX = 2; if PHRMCY_SRVC_CD = 2, 3, or 4, then SERVRX = 1.	1 = Provided 2 = Not provided Derived from: [PHRMCY_SRVC_ONST_RSDNT_SW, PHRMCY_SRVC_ONST_NRSNT_SW, PHRMCY_SRVC_OFSITE_RSDNT_SW] Pharmacist services 1) Services provided onsite to residents, either by employees or contractors; 2) Services provided onsite to non-residents; 3) Services provided to residents offsite or not routinely provided onsite If “no” to 1, 2, and 3, SERVRX = 2; if “yes” to any, then SERVRX = 1.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Skilled nursing services ¹	For home health agencies, the definition for nursing services is not provided in CMS' "State Operations Manual"	1 = Provided 2 = Not provided (includes referral only)	1 = Provided 2 = Not provided (includes referral only)	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided	---	---	1 = Provided 2 = Not provided
	For hospices, nursing services are "routinely available on a 24-hour basis, 7 days a week," and hospices must "provide nursing care and services by or under the supervision of a registered nurse" (available from: https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_m_hospice.pdf)	Derived from: [SERVNURS1, SERVNUSS2, SERVNUSS3, SERVNUSS4]	Derived from: [SERVNURS1, SERVNUSS2, SERVNUSS3, SERVNUSS4]	Derived from: [NRSNG_SRVC_CD] Nursing care 0 = Not provided 1 = Provided by agency staff 2 = Provided under arrangement 3 = Combination	Derived from: [NRSNG_SRVC_CD] Nursing services 0 = Not provided 1 = Provided by agency staff 2 = Provided under arrangement 3 = Combination			Derived from: [NRSNG_SRVC_ONST_RSDNT_SW, NRSNG_SRVC_ONST_NRSNT_SW, NRSNG_SRVC_OFSITE_RSDNT_SW]
	Nursing services in nursing homes refer to "coordination, implementation, monitoring and management of resident care plans. Includes provision of personal care services, monitoring resident responsiveness to environment, range-of-motion exercises, application of sterile dressings, skin care, naso-gastric tubes, intravenous fluids, catheterization, administration of medications, etc." (CMS form 671)	Q23i. Skilled nursing services— must be performed by an RN or LPN and are medical in nature 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	Q26i. Skilled nursing services— must be performed by an RN or LPN and are medical in nature 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	If NURSNG_SRVC_CD = 0, then SERVNUSS = 2; if NURSNG_SRVC_CD > 0 then, SERVNUSS = 1.	If NURSNG_SRVC_CD = 0, then SERVNUSS = 2; if NURSNG_SRVC_CD > 0 then, SERVNUSS = 1.			Nursing services 1) Services provided onsite to residents, either by employees or contractors; 2) Services provided onsite to non-residents; 3) Services provided to residents offsite or not routinely provided onsite
								If "no" to 1, 2, and 3, then SERVNUSS = 2; if "yes" to any, then SERVNUSS = 1.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Hospice services ¹	For home health agencies, the agency was coded as providing hospice services if the agency also participates in the Medicare program as a hospice. If nursing homes have at least one bed identified and dedicated for residents needing hospice services or have one or more residents receiving hospice care benefits, they were coded as providing hospice services.	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVHOS1, SERVHOS2, SERVHOS3, SERVHOS4] Q23b. Hospice services 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	1 = Provided 2 = Not provided (includes referral only) Derived from: [SERVHOS1, SERVHOS2, SERVHOS3, SERVHOS4] Q26b. Hospice services 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	1 = Provided 2 = Not provided Derived from: [MDCR_HOSPC_SW] Indicates if the agency also participates in the Medicare program as a hospice provider If MDCR_HOSPC_SW = 'Y', then, SERVHOS = 1; if MDCR_HOSPC_SW = 'N', then SERVHOS = 2.	...	---	---	1 = Provided 2 = Not provided Derived from: [HOSPC_BED_CNT, CNSUS_HOSPC_CARE_CNT] 1) Number of beds in a unit identified and dedicated by a facility for residents needing hospice services 2) Number of residents receiving hospice care benefit If HOSPC_BED_CNT > 0 or CNSUS_HOSPC_CARE_CNT > 0, then SERVHOS = 1; if HOSPC_BED_CNT = 0 and CNSUS_HOSPC_CARE_CNT = 0, then SERVHOS = 2.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Dietary and nutritional services ¹	Refers to dietary and nutritional services	1 = Provided 2 = Not provided (includes referral only)	1 = Provided 2 = Not provided (includes referral only)	---	---	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided	1 = Provided 2 = Not provided
		Derived from: [SERVDIET1, SERVDIET2, SERVDIET3, SERVDIET4]	Derived from: [SERVDIET1, SERVDIET2, SERVDIET3, SERVDIET4]			Derived from: [DTRY_SRVC_CD]	Derived from: [DTRY_SRVC_CD]	Derived from: [DTRY_ONST_ RSDNT_SW, DTRY_ ONST_NRSNT_SW, DTRY_OFSITE_ RSDNT_SW]
		Q23h. Dietary and nutritional services 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service	Q26h. Dietary and nutritional services 1 = Provides the service by paid center employees 2 = Arranges for the service to be provided by outside service providers 3 = Refers participants or family to outside service providers 4 = Does not provide, arrange, or refer for this service			Services: Dietary code 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If DTRY_SRVC_CD = 1, then SERVDIET = 2; if DTRY_SRVC_CD = 2, 3, or 4, then SERVDIET = 1.	Services: Dietary code 1) Not provided 2) Provided by staff 3) Provided by staff and under arrangement 4) Provided under arrangement If DTRY_SRVC_CD = 1, then SERVDIET = 2; if DTRY_SRVC_CD = 2, 3, or 4, then SERVDIET = 1.	Dietary services 1) Services provided onsite to residents, either by employees or contractors; 2) Services provided onsite to non-residents; 3) Services provided to residents offsite or not routinely provided onsite If "no" to 1, 2, and 3, then SERVDIET = 2; if "yes" to any, then SERVDIET = 1.

See footnotes at end of table.

Table V. Services provided by post-acute and long-term care services providers, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Dementia care units	Refers to the provision of dementia care units or only serving residents with dementia in residential care communities In nursing homes, refers to having any certified Alzheimer's bed and only serving residents with dementia if Alzheimer's beds equals total certified beds	---	1 = Serves only residents with dementia 2 = Provides dementia care units within larger community Derived from: [ONLYDEM, DEMWING] Q7. Does this residential care community only serve adults with dementia or Alzheimer's disease? Q8. [If no to Q7] Does this residential care community have a distinct unit, wing, or floor that is designated as a dementia or Alzheimer's care unit?	---	---	---	---	1 = Serves only residents with dementia 2 = Provides dementia care units within larger facility Derived from: [CRTFD_BED_CNT, ALZHMR_BED_CNT] Number of certified beds; number of beds in a unit identified and dedicated by the facility for residents with Alzheimer's disease If CRTFD_BED_CNT = ALZHMR_BED_CNT, then DSU = 1; if ALZHMR_BED_CNT > 0, then DSU = 2; else DSU = 0.

--- Data not available.

... Category not applicable.

¹For ADSC and RCC, the questionnaires used "mark all that apply" questions to ask about different services provided. Respondents indicated as many as three different ways that the ADSC or RCC provided a given service. For each service, four binary variables were derived: three variables corresponding to three different ways that ADSCs or RCCs provided the service (for example, by paid employees, by arranging for service to be provided by outside providers, or by referral); and one variable indicating whether the ADSC or RCC provided the service in any of these ways or did not provide the service. For this report, a derived variable with two mutually exclusive categories was used: 1) provided by paid employees, or arranging for service to be provided by outside providers, in addition to referral; 2) not provided or provided only by referral.

NOTES: For survey data (ADSC and RCC), question numbers refer to the National Study of Long-Term Care Providers (NSLTCP) provider questionnaires. Questionnaires and detailed documentation on survey variables are available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm>. For administrative data (HHA, HOS, NH, IRF, and LTCH), when the data source is not specified, the source is Centers for Medicare and Medicaid Services Certification and Survey Provider Enhanced Reports (CASPER) data.

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018, and Centers for Medicare and Medicaid Services, 2017 and 2018.

Table VI. Use of post-acute and long-term care services, by sector

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Number of services users	Number of users of services provided by paid, regulated long-term care services providers	Q3. What is the total number of participants currently enrolled at this adult day services center at this location? This number was also used to create categories of number of people served (SIZE).	Q5. What is the total number of residents currently living at this residential care community? Please include residents for whom a bed is being held while in the hospital. If you have respite care residents, please include them. This number was also used to create categories of number of people served (SIZE).	Derived from: [OBQI] Number of home health patients whose episode of care ended at any time in CY (calendar year) 2017 (i.e., discharges), regardless of payment source This number was also used to create categories of number of people served (SIZE).	Derived from: [BENE_CNT from Institutional Provider and Beneficiary Summary (IPBS) data] Number of patients for whom a Medicare claim was submitted at any time in CY 2017 BENE_CNT was also used to create categories of number of people served (SIZE) and used as the denominator when computing percentages for all aggregate patient-level measures.	Derived from: [BENE_CNT from IPBS data] Number of patients for whom a Medicare claim was submitted at any time in CY 2017 BENE_CNT was also used to create categories of number of people served (SIZE) and used as the denominator when computing percentages for all aggregate resident-level measures.	Derived from: [BENE_CNT from IPBS data] Number of patients for whom a Medicare claim was submitted at any time in CY 2017 BENE_CNT was also used to create categories of number of people served (SIZE) and used as the denominator when computing percentages for all aggregate resident-level measures.	Number of current residents in certified beds in Certification and Survey Provider Enhanced Reports (CASPER) nursing home data CNSUS_RSDNT_CNT was also used to create categories of number of people served (SIZE) and used as the denominator when computing percentages for all aggregate resident-level measures.
Age	Number of services users under age 65	Derived from: What is [sampled person's initials] age in years?	Derived from: What is [sampled person's initials] age in years?	Derived from: [MSR_201_VAL from OBQI]	Derived from: [AGE_LESS_65 / BENE_CNT from IPBS]	Derived from: [AGE_LESS_65 / BENE_CNT from IPBS]	Derived from: [AGE_LESS_65 / BENE_CNT from IPBS]	Derived from: [C_RSDNT_AGE_NUM from MARET data]
		AGE < 65	AGE < 65	Calculated age at the time of episode of care	Number of beneficiaries under age 65 utilizing the provider	Number of beneficiaries under age 65 utilizing the provider	Number of beneficiaries under age 65 utilizing the provider	Calculated age at the time of nursing home assessment
		Missing data for AGE were imputed.	Missing data for AGE were imputed.					
	Number of services users between ages 65 and 74	Derived from: What is [sampled person's initials] age in years?	Derived from: What is [sampled person's initials] age in years?	Derived from: [MSR_201_VAL from OBQI]	Derived from: [AGE_65_69, AGE_70_74 / BENE_CNT from IPBS data]	Derived from: [AGE_65_69, AGE_70_74 / BENE_CNT from IPBS data]	Derived from: [AGE_65_69, AGE_70_74 / BENE_CNT from IPBS data]	Derived from: [C_RSDNT_AGE_NUM from MARET data]
		AGE >= 65 and < 75	AGE >= 65 and < 75	Calculated age at the time of episode of care	Number of beneficiaries between ages 65 and 69 utilizing the provider; number of beneficiaries between ages 70 and 74 utilizing the provider	Number of beneficiaries between ages 65 and 69 utilizing the provider; number of beneficiaries between ages 70 and 74 utilizing the provider	Number of beneficiaries between ages 65 and 69 utilizing the provider; number of beneficiaries between ages 70 and 74 utilizing the provider	Calculated age at the time of nursing home assessment
		Missing data for AGE were imputed.	Missing data for AGE were imputed.					

See footnotes at end of table.

Table VI. Use of post-acute and long-term care services, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Age—Con.	Number of services users between ages 75 and 84	Derived from: What is [sampled person's initials] age in years?	Derived from: What is [sampled person's initials] age in years?	Derived from: [MSR_201_VAL from OBQI]	Derived from: [AGE_75_79, AGE_80_84 / BENE_CNT from IPBS data]	Derived from: [AGE_75_79, AGE_80_84 / BENE_CNT from IPBS data]	Derived from: [AGE_75_79, AGE_80_84 / BENE_CNT from IPBS data]	Derived from: [C_RSDNT_AGE_NUM from MARET data]
		AGE >= 75 and < 85	AGE >= 75 and < 85	Calculated age at the time of episode of care	Number of beneficiaries between ages 75 and 79 utilizing the provider; number of beneficiaries between ages 80 and 84 utilizing the provider	Number of beneficiaries between ages 75 and 79 utilizing the provider; number of beneficiaries between ages 80 and 84 utilizing the provider	Number of beneficiaries between ages 75 and 79 utilizing the provider; number of beneficiaries between ages 80 and 84 utilizing the provider	Calculated age at the time of nursing home assessment
		Missing data for AGE were imputed.	Missing data for AGE were imputed.					
	Number of services users aged 85 and over	Derived from: What is [sampled person's initials] age in years?	Derived from: What is [sampled person's initials] age in years?	Derived from: [MSR_201_VAL from OBQI]	Derived from: [AGE_OVER_84 / BENE_CNT from IPBS data]	Derived from: [AGE_OVER_84 / BENE_CNT from IPBS data]	Derived from: [AGE_OVER_84 / BENE_CNT from IPBS data]	Derived from: [C_RSDNT_AGE_NUM from Minimum Data Set Active Resident Episode Table (MARET) data]
		AGE >= 85	AGE >= 85	Calculated age at the time of episode of care	Number of beneficiaries over age 84 utilizing the provider	Number of beneficiaries over age 84 utilizing the provider	Number of beneficiaries over age 84 utilizing the provider	Calculated age at the time of nursing home assessment
		Missing data for AGE were imputed.	Missing data for AGE were imputed.					

See footnotes at end of table.

Table VI. Use of post-acute and long-term care services, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Race and ethnicity	Number of services users of Hispanic or Latino origin	Is [sampled person's initials] of Hispanic, Latino, or Spanish origin or descent? 1 = Yes 2 = No 3 = Don't know	Is [sampled person's initials] of Hispanic, Latino, or Spanish origin or descent? 1 = Yes 2 = No 3 = Don't know	Derived from: [RACE_HISPAN / BENE_CNT from IPBS data]	Derived from: [RACE_HISPAN / BENE_CNT from IPBS data]	Derived from: [RACE_HISPAN / BENE_CNT from IPBS data]	Derived from: [RACE_HISPAN / BENE_CNT from IPBS data]	Derived from: [A1000D_HSPNC_CD from MARET data]
		Missing data and don't know for ETHNICITY were imputed.	Missing data and don't know for ETHNICITY were imputed.	Number of Hispanic beneficiaries utilizing the provider	Number of Hispanic beneficiaries utilizing the provider	Number of Hispanic beneficiaries utilizing the provider	Number of Hispanic beneficiaries utilizing the provider	Number of Hispanic residents
								Coded so that indicator includes all Hispanic, regardless of race indicator
	Number of services users who are non-Hispanic White	Please look at the show card titled "Race" to answer this question. Which one or more of the following would you say is [sampled person's initials]'s race? 5. White	Please look at the show card titled "Race" to answer this question. Which one or more of the following would you say is [sampled person's initials]'s race? 5. White	Derived from: [RACE_WHITE / BENE_CNT from IPBS data]	Derived from: [RACE_WHITE / BENE_CNT from IPBS data]	Derived from: [RACE_WHITE / BENE_CNT from IPBS data]	Derived from: [RACE_WHITE / BENE_CNT from IPBS data]	Derived from: [A1000F_WHT_CD from MARET data]
		Coded so that number includes only non-Hispanic White	Coded so that number includes only non-Hispanic White	Number of non-Hispanic White beneficiaries utilizing the provider	Number of non-Hispanic White beneficiaries utilizing the provider	Number of non-Hispanic White beneficiaries utilizing the provider	Number of non-Hispanic White beneficiaries utilizing the provider	Number of White residents
		Missing data for race were imputed.	Missing data for race were imputed.					Coded so that indicator includes only non-Hispanic White

See footnotes at end of table.

Table VI. Use of post-acute and long-term care services, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Race and ethnicity—Con.	Number of services users who are non-Hispanic Black	Please look at the show card titled “Race” to answer this question. Which one or more of the following would you say is [sampled person’s initials]’s race? 3. Black Coded so that number includes only non-Hispanic Black Missing data for race were imputed.	Please look at the show card titled “Race” to answer this question. Which one or more of the following would you say is [sampled person’s initials]’s race? 3. Black Coded so that number includes only non-Hispanic Black Missing data for race were imputed.	Derived from: [RACE_BLACK / BENE_CNT from IPBS data] Number of non-Hispanic Black beneficiaries utilizing the provider	Derived from: [RACE_BLACK / BENE_CNT from IPBS data] Number of non-Hispanic Black beneficiaries utilizing the provider	Derived from: [RACE_BLACK / BENE_CNT from IPBS data] Number of non-Hispanic black beneficiaries utilizing the provider	Derived from: [RACE_BLACK / BENE_CNT from IPBS data] Number of non-Hispanic Black beneficiaries utilizing the provider	Derived from: [A1000C_AFRCN_AMRCN_CD from MARET data] Number of African-American residents Coded so that indicator includes only non-Hispanic African American
	Number of services users who are of a race other than White or Black	Please look at the show card titled “Race” to answer this question. Which one or more of the following would you say is [sampled person’s initials]’s race? 1. American Indian or Alaska Native 2. Asian 3. Native Hawaiian or Other Pacific Islander Coded so that number includes only non-Hispanic for each category, multiple race categories selected Missing data for race were imputed.	Please look at the show card titled “Race” to answer this question. Which one or more of the following would you say is [sampled person’s initials]’s race? 1. American Indian or Alaska Native 2. Asian 3. Native Hawaiian or Other Pacific Islander Coded so that number includes only non-Hispanic for each category, multiple race categories selected Missing data for race were imputed.	Derived from: [RACE_NATIND, RACE_API, RACE_OTHER / BENE_CNT from IPBS] Number of American Indian or Alaska Native, Asian or Pacific Islander, and other beneficiaries not elsewhere classified utilizing the provider	Derived from: [RACE_NATIND, RACE_API, RACE_OTHER / BENE_CNT from IPBS] Number of American Indian or Alaska Native, Asian or Pacific Islander, and other beneficiaries not elsewhere classified utilizing the provider	Derived from: [RACE_NATIND, RACE_API, RACE_OTHER / BENE_CNT from IPBS] Number of American Indian or Alaska Native, Asian or Pacific Islander, and other beneficiaries not elsewhere classified utilizing the provider	Derived from: [RACE_NATIND, RACE_API, RACE_OTHER / BENE_CNT from IPBS] Number of American Indian or Alaska Native, Asian or Pacific Islander, and other beneficiaries not elsewhere classified utilizing the provider	Derived from: [A1000A_AMRCN_INDND_AK_NTV_CD, A1000B_ASN_CD, A1000E_NTV_HI_PCFC_ISLNDNR_CD from MARET data] Number of American Indian or Alaska Native, Asian, and Native Hawaiian or Pacific Islander residents Coded so that indicator includes only non-Hispanic “other” races

See footnotes at end of table.

Table VI. Use of post-acute and long-term care services, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Sex	Number of services users who are male	What is [sampled person's initials]'s gender? 1. Male	What is [sampled person's initials]'s gender? 1. Male	Derived from: [MSR_202_VAL from OBQI data]	Derived from: [MALE / BENE_CNT from IPBS data]	Derived from: [MALE / BENE_CNT from IPBS data]	Derived from: [MALE / BENE_CNT from IPBS data]	Derived from: [A0800_GNDR_CD from MARET data]
		Missing data for sex imputed	Missing data for sex imputed	"Patient History, Demographics, Gender: Male"	Number of male beneficiaries utilizing the provider	Number of male beneficiaries utilizing the provider	Number of male beneficiaries utilizing the provider	Identifies the resident's sex: 1 = Male
	Number of services users who are female	What is [sampled person's initials]'s gender? 2. Female	What is [sampled person's initials]'s gender? 2. Female	Derived from: [MSR_202_VAL from OBQI data]	Derived from: [FEMALE / BENE_CNT from IPBS data]	Derived from: [FEMALE / BENE_CNT from IPBS data]	Derived from: [FEMALE / BENE_CNT from IPBS data]	Derived from: [A0800_GNDR_CD from MARET data]
		Missing data for sex were imputed.	Missing data for sex were imputed.	"Patient History, Demographics, Gender: Female"	Number of female beneficiaries utilizing the provider	Number of female beneficiaries utilizing the provider	Number of female beneficiaries utilizing the provider	Identifies the resident's sex: 1 = Female

See footnotes at end of table.

Table VI. Use of post-acute and long-term care services, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Medicaid as payer source	Number of users with Medicaid paying for any services received	Derived from: TPAY SOURCE: During the last complete month, what was the one primary payment source... 1. MEDICAID and MEDPAIDRC and During the last complete month, did Medicaid pay for any of the services that [sampled person's initials] received at this center? Please include any funding from a Medicaid state plan, Medicaid waiver, Medicaid managed care, or California regional center. 1 = Yes 2 = No 3 = Don't know Don't know was coded as missing data.	During the last complete month, did Medicaid pay for any of the services that [sampled person's initials] received at this center? Please include any funding from a Medicaid state plan, Medicaid waiver, Medicaid managed care. 1 = Yes 2 = No 3 = Don't know Don't know was coded as missing data.	Derived from: [MSR_207_VAL from OBQI data] Number of patients coded as having Medicaid as payer source if they had any Medicaid as traditional fee-for-service or HMO (health maintenance organization) or managed care as current payment sources for home care at start of care or resumption of care	---	---	---	Derived from: [CNSUS_MDCCD_CNT / TOTRES] Number of residents whose primary payer source is Medicaid

--- Data not available.

NOTES: For survey data (ADSC and RCC), question wording refers to the National Study of Long-Term Care Providers (NSLTCP) services user questionnaires. Questionnaires and detailed documentation on survey variables are available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm>. For administrative data (HHA, HOS, NH, IRF, and LTCH), when the data source is not specified, the source is Centers for Medicare and Medicaid Services Certification and Survey Provider Enhanced Reports (CASPER) data.

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018, and Centers for Medicare and Medicaid Services, 2017 and 2018.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Diagnosed with Alzheimer disease or dementia	Number of services users diagnosed with Alzheimer disease or dementia	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 2. Alzheimer's disease or other dementia	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 2. Alzheimer's disease or other dementia	Derived from: [ALZRDSD_BENE_CNT / BENE_CNT from Institutional Provider and Beneficiary Summary (IPBS) data] Number of beneficiaries meeting the chronic condition algorithm for Alzheimer's broad classification, including dementia and utilizing the provider (Alzheimer's disease and related disorders or senile dementia)	Derived from: [ALZRDSD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for Alzheimer's broad classification, including dementia and utilizing the provider (Alzheimer's disease and related disorders or senile dementia)	Derived from: [ALZRDSD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for Alzheimer's broad classification, including dementia and utilizing the provider (Alzheimer's disease and related disorders or senile dementia)	Derived from: [ALZRDSD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for Alzheimer's broad classification, including dementia and utilizing the provider (Alzheimer's disease and related disorders or senile dementia)	Derived from: [I4200_ALZHMR_CD, I4800_DMNT_CD from Minimum Data Set Active Resident Episode Table (MARET) data] Indicates whether the resident had an active diagnosis of Alzheimer's disease in the last 7 days or indicates whether the resident had an active diagnosis of non-Alzheimer's dementia, such as vascular or multi-infarct dementia; mixed dementia; or frontotemporal dementia, such as Pick's disease and dementia related to stroke, Parkinson's disease, or Creutzfeldt-Jakob disease in the last 7 days
Diagnosed with depression	Number of services users diagnosed with depression	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 11. Depression	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 11. Depression	Derived from: [DEPR_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for depression utilizing the provider	Derived from: [DEPR_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for depression utilizing the provider	Derived from: [DEPR_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for depression utilizing the provider	Derived from: [DEPR_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for depression utilizing the provider	Derived from: [I5800_DPRSN_CD from MARET data] Indicates if the resident had an active diagnosis of depression (other than bipolar) in the last 7 days

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Diagnosed with diabetes	Number of services users diagnosed with diabetes	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 12. Diabetes	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 12. Diabetes	Derived from: [DIAB_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for diabetes utilizing the provider	Derived from: [DIAB_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for diabetes utilizing the provider	Derived from: [DIAB_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for diabetes utilizing the provider	Derived from: [DIAB_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for diabetes utilizing the provider	Derived from: [I2900_DM_CD from MARET data] Indicates whether the resident had an active diagnosis of diabetes mellitus (diabetic retinopathy or neuropathy) in the last 7 days
Diagnosed with arthritis	Number of services users diagnosed with arthritis	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 5. Arthritis or rheumatoid arthritis	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 5. Arthritis or rheumatoid arthritis	Derived from: [RAOA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for rheumatoid or osteoarthritis and utilizing the provider	Derived from: [RAOA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for rheumatoid or osteoarthritis and utilizing the provider	Derived from: [RAOA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for rheumatoid or osteoarthritis and utilizing the provider	Derived from: [RAOA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for rheumatoid or osteoarthritis and utilizing the provider	Derived from: [I3700_ARTHTS_CD from MARET data] Indicates whether the resident had an active diagnosis of arthritis in the last 7 days
Diagnosed with asthma	Number of services users diagnosed with asthma	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 6. Asthma	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 6. Asthma	Derived from: [ASTHMA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for asthma and utilizing the provider	Derived from: [ASTHMA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for asthma and utilizing the provider	Derived from: [ASTHMA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for asthma and utilizing the provider	Derived from: [ASTHMA_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for asthma and utilizing the provider	---

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Diagnosed with chronic kidney disease	Number of services users diagnosed with kidney disease or chronic kidney disease	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 22. Kidney disease	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 22. Kidney disease	Derived from: [CKD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for chronic kidney disease and utilizing the provider	Derived from: [CKD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for chronic kidney disease and utilizing the provider	Derived from: [CKD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for chronic kidney disease and utilizing the provider	Derived from: [CKD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for chronic kidney disease and utilizing the provider	---
Diagnosed with chronic obstructive pulmonary disease (COPD)	Number of services users diagnosed with COPD	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 10. COPD (chronic bronchitis or emphysema)	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 10. COPD (chronic bronchitis or emphysema)	Derived from: [COPD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for COPD and utilizing the provider	Derived from: [COPD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for COPD and utilizing the provider	Derived from: [COPD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for COPD and utilizing the provider	Derived from: [COPD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for COPD and utilizing the provider	---
Diagnosed with heart disease	Number of services users diagnosed with heart disease	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 17. Heart disease (coronary or ischemic)	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 17. Heart disease (coronary or ischemic)	Derived from: [IHD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for ischemic heart disease and utilizing the provider	Derived from: [IHD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for ischemic heart disease and utilizing the provider	Derived from: [IHD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for ischemic heart disease and utilizing the provider	Derived from: [IHD_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for ischemic heart disease and utilizing the provider	Derived from: [I0400_CAD_CD, I0600_HRT_FAILR_CD, I4500_STRK_CD from MARET data] Indicates whether the resident had an active diagnosis of coronary artery disease, congestive heart failure, or stroke (CVA or TIA or Stroke) in the last 7 days

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Diagnosed with high blood pressure or hypertension	Number of services users diagnosed with high blood pressure or hypertension	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 18. High blood pressure or hypertension	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 18. High blood pressure or hypertension	Derived from: [HYPERT_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for hypertension and utilizing the provider	Derived from: [HYPERT_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for hypertension and utilizing the provider	Derived from: [HYPERT_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for hypertension and utilizing the provider	Derived from: [HYPERT_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for hypertension and utilizing the provider	Derived from: [I0700_HYPRTNSN_CD from MARET data] Indicates whether the resident had an active diagnosis of hypertension in the last 7 days
Diagnosed with osteoporosis	Number of services users diagnosed with osteoporosis	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 27. Osteoporosis	As far as you know, has a doctor or other health professional ever diagnosed [sampled person's initials] with any of the following conditions? 27. Osteoporosis	Derived from: [OST_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for osteoporosis and utilizing the provider	Derived from: [OST_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for osteoporosis and utilizing the provider	Derived from: [OST_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for osteoporosis and utilizing the provider	Derived from: [OST_BENE_CNT / BENE_CNT from IPBS data] Number of beneficiaries meeting the chronic condition algorithm for osteoporosis and utilizing the provider	Derived from: [I3800_OSTPRS_CD from MARET data] Indicates whether the resident had an active diagnosis of osteoporosis in the last 7 days

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Assistance with eating	Number of services users needing any assistance with eating. Assistance refers to needing any help or supervision from another person or use of assistive devices.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to eat, like cutting up food? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to eat, like cutting up food? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Derived from: [MSR_342_VAL from Outcome-Based Quality Improvement (OBQI)] Number of patients coded as needing any assistance with eating if they: are able to feed self independently but require meal setup or intermittent assistance or supervision from another person; require a liquid, pureed, or ground meat diet; are unable to feed self and must be assisted or supervised throughout the meal or snack; are able to take in nutrients orally and receive supplemental nutrients through a nasogastric tube or gastrostomy; are unable to take in nutrients orally and are fed nutrients through a nasogastric tube or gastrostomy; or are unable to take in nutrients orally or by tube feeding	---	Derived from: [EAT_ADMSN_CD from IRF-PAI] Number of patients needing assistance with eating including: 1) Helper—complete dependence or total assistance; 2) Helper—complete dependence or maximal assistance; 3) Helper—modified dependence or moderate assistance; 4) Helper—modified dependence or minimal assistance; 5) Helper—modified dependence or supervision	---	Derived from: [CNSUS_EATG_ASTD_CNT, CNSUS_EATG_DPDNT_CNT / CNSUS_RSDNT_CNT] Number of residents coded as needing any assistance with eating if they require supervision, limited or extensive assistance from staff, or full staff performance every time during entire 7-day period. If the facility routinely provides “setup” activities (e.g., opening containers, buttering bread, and organizing the tray) and if this is the extent of assistance provided for the resident, the resident was coded as not needing any assistance with eating

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Assistance with dressing	Number of services users needing any assistance with dressing. Assistance refers to needing any help or supervision from another person or use of assistive devices.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to dress? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to dress? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Derived from: [MSR_335_VAL and MSR_336_VAL from OBQI] Number of patients coded as needing any assistance with dressing if: they are able to dress upper and lower body without assistance, if clothing and shoes are laid out or handed to the patient; someone must help the patient put on upper body clothing or undergarments, slacks, socks or nylons, and shoes; or patient depends entirely upon another person to dress the upper and lower body	---	Derived from: [DRSG_UPR_ADMSN_CD, DRSG_LWR_ADMSN_CD from IRF-PAI] Number of patients needing assistance with dressing including: 1) Helper—complete dependence or total assistance; 2) Helper—complete dependence or maximal assistance; 3) Helper—modified dependence or moderate assistance; 4) Helper—modified dependence or minimal assistance; 5) Helper—modified dependence or supervision	---	Derived from: [CNSUS_DRS_ASTD_CNT; CNSUS_DRS_DPNDNT_CNT / CNSUS_RSDNT_CNT] Number of residents coded as needing any assistance with dressing if they require supervision, limited or extensive assistance from staff, or full staff performance every time during entire 7-day period. If the facility routinely set out clothes for all residents, and this is the only assistance the resident receives, the resident was coded as not needing any assistance with dressing

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Assistance with toileting	Number of services users needing any assistance with using bathroom. Assistance refers to needing any help or supervision from another person or use of assistive devices.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to use the bathroom or toileting? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to use the bathroom or toileting? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Derived from: [MSR_339_VA from OBQI] Number of patients coded as needing any assistance with toileting if: the patient is able to manage toileting hygiene and clothing management without assistance if supplies or implements are laid out for the patient; someone must help the patient to maintain toileting hygiene or adjust clothing; or the patient depends entirely upon another person to maintain toileting hygiene. Toileting hygiene refers to the patient's current ability to maintain perineal hygiene safely, or adjust clothes or incontinence pads before and after using toilet, commode, bedpan, and urinal. If managing ostomy, it includes cleaning area around stoma, but not managing equipment	---	Derived from: [TOILTG_ADMSN_CD from IRF-PAI] Number of patients needing assistance with toileting including: 1) Helper—complete dependence or total assistance; 2) Helper—complete dependence or maximal assistance; 3) Helper—modified dependence or moderate assistance; 4) Helper—modified dependence or minimal assistance; 5) Helper—modified dependence or supervision	---	Derived from: [CNSUS_TOILT_ASTD_CNT, CNSUS_TOILT_DPNDNT_CNT / CNSUS_RSDNT_CNT] Number of residents coded as needing any assistance with toileting if they require supervision, limited or extensive assistance from staff, or full staff performance every time during entire 7-day period If all that is done for the resident is to open a package (e.g., a clean sanitary pad), the resident was coded as not needing any assistance with toileting.

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Assistance with bathing	Number of services users needing any assistance with bathing or showering. Assistance refers to needing any help or supervision from another person or use of assistive devices.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to bathe or shower? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to bathe or shower? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Derived from: [MSR_337_VAL from OBQI] Number of patients coded as needing any assistance with bathing if the patient is: with the use of devices, able to bathe self in shower or tub independently, including getting in and out of the tub or shower; able to bathe in shower or tub with the intermittent assistance of another person; able to participate in bathing self in shower or tub, but requires presence of another person throughout the bath for assistance or supervision; unable to use the shower or tub, but able to bathe self independently with or without the use of devices at the sink, in chair, or on commode; unable to use the shower or tub, but able to participate in bathing self in bed, at the sink, in bedside chair, or on commode, with the assistance or supervision of another person throughout the bath; or unable to participate effectively in bathing and is bathed totally by another person	---	Derived from: [BATHG_ADMSN_CD from IRF-PAI] Number of patients needing assistance with bathing including: 1) Helper—complete dependence or total assistance; 2) Helper—complete dependence or maximal assistance; 3) Helper—modified dependence or moderate assistance; 4) Helper—modified dependence or minimal assistance; 5) Helper—modified dependence or supervision	---	Derived from: [CNSUS_BATHG_ASTD_CNT, CNSUS_BATHG_DPNDNT_CNT / CNSUS_RSDNT_CNT] Number of residents coded as needing any assistance with bathing if they require supervision, physical help limited to transfer only or in part of bathing activity, or full staff performance every time during entire 7-day period If the facility provides setup assistance to all residents, such as drawing water for a tub bath or laying out bathing materials, and the resident requires no other assistance, the resident was coded as not needing any assistance with bathing.

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Assistance with walking or locomotion	Number of services users needing any assistance with walking or locomotion. Assistance refers to needing any help or supervision from another person or use of assistive devices.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need for locomotion or to walk? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need for locomotion or to walk? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Derived from: [MSR_341_VAL from OBQI] Number of patients coded as needing any assistance with ambulation or locomotion if they are: able to independently walk on even and uneven surfaces and negotiate stairs with or without railings without use of an assistive device, with the use of a one-handed assistive device, or with the use of a two-handed device; able to walk only with the assistance of another person at all times; chairfast, unable to ambulate but are able to wheel self independently; chairfast, unable to ambulate and unable to wheel self; or bedfast, unable to ambulate or be up in a chair	---	Derived from: [WLK_ADMSN_CD from IRF-PAI] Number of patients needing assistance with walking or locomotion including: 1) Helper—complete dependence or total assistance; 2) Helper—complete dependence or maximal assistance; 3) Helper—modified dependence or moderate assistance; 4) Helper—modified dependence or minimal assistance; 5) Helper—modified dependence or supervision	---	Derived from: [CNSUS_INDPNDNT_MBLTY_CNT / CNSUS_RSDNT_CNT] Number of residents who require no help or oversight; or help or oversight was provided only one or two times during the past 7 days. Do not include residents who use a cane, walker, or crutch Subtracted from CNSUS_RSDNT_CNT

See footnotes at end of table.

Table VII. Health and functional characteristics of post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Assistance with transferring	Number of services users needing any assistance with transferring. Assistance refers to needing any help or supervision from another person or use of assistive devices.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to transfer in and out of a chair? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Needs assistance = 1 No assistance = 2 Derived from: Which types of assistance, if any, does [sampled person's initials] currently need to transfer in and out of a bed or chair? 1. Need help or supervision 2. Use of an assistance device 3. Both 4. Need no assistance If 1, 2, or 3, then = 1; if 4, then = 2.	Derived from: [MSR_340_VAL from OBQI] Number of patients coded as needing any assistance with transferring if they are: able to transfer with minimal human assistance or with use of an assistive device; able to bear weight and pivot during the transfer process but unable to transfer self; and are unable to bear weight or pivot when transferred by another person; bedfast, unable to transfer but are able to turn and position self in bed; bedfast, unable to transfer and are unable to turn and position self	---	Derived from: [BED_CHR_WC_ADMSN_CD from IRF-PAI] Number of patients needing assistance with transferring from bed, chair, or wheelchair including: 1) Helper—complete dependence or total assistance; 2) Helper—complete dependence or maximal assistance; 3) Helper—modified dependence or moderate assistance; 4) Helper—modified dependence or minimal assistance; 5) Helper—modified dependence or supervision	---	Derived from: [CNSUS_TRNSFR_ASTD_CNT, CNSUS_TRNSFR_DPNDNT_CNT / CNSUS_RSDNT_CNT] Number of residents who require help moving between surfaces, including, to or from bed, chair, wheelchair, or standing positions Excludes transfers to or from the bath or toilet. If the facility routinely provides “setup” assistance to all residents, such as handing the equipment (e.g., sliding board) to the resident, and this is the only assistance required, the resident was coded as not needing assistance with transferring.

--- Data not available.

NOTES: For survey data (ADSC and RCC), question numbers refer to the order in National Study of Long-Term Care Providers (NSLTCP) services user questionnaires. Questionnaires and detailed documentation on survey variables are available from: https://www.cdc.gov/nchs/nsltcp/nsltcp_questionnaires.htm. For administrative data (HHA, HOS, and NH), when the data source is not specified, the source is Centers for Medicare and Medicaid Services Certification and Survey Provider Enhanced Reports (CASPER).

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018, and Centers for Medicare and Medicaid Services, 2017 and 2018.

Table VIII. Adverse events among post-acute and long-term care services users, by sector

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Overnight hospital stay	Number of services users who were discharged from an overnight hospital stay	Was [sampled person's initials] discharged from an overnight hospital stay in the past 90 days? Exclude trips to the hospital emergency department that did not result in an overnight hospital stay. 1 = Yes 2 = No 3 = Don't know Don't know was coded as missing data.	Was [sampled person's initials] discharged from an overnight hospital stay in the past 90 days? Exclude trips to the hospital emergency department that did not result in an overnight hospital stay. 1 = Yes 2 = No 3 = Don't know Don't know was coded as missing data.	Derived from: [MSR_447_VAL from Outcome-Based Quality Improvement (OBQI)] To which inpatient facility has the patient been admitted? 1 = Hospital	---	---	---	Number of residents in 2018 Minimum Data Set Active Resident Episode Table (MARET) data file, with an overnight hospital stay, defined as MARET residents with at least one inpatient hospitalization claim in the 2018 Medicare Provider Analysis and Review, where the inpatient hospitalization discharge occurred after the nursing home admission date and during the 2018 calendar year
Emergency department visits	Number of services users who had emergency department visits	During the past 90 days, was [sampled person's initials] treated in a hospital emergency department? 1 = Yes 2 = No 3 = Don't know Don't know was coded as missing data.	During the past 90 days, was [sampled person's initials] treated in a hospital emergency department? 1 = Yes 2 = No 3 = Don't know Don't know was coded as missing data.	Derived from: [MSR_426_VAL from OBQI Case Mix Roll-up data] Since the last time Outcome and Assessment Information Set data were collected, has the patient utilized a hospital emergency department (includes holding or observation)?	---	---	---	---

See footnotes at end of table.

Table VIII. Adverse events among post-acute and long-term care services users, by sector—Con.

Characteristic	Definition	Survey data		Administrative data				
		Adult day services center (ADSC)	Residential care community (RCC)	Home health agency (HHA)	Hospice (HOS)	Inpatient rehabilitation facility (IRF)	Long-term care hospital (LTCH)	Nursing home (NH)
Falls	Number of services users who had falls	Derived from: By falls we mean any fall, slip, or trip in which [sampled person's initials] lost balance and landed on the floor or ground or at a lower level. Please include falls that occurred at your adult day services center or off-site, whether or not [sampled person's initials] was injured, and whether or not anyone saw [sampled person's initials] fall or caught them. As best you know, during the past 90 days, how many falls has [sampled person's initials] had?	Derived from: By falls we mean any fall, slip, or trip in which [sampled person's initials] lost balance and landed on the floor or ground or at a lower level. Please include falls that occurred at your residential care community or off-site, whether or not [sampled person's initials] was injured, and whether or not anyone saw [sampled person's initials] fall or caught them. As best you know, during the past 90 days, how many falls has [sampled person's initials] had?	---	---	---	---	Derived from: [J1800_FALL_LAST_ASMT_CD from MARET data] Has the resident had any falls since admission or the prior assessment, whichever is more recent?
Length of stay	Nursing home residents categorized by short-stay (residents had been admitted less than 100 days from assessment date) and long-stay (admitted for 100 days or more)	---	---	---	---	---	---	Derived from: [LAST_TRGT_DT and A1600_ENTRY_DT from MARET data] If LOS <= 100, then SHORTSTAY_100 = 1; if LOS > 100, then SHORTSTAY_100 = 0.

--- Data not available.

NOTES: For survey data (ADSC and RCC), question wording refers to the National Study of Long-Term Care Providers services user questionnaires. Questionnaires and detailed documentation on survey variables are available from: <https://www.cdc.gov/nchs/npals/questionnaires.htm>. For administrative data (HHA, HOS, NH, IRF, and LTCH), when the data source is not specified, the source is Centers for Medicare and Medicaid Services Certification and Survey Provider Enhanced Reports data.

SOURCES: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018, and Centers for Medicare and Medicaid Services, 2017 and 2018.

Appendix III. Supporting Tables

Table IX. Post-acute and long-term care services providers, by geographical and organizational characteristics and sector: United States, 2017–2018

Characteristic	Adult day services center	SE	Home health agency	SE	Hospice	SE	Inpatient rehabilitation facility	SE	Long-term care hospital	SE	Nursing home	SE	Residential care community	SE
Number														
Number of providers ¹	4,200	12	11,500	...	4,700	...	1,200	...	400	...	15,600	...	31,400	300
Number of beds or licensed maximum capacity ¹	283,200	8,500	...	...	...	...	344,600	9,700	26,500	1,500	1,655,400	7,600	1,183,600	43,000
Average number of beds or licensed maximum capacity ^{2,3}	68	2	---	---	---	---	298	8	68	4	106	0	38	1
Average number of people served ^{3,4}														
Daily	65	2	...	...	...	...	---	---	---	---	85	0	32	1
Annually	...	...	458	11	356	11	348	10	293	11	...	...	...	...
Number of people served ⁵														
Percent distribution														
Category 1	22.9	1.5	42.7	0.5	37.1	0.7	15.0	1.1	9.1	1.5	5.5	0.2	62.9	1.3
Category 2	58.7	1.8	24.4	0.4	32.5	0.7	46.2	1.5	58.3	2.5	65.4	0.4	31.2	1.5
Category 3	18.5	1.4	32.9	0.5	30.3	0.7	38.8	1.5	32.6	2.4	29.1	0.4	6.0	0.8
Region														
Northeast	19.3	0.1	9.1	0.3	9.3	0.4	15.2	1.1	11.0	1.6	16.6	0.3	7.4	0.2
Midwest	15.5	0.1	26.8	0.4	20.3	0.6	24.8	1.3	22.0	2.1	33.0	0.4	26.6	0.7
South	33.3	0.1	43.9	0.5	37.4	0.7	41.3	1.5	54.6	2.5	34.9	0.4	25.8	0.3
West	32.0	0.1	20.3	0.4	32.9	0.7	18.7	1.2	13.3	1.7	15.5	0.3	40.2	0.4
Metropolitan statistical area status														
Metropolitan	84.6	1.4	85.4	0.3	81.1	0.6	86.7	1.0	94.8	1.2	71.9	0.4	86.5	1.7
Micropolitan	11.1	1.2	8.1	0.3	11.5	0.5	11.5	1.0	4.6	1.1	13.5	0.3	8.7	1.5
Neither	4.3	0.8	6.5	0.2	7.4	0.4	1.8	0.4	0.5	0.4	14.6	0.3	4.9	1.1
Ownership														
For profit	42.3	1.8	82.0	0.4	66.4	0.7	34.4	1.4	67.2	2.4	70.0	0.4	79.2	1.9
Nonprofit	52.8	1.8	14.3	0.3	21.3	0.6	46.9	1.5	23.1	2.1	23.2	0.3	18.8	1.8
Government and other	4.8	0.8	3.7	0.2	12.3	0.5	18.7	1.2	9.8	1.5	6.8	0.2	2.0	0.8
Certification														
Percent														
Medicare certified	...	...	98.6	0.1	---	---	100.0	...	100.0	...	97.8	0.1	...	...
Medicaid certified	74.9	1.5	78.9	0.4	---	---	95.9	0.6	76.9	2.1	95.4	0.2	46.9	2.8
Chain affiliated	42.7	1.8	---	---	---	---	---	---	---	---	58.6	0.4	60.3	2.8

... Category not applicable.

--- Data not available.

¹Estimates are rounded as whole numbers to the nearest hundred.²For adult day services centers (ADSCs), capacity is based on licensed maximum capacity. For nursing homes (NHs), residential care communities (RCCs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs), capacity is based on number of licensed or certified beds.³Averages are based on unrounded numbers.⁴Estimated number of ADSC participants represents current participants in 2018. Estimated number of home health agency (HHA) and IRF patients represents patients discharged in 2017. Estimated number of hospice (HOS) and LTCH patients represents patients who received care at any time in 2017. Estimated number of NH and RCC residents represents current residents in 2018.⁵For ADSCs, NHs, and RCCs, number of people served is based on current users on any given day in 2018, and the categories are 1–25, 26–100, and 101 or more. For HHAs, HOSs, IRFs, and LTCHs, number of people served is based on number of patients in 2017, and the categories are 1–100, 101–300, and 301 or more.

NOTES: SE is standard error. Percent distributions may not add to 100 because of rounding. Percentages are based on unrounded estimates.

SOURCE: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018.

Table X. Staffing characteristics of post-acute and long-term care services providers, by staff type and sector: United States, 2018

Characteristic	Adult day services center	SE	Home health agency	SE	Hospice	SE	Inpatient rehabilitation facility	SE	Long-term care hospital	SE	Nursing home	SE	Residential care community	SE
Number														
Total number of nursing and social work employee FTEs	24,300	1,089	139,200	1,530	91,300	1,620	263,900	7,000	13,600	440	660,000	4,780	474,200	31,300
Percent distribution														
Nursing and social work employee FTEs														
Registered nurse	26.6	1.4	51.5	0.4	48.4	0.3	92.4	0.3	79.9	1.7	12.1	0.1	14.7	2.3
Licensed practical nurse or licensed vocational nurse	8.6	0.5	21.3	0.3	8.7	0.2	8.6	0.3	17.9	1.7	23.3	0.1	14.1	1.3
Aide	55.6	1.5	24.7	0.4	31.6	0.3	---	---	---	---	62.8	0.1	70.0	2.2
Social worker	9.3	0.6	2.6	0.0	11.3	0.1	---	---	---	---	1.8	0.0	1.2	0.2
Percent														
Providers with one or more employee FTEs														
Registered nurse	61.0	1.7	99.6	0.1	†100.0	...	97.6	0.5	96.9	0.9	71.4	0.4	41.9	2.6
Licensed practical nurse or licensed vocational nurse	41.4	1.8	72.8	0.4	65.1	0.7	87.3	1.0	76.2	2.2	70.9	0.4	41.3	2.3
Aide	65.2	1.7	89.5	0.3	97.8	0.2	---	---	---	---	70.8	0.4	73.5	2.6
Social worker	37.1	1.8	46.7	0.5	99.2	0.1	---	---	---	---	55.7	0.4	13.0	1.8
Activities director or staff	80.5	1.5	---	---	---	---	---	---	---	---	69.7	0.4	56.7	2.6
Mean														
Employee hours per resident or participant per day														
Registered nurse	0.31	0.04	---	---	---	---	---	---	---	---	0.37	0.01	0.74	0.29
Licensed practical nurse or licensed vocational nurse	0.15	0.03	---	---	---	---	---	---	---	---	0.61	0.01	0.43	0.18
Aide	0.74	0.09	---	---	---	---	---	---	---	---	1.67	0.01	2.28	0.29
Social worker	0.08	0.01	---	---	---	---	---	---	---	---	0.06	0.00	0.06	0.03
Activities director or staff	0.63	0.07	---	---	---	---	---	---	---	---	0.14	0.00	0.39	0.11

--- Data not available.

† Percentage is 90% or higher but estimate is not displayed as it may pose a disclosure risk.

... Category not applicable.

NOTES: SE is standard error. FTE is full-time equivalent. Percent distributions may not add to 100 because of rounding. Percentages are based on unrounded estimates.

SOURCE: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018.

Table XI. Services provided by post-acute and long-term care services providers, by type of service and sector: United States, 2018

Service provided	Adult day services center	SE	Home health agency	SE	Hospice	SE	Inpatient rehabilitation facility	SE	Long-term care hospital	SE	Nursing home	SE	Residential care community	SE
Percent														
Social work	50.2	1.9	81.7	0.4	100.0	—	97.5	0.5	88.2	1.6	63.8	0.4	62.8	2.9
Mental health or counseling	37.7	1.8	---	---	97.3	0.2	---	---	---	---	63.6	0.4	62.0	2.7
Therapeutic	45.4	1.8	95.8	0.2	97.9	0.2	99.8	0.1	99.5	0.4	71.7	0.4	71.7	2.6
Skilled nursing or nursing	62.0	1.7	100.0	—	100.0	—	---	---	---	---	71.6	0.4	70.8	2.6
Pharmacy or pharmacist services	30.9	1.7	4.5	0.2	---	---	99.0	0.3	98.0	0.7	70.1	0.4	84.5	2.2
Hospice	12.6	1.2	5.4	0.2	...	...	---	---	---	---	83.0	0.3	66.8	2.9
Dietary and nutritional	60.5	1.8	---	---	---	---	98.8	0.3	96.4	0.9	71.5	0.4	82.6	2.2
Dementia-specific units														
Only serve residents with dementia	---	---	---	---	---	---	---	---	---	---	0.3	0.1	6.0	1.3
Have a distinct unit, wing, or floor designated for dementia special care	---	---	---	---	---	---	---	---	---	---	13.4	0.3	19.4	1.6

— Quantity zero.

--- Data not available.

... Category not applicable.

NOTES: SE is standard error. Percent distributions may not add to 100 due to rounding. Percentages are based on unrounded estimates.

SOURCE: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018.

Table XII. Post-acute and long-term care users, by selected characteristics and sector: United States, 2017–2018

Characteristic ¹	Adult day services center	SE	Home health agency	SE	Hospice	SE	Inpatient rehabilitation facility	SE	Long-term care hospital	SE	Nursing home	SE	Residential care community	SE
Users ²	251,100	7,080	4,940,270	---	1,562,524	47,679	380,430	10,956	115,822	4,448	1,321,200	6,640	918,700	33,620
Age	Percent distribution													
Under 65	39.4	2.1	17.3	0.0	5.2	0.1	12.1	0.2	25.7	0.5	16.9	0.0	7.5	1.2
65 and over	60.6	2.1	82.7	0.0	94.8	0.1	87.9	0.2	74.3	0.5	83.1	0.0	92.5	1.3
65–74	17.8	1.4	27.5	0.0	17.6	0.1	31.9	0.2	34.3	0.3	19.5	0.0	12.1	1.6
75–84	24.1	1.7	29.9	0.0	29.2	0.1	33.5	0.1	26.5	0.2	27.2	0.0	25.5	2.4
85 and over	18.6	1.5	25.2	0.0	48.0	0.2	22.5	0.3	13.5	0.5	36.4	0.0	54.9	2.6
Sex														
Men	43.5	1.9	39.4	0.1	41.6	0.1	45.8	0.2	51.8	0.3	36.7	0.0	32.6	2.1
Women	56.5	1.9	60.6	0.1	58.4	0.1	54.2	0.2	48.2	0.3	63.3	0.0	67.4	2.1
Race and ethnicity														
Hispanic	22.2	1.9	7.0	0.2	6.5	0.4	5.8	0.4	9.7	0.9	5.7	0.0	1.9	0.6
Non-Hispanic White	44.8	2.1	76.8	0.3	82.3	0.5	79.9	0.6	66.3	1.1	73.9	0.0	89.4	1.8
Non-Hispanic Black	16.8	1.4	12.1	0.2	8.3	0.2	10.8	0.4	19.8	0.9	14.9	0.0	5.9	1.4
Other ³	16.3	1.9	4.1	0.1	3.0	0.2	3.5	0.2	4.1	0.3	5.5	0.0	2.8	0.9
Medicaid payer source	72.3	1.9	9.1	0.0	---	---	---	---	---	---	62.0	0.2	18.1	2.3
Diagnosis ⁴	Percent													
Alzheimer disease or other dementias	27.8	1.8	35.5	0.2	46.3	0.3	35.6	0.4	45.5	0.7	49.1	0.0	33.7	2.8
Arthritis	18.5	1.6	61.7	0.2	29.6	0.2	62.8	0.3	52.6	0.6	27.6	0.0	20.5	2.1
Asthma	5.6	0.9	11.8	0.1	3.7	0.0	12.0	0.1	13.9	0.2	---	---	2.0	0.5
Chronic kidney disease	5.7	0.9	54.7	0.1	39.2	0.2	61.2	0.3	81.4	0.5	---	---	6.5	1.1
Chronic obstructive pulmonary disease	6.8	0.9	32.0	0.2	20.1	0.2	33.1	0.3	55.4	0.8	---	---	10.6	1.9
Depression	21.8	1.7	40.5	0.1	23.7	0.2	49.2	0.4	51.8	0.5	48.8	0.0	27.5	2.5
Diabetes	29.7	1.7	45.2	0.2	26.6	0.2	48.2	0.3	64.2	0.6	34.8	0.0	20.4	2.3
Heart disease ⁵	13.3	1.4	54.4	0.2	37.9	0.3	59.8	0.4	68.3	0.6	20.1	0.0	17.3	1.9
High blood pressure or hypertension	51.1	2.0	89.2	0.1	50.3	0.3	93.6	0.1	93.5	0.3	76.9	0.0	55.2	2.7
Osteoporosis	12.7	1.6	15.0	0.1	6.4	0.1	17.4	0.2	10.5	0.2	11.4	0.0	12.0	1.5
Need assistance in physical functioning														
Bathing	74.8	1.9	98.3	0.0	---	---	99.7	0.0	---	---	96.5	0.1	77.3	2.2
Dressing	64.2	2.0	95.6	0.0	---	---	99.9	0.0	---	---	92.7	0.1	61.7	2.5
Toileting	52.7	2.1	90.2	0.0	---	---	99.4	0.0	---	---	89.8	0.1	48.7	2.9
Walking or locomotion	57.7	2.0	97.2	0.0	---	---	99.8	0.0	---	---	92.4	0.1	69.0	2.6
Transferring in and out of a chair or bed	53.6	2.1	95.4	0.0	---	---	99.9	0.0	---	---	87.3	0.1	51.0	2.8
Eating	41.4	2.0	66.8	0.0	---	---	83.9	0.1	---	---	60.2	0.3	26.3	2.5

See footnotes at end of table.

Table XII. Post-acute and long-term care users, by selected characteristics and sector: United States, 2017–2018—Con.

Characteristic	Adult day services center	SE	Home health agency	SE	Hospice	SE	Inpatient rehabilitation facility	SE	Long-term care hospital	SE	Nursing home	SE	Residential care community	SE
Adverse event							Percent							
Overnight hospital stay ⁶	5.4	0.8	15.0	0.0	---	---	---	---	---	---	14.6	0.0	7.7	1.1
Emergency department visit	9.7	1.0	16.1	0.0	---	---	---	---	---	---	---	---	12.1	1.5
Fall	14.4	1.3	---	---	---	---	---	---	---	---	17.0	0.0	29.6	2.4

--- Data not available.

0.0 Quantity more than zero but less than 0.05.

¹All cases with missing data were removed from the denominator when calculating percentages. For variables that had missing data for more than 10% of all cases, the percentage missing is reported in a footnote.

²Estimates are rounded as whole numbers to the nearest hundred. Estimated number of adult day services center (ADSC) participants, nursing home (NH) residents, and residential care community (RCC) residents represents current users in 2018. Estimated number of home health agency (HHA) and inpatient rehabilitation facility (IRF) patients represents patients discharged in 2017. Estimated number of hospice (HOS) and long-term care hospital (LTCH) patients represents patients who received care at any time in 2017.

³For ADSCs and RCCs, includes non-Hispanic American Indian or Alaska Native (AIAN), non-Hispanic Asian, non-Hispanic Native Hawaiian or Other Pacific Islander (NHOPI), non-Hispanic of two or more races, and unknown race and ethnicity. For HOS, HHAs, NHs, IRFs, and LTCHs, other race includes non-Hispanic AIAN, non-Hispanic Asian, and non-Hispanic NHOPI.

⁴For ADSCs, the percentage of missing data was 11.2% for Alzheimer disease, 14.3% for arthritis, 14.8% for asthma, 15.0% for chronic kidney disease, 15.3% for chronic obstructive pulmonary disease (COPD), 13.1% for depression, 11.8% for diabetes, 14.1% for heart disease, 13.1% for hypertension, and 15.8% for osteoporosis. For RCCs, the percentage missing was 14.1% for arthritis, 15.6% for asthma, 15.3% for chronic kidney disease, 13.6% for COPD, 12.6% for depression, 12.5% for diabetes, 13.0% for heart disease, 11.5% for hypertension, and 15.0% for osteoporosis.

⁵For ADSC participants and RCC residents, heart disease includes congestive heart failure, coronary or ischemic heart disease, heart attack, and stroke. For HHA, HOS, IRF, and LTCH patients, heart disease refers to ischemic heart disease. For NH residents, heart disease refers to coronary artery disease, congestive heart failure, and stroke.

⁶For NH residents, overnight hospital stay is defined as any resident in the 2018 Minimum Data Set Active Resident Episode Table 3rd quarter file having any inpatient hospital stay as determined in the 2018 Medicare Provider Analysis and Review data file.

NOTES: SE is standard error. Percent distributions may not add to 100 due to rounding. Percentages are based on unrounded estimates.

SOURCE: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018.

Table XIII. Nursing home residents, by selected characteristics and length of stay: United States, 2018

Characteristic	Short stay (fewer than 100 days) ¹	SE	Long stay (100 days or more) ¹	SE
	Number			
Users ²	598,712	580	773,765	580
	Percent distribution			
Age				
Under 65	18.9	0.1	15.4	0.0
65 and over	81.1	0.1	84.6	0.0
65–74	21.8	0.1	17.7	0.0
75–84	28.7	0.1	26.1	0.1
85 and over	30.7	0.1	40.9	0.1
Sex				
Men	41.0	0.1	33.4	0.1
Women	59.0	0.1	66.6	0.1
Race and ethnicity				
Hispanic	5.6	0.0	5.7	0.0
Non-Hispanic White	73.3	0.1	74.4	0.1
Non-Hispanic Black	14.6	0.1	15.2	0.0
Other ³	6.5	0.0	4.7	0.0
Medicaid payer source	---	---	---	---
Diagnosis				
Alzheimer disease or other dementias	35.8	0.1	57.6	0.1
Arthritis	24.9	0.1	29.8	0.1
Depression	42.8	0.1	52.7	0.1
Diabetes	38.1	0.1	32.7	0.1
Heart disease ⁴	44.7	0.1	39.8	0.1
High blood pressure or hypertension	77.4	0.1	76.6	0.1
Osteoporosis	8.8	0.0	13.0	0.0
Need assistance in physical functioning				
Bathing	---	---	---	---
Dressing	---	---	---	---
Toileting	---	---	---	---
Walking or locomotion	---	---	---	---
Transferring in and out of a chair or bed	---	---	---	---
Eating	---	---	---	---
Adverse events				
Overnight hospital stay ⁵	23.0	0.1	8.15	0.03
Emergency department visit.	---	---	---	---
Fall	13.5	0.1	19.3	0.0

0.0 Quantity more than zero but less than 0.05.

--- Data not available.

¹Average length of stay among all residents is 485 days; 43% of residents are short-stay and 57% are long-stay.²Estimates are rounded as whole numbers to the nearest hundred. Estimated number of nursing home residents represents current residents in 2018.³Includes non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, and non-Hispanic Native Hawaiian or Other Pacific Islander.⁴Includes coronary artery disease, congestive heart failure, and stroke.⁵Defined as any resident in the 2018 Minimum Data Set Active Resident Episode Table 3rd quarter file having any inpatient hospital stay as determined in the 2018 Medicare Provider Analysis and Review data file.

NOTES: SE is standard error. Percent distributions may not add to 100 because of rounding. Percentages are based on unrounded estimates.

SOURCE: National Center for Health Statistics, National Study of Long-Term Care Providers, 2017–2018.

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