U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Behavioral Health, Disability, and Aging Policy

UNDERSTANDING THE CHARACTERISTICS OF OLDER ADULTS IN DIFFERENT RESIDENTIAL SETTINGS:

DATA SOURCES AND TRENDS

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Office of the Assistant Secretary for Planning and Evaluation

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NOTE: BHDAP was previously known as the Office of Disability, Aging, and Long-Term Care Policy (DALTCP). Only our office name has changed, not our mission, portfolio, or policy focus.

This report was prepared under contract #HHSP233201600021I between HHS's ASPE/DALTCP and RTI International. For additional information about this subject, you can visit the BHDAP home page at https://aspe.hhs.gov/bhdap or contact the ASPE Project Officers, at HHS/ASPE/BHDAP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C., 20201; William.Halterman@hhs.gov, William.Marton@hhs.gov, Helen.Lamont@hhs.gov.

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ACRONYMS

The following acronyms are mentioned in this report and/or appendix.

ACS	American Community Survey
ADL	Activity of Daily Living
ASPE	Office of the Assistant Secretary for Planning and Evaluation
CCRC	Continuing Care Retirement Community
CES-D	Center for Epidemiologic Studies Depression Scale
CMS	Centers for Medicare & Medicaid Services
COPD	Chronic Obstructive Pulmonary Disease
CVA	Cerebrovascular Accident
FQ	Facility Questionnaire
HIPAA	Health Insurance Portability and Accountability Act
HRS	Health and Retirement Study
IADL	Instrumental Activity of Daily Living
LTSS	Long-Term Services and Supports
MCBS	Medicare Current Beneficiary Survey
MSA	Metropolitan Statistical Area
NCHS	National Center for Health Statistics
NHATS	National Health and Aging Trends Study
NSLTCP	National Study of Long-Term Care Providers
NSRCF	National Study of Residential Care Facilities
RCF	Residential Care Facility
RIC	Record Identification Code
SP	Sample Person

EXECUTIVE SUMMARY

Introduction

By 2050, the number of adults 65 years and older is expected to more than double to 88.5 million from 40.2 million in 2010 (U.S. Census Bureau, 2010a). As the population ages, the prevalence of disability and functional limitations, as well as the demand for long-term services and supports (LTSS), is anticipated to increase. A recent report from the Office of the Assistant Secretary for Planning and Evaluation estimated that more than half of older adults turning 65 will develop a disability that necessitates LTSS (Favreault & Dey, 2016). LTSS include a variety of personal care, mobility, health, and social services to assist individuals with functional limitations due to disability or other physical or cognitive conditions (Tach & Wiener, 2018).

Despite this need, most older adults say they would like to live in their homes and communities for as long as they are able, rather than move to nursing homes, which provide high-acuity care for residents with serious health concerns, multiple comorbidities, and chronic conditions (Keenan, 2010). LTSS can be provided in a variety of residential settings, from traditional housing and assisted living (non-institutional) to nursing homes (institutional). Yet we lack consistent and reliable estimates of older adults' use of each type of setting.

Most research has identified a trend toward an increasing use of non-institutional residential care, such as assisted living facilities (Silver et al., 2018), and a decline in the use of institutional care such as nursing homes (Spillman & Black, 2005; Grabowski, Stevenson, & Cornell, 2012; Degenholtz et al., 2016). However, survey and regulatory differences in the definitions of non-institutional LTSS can vary across surveys and states, hindering researchers' and policy makers' understanding of the LTSS needs of people residing in these settings.

Building upon prior work by Spillman & Black (2006), this project describes where older adults live, how their needs differ by residential setting type, and how population demographics, health, disability, and functional status have changed over time. We present and compare information from different data sources and surveys, each with a slightly different sampling frame, purpose, and set of limitations. Exploring multiple data sources provides a more complete picture of the characteristics of older adults across different residential settings. Additionally, understanding the differences between survey methods provides insight into why the picture of the older adult population may vary depending on the source information.

This work extends that of Spillman & Black by using more recent data from surveys that they analyzed. We also augment this data with information from other, more recent datasets that sample the older adult population and survey long-term care facilities. Through a longitudinal analysis of data from multiple sources, we address the following questions:

- How many older adults live in traditional housing, community-based residential care facilities (RCFs), and nursing homes, and how have these numbers changed in recent years?

- What do we know about the demographic, health, and functional characteristics of older adults living in these settings, and how they differ across the three types of living arrangements?

Data Sources

We used multiple data sources to estimate the older adult (age 65+) population[1] in the United States, their places of residence, and their demographic, health, and functional characteristics. These data sources include the Medicare Current Beneficiary Survey (MCBS) 2008 and 2013 Cost and Use Files; the 2008 and 2014 Health and Retirement Study (HRS); the 2011 and 2015 National Health and Aging Trends Study (NHATS); and the 2010, 2012 and 2014 National Study of Long-Term Care Providers, 2010, 2012.

Findings

How many older adults live in traditional housing, community-based RCFs, and nursing homes, and how have these numbers changed in recent years?

- **Population growth**. The older population (age 65+) has grown from approximately 34 million in 2002 to 42-46 million in 2014/2015.

- **Residential setting changes**. The proportion of older adults residing in nursing homes is declining, and there is a corresponding increase in the proportion of older adults living in traditional housing ($p<0.05$). Although the number of people living in community-based residential care settings has increased, the proportion of older adults residing in these settings remained stable (HRS and MCBS) or slightly declined (NHATS) over time.

    - In the most recent years for which data were available, the MCBS indicates 979,481 people in community-based residential care settings (2013), up from 781,982 in 2002 but proportionally the same (2.3%). The HRS reports many fewer (0.8 million; 2014), and the NHATS reports many more (2 million; 2015). These differences across surveys likely reflect variation in how residential care settings are defined by each survey, and in how samples are selected.

What do we know about the demographic, health, and functional characteristics of older adults living in these settings, and how they differ across the three types of living arrangements?

- **Demographics**. The demographic characteristics of residents were similar across years within each setting, and across settings, with some key exceptions.

[1] The NSLTCP samples residential care providers, rather than individuals, and as such is not restricted to people age 65 years and older.

- **Age**. The age distributions of older adults living in community-based residential care were comparable to those living in nursing homes in the most recent year of each survey (53%-61.5% of residents were aged 85 and older).

- **Race**. There were increases in non-White residents in community-based residential care over time, across all datasets except the HRS.

- **Marriage status**. The presence of single or widowed adults increased slightly in community-based residential care, but not in traditional housing or nursing facilities.

- **Income**. The proportion of low-income older adults declined over time in traditional housing and community-based residential care, but not in nursing homes.

- **Functional limitations**. Estimates of functional limitation varied across data sources, likely resulting from differences in variable definitions and approaches to data collection. The general patterns, however, were consistent.

  - In all data sources, and at all points in time, people living in community-based residential care settings reported more impairments than did those living in traditional settings. Those residing in nursing homes had the highest prevalence of functional limitations across all settings.

  - In general, functional limitations have increased over time for those residing in community-based residential care settings and nursing homes across all surveys, though this increase was only statistically significant for those in nursing homes. Changes in functional limitations of those residing in traditional housing varied by survey: the HRS indicated that there was very little change in functional limitations (not statistically significant), the MCBS showed an increase in 2013 relative to 2008 ($p<0.05$), while the NHATS reported a decline from 2011 to 2015 ($p<0.01$).

- **Disability**. Estimates of Health Insurance Portability and Accountability Act (HIPAA)-defined disability show the prevalence in community-based residential care settings ranged from 22.4%-41.6%, depending on the survey, and was 95% (MCBS) in nursing facilities during the latest year of the study period. Depending on the survey, the prevalence of HIPAA-defined disability among traditional housing residents ranged from 5.8%-11% in the latest year of the study period. The trend overtime was mixed, depending on the survey.

- **Alzheimer's and other dementia**. The prevalence of Alzheimer's disease and other dementias was lowest among those living in traditional settings, and highest among those living in nursing homes. In all settings, the proportion of people with any type of dementia increased from the baseline year to the most recent year of each survey, though not all changes were statistically significant. These patterns were consistent across datasets, but the prevalence rates varied, depending on how data were collected.

Each dataset has implications for estimating the characteristics and size of the residential care population. Differences in setting definitions, data collection procedures, and sampling frame can impact findings. Surveys that capture a mix of LTSS services offered within a setting, in addition to place names, can reliably capture residential care estimates beyond assisted living facilities or facilities regulated by state agencies. Researchers need to consider these methodological differences across datasets to understand how they impact estimates on the size of each setting, as well as the demographic and health status characteristics of residents within settings.

Despite these differences, the consistency in these findings suggest a growing role for non-institutional residential care settings within the long-term care continuum. In particular, as the proportion of older adults living in traditional housing is increasing, along with the health and functional needs of those residents, there may be a growing role for LTSS services outside of both community-based residential care and nursing homes.