STATE LTSS SCORECARD METHODOLOGY OVERVIEW AND DETAILED INDICATOR DESCRIPTIONS

Methodology Overview

The scoring and ranking methodology in this Scorecard is based on the same methodology used in the 2014 State Long-Term Services and Supports (LTSS) *Scorecard*; however, there are two significant changes. First, the Quality of Life and Quality of Care dimension is given half the weight of the other dimensions in determining the overall rank; second, the Support for Family Caregivers dimension is calculated as a single composite indicator. These changes are discussed in more detail below.

Dimensions and Indicators: The *Scorecard* measures LTSS system performance using 25 indicators across 5 dimensions:

Affordability and Access (six indicators) includes the relative affordability of private pay LTSS, the proportion of individuals with private long-term care insurance, the reach of Medicaid and the Medicaid LTSS safety net for people with disabilities who have modest incomes, and the ease of navigating the LTSS system.

Choice of Setting and Provider (six indicators) includes the balance between institutional services and home- and community-based services (HCBS), the extent of participant direction, and the supply and availability of alternatives to nursing homes, including residential care options such as assisted living and the supply of home health and personal care aides.

Quality of Life and Quality of Care (three indicators) includes employment of people with disabilities living in the community, and two indicators of quality in nursing homes. Due to discontinuation of data sources, half of the quality indicators from the previous *Scorecard* could not be repeated, and no suitable replacements could be found. Because of these gaps, the Quality of Life and Quality of Care dimension received only one-half of the weight of the other four dimensions in determining states' overall ranks on LTSS system performance.

Support for Family Caregivers (a single policy composite, divided into four indicators) includes supports for working caregivers, person- and family-centered care, nurse delegation and scope of practice, and transportation policies.

Effective Transitions (six indicators) includes measures of hospitalization and institutionalization that should be minimized in a high-performing LTSS system.

The framework for assessing LTSS system performance was developed in consultation with the *Scorecard* National Advisory Panel (NAP). NAP members are listed in the acknowledgments section of the 2017 LTSS *Scorecard* report, which can be found on the LTSS *Scorecard* website www.longtermscorecard.org. The NAP was instrumental in providing and evaluating the merits of the data indicators that populate each of the five dimensions. The NAP also helped refine some indicators from the past *Scorecard*.

The indicator selection criteria included the following conditions: indicators had to be clear, important, meaningful, and have comparable data available at the state level. Several composite indicators were constructed from a range of data in a related area, enabling us to rank states in areas of performance that would otherwise be difficult to assess. The methodology for each composite indicator is described in the

detailed indicator descriptions section below. Indicators are based on data that are expected to be updated regularly, so that change can be observed over time.

The 25 indicators were selected because they represent the best available measures at the state level. No single indicator fully captures state performance, but taken together they provide a useful measure of how state LTSS systems compare across a range of important dimensions.

Ranking Methodology: The *Scorecard* ranks the states from highest to lowest performance on each indicator in the Access, Choice, Quality, and Transitions dimensions. We average rankings across all indicators within each of these four dimensions and then re-rank to determine each state's dimension ranks. The Support for Family Caregivers dimension is a single composite indicator, and states are ranked based on the total composite score.

All dimensions are weighted equally with the exception of the Quality dimension, which was given half weight. In the case of missing data or ties in rank for an indicator or dimension, minor adjustments were made to values used in calculating the average.

- For ties: the average rank is given for the computation of the dimension or overall average (e.g., two states tied at third; both get a score of 3.5 for the calculation of the dimension average).
- Missing data: a constant value is added to all ranks so that the average rank for the indicator is 26.

CHANGES TO DIMENSIONS AND DATA INDICATORS

There are several differences in the indicator set between the 2014 and 2017 *State LTSS Scorecards*. In this appendix, we take a dimension-by-dimension look at the changes to the indicators between the 2014 *Scorecard* and the current *Scorecard*. The 25 indicators in the 2017 *Scorecard* can be classified as below.

Exhibit 1 **Status of Indicators in the 2017 State LTSS *Scorecard*, Relative to 2014 *Scorecard***

Status Relative to 2014 ***Scorecard***	Count of Indicators
Repeated without change	12
Indicator changed; revised baseline available for comparing change over time	7
Indicator in 2014 *Scorecard* revised and split into two indicators for 2017 *Scorecard*	2
Indicator changed; revised baseline data not available	2
Total repeated indicators	23
New indicator; prior data available for comparing change over time	2
Total indicators in 2017 *Scorecard*	25
Dropped indicators (in 2014 *Scorecard*, but not 2017 *Scorecard*)	4

Twelve indicators—approximately half—in the 2017 *Scorecard* are repeated from the 2014 *Scorecard* without change. For these indicators, the data from the 2014 *Scorecard* can be used as a baseline to analyze change over time. The baseline data in the 2017 *Scorecard* will not necessarily match those of the 2014 *Scorecard* because the years are different, or the data used in the 2014 *Scorecard* have been updated for accuracy.

Another 9 indicators are updates with some change in methodology; this could be a new measure definition, new scoring algorithm, and/or new data source for which prior-year data are available to create a revised baseline that can be used to analyze change over time. Two indicators from the 2017 *Scorecard* had a change in methodology, but comparability to prior years is not possible. As a result, 23 of the 25 indicators in the 2014 *Scorecard* are continued into the 2017 *Scorecard*.

In addition, four measures from the 2014 *Scorecard* were not included in the 2017 *Scorecard* due to discontinuation of the underlying data source and lack of adequate alternative measures. These are outlined in exhibit 2 below.

Exhibit 2 **Indicators Dropped from the 2014 *Scorecard***

Dimension	Dropped Indicator
Quality	Percent of adults ages 18+ with disabilities in the community usually or always getting needed support
Quality	Percent of adults ages 18+ with disabilities in the community satisfied or very satisfied with life
Quality	Nursing home staffing turnover: ratio of employee terminations to the average number of active employees
Support for Family Caregivers	Caregivers without a lot of worry or stress, well-rested, having enough time

Affordability and Access

The 2017 *Scorecard* repeats all six indicators used in 2014 version to measure the affordability and accessibility of LTSS in a state. Three of these indicators are repeated without change.

Exhibit 3 Affordability and Access Indicators in the 2017 State LTSS *Scorecard*

2017 ***Scorecard*** Indicator	Change over Time	Status Relative to 2014 ***Scorecard***
Median annual nursing home private pay cost as a percentage of median household income ages 65+	Yes	Repeated without change
Median annual home care private pay cost as a percentage of median household income ages 65+	Yes	Repeated without change
Private long-term care insurance policies in effect per 1,000 population ages 40+	Yes	New data source; revised definition
Percent of adults ages 21+ with activities of daily living (ADL) disability at or below 250% of poverty receiving Medicaid or other government assistance health insurance	Yes	Repeated without change
Medicaid LTSS beneficiaries per 100 people with ADL disability	Yes	New data source; Revised definition
Aging and Disability Resource Center/No Wrong Door (ADRC/NWD) functions	No	New definition; indicator scoring changed; revised baseline not available

Two indicators have a new data source and revised definition due to the data source from the 2014 *Scorecard* being unavailable:

- **Private Long-Term Care Insurance** now includes both stand-alone policies and hybrid policies. The 2014 *Scorecard* included only stand-alone policies. While the majority of policies are stand-alone, the proportion of hybrid policies is increasing.
- Because of changes in data availability, the **Medicaid LTSS Safety Net** measure is now a count of unique beneficiaries—of all ages and types of disability and is now called the **Medicaid LTSS Beneficiaries per 100 People with ADL Disabilities** measure. Previously, the measure had been a count of participant years and was limited to older people and adults with physical disabilities.

A version of the Aging and Disability Resource Center/No Wrong Door Functions indicator has been in all three editions of the *Scorecard*. However, the indicator was updated in this edition based on published guidance on key elements of No Wrong Door systems from the federal government. The changes to the measure involved new data collection; it is not possible to create a comparable baseline score from previous-year data. Scoring for this measure is discussed in the detailed indicator descriptions section below.

Choice of Setting and Provider

The 2017 *Scorecard* repeats all five indicators used in 2014 to measure the level of choice of setting and provider in a state, and it includes one new measure. Of the five repeated indicators, only one is repeated without change from the 2014 *Scorecard* (percent of Medicaid- and state-funded LTSS spending going to HCBS).

Exhibit 4 Choice of Setting and Provider Indicators in the 2017 State LTSS *Scorecard*

2017 ***Scorecard*** Indicator	Change over Time	Status Relative to 2014 ***Scorecard***
Percent of Medicaid and state-funded LTSS spending going to HCBS for older people and adults with physical disabilities	Yes	Repeated without change
Percent of new Medicaid aged/disabled LTSS users first receiving services in the community	Yes	Revised definition
Number of people participant-directing services per 1,000 population with disabilities	No	Repeated from previous Scorecard; data not comparable
Home health and personal care aides per 100 population ages 18+ with ADL disability	Yes	Revised definition
Assisted living and residential care units per 1,000 people ages 75+	Yes	New data source; revised definition
Subsidized housing opportunities (place based and vouchers) as a percentage of all housing units	Yes	New measure

The LTSS New Users measure is calculated the same way it was done in previous *Scorecards*; however, instead of treating states for which the source data is incomplete or unreliable as missing, as was done in prior *Scorecards*, the rate of new user balance for these states was imputed in the 2017 *Scorecard*.

Participant direction data was collected in a similar manner to the 2014 *Scorecard*. The denominator was changed from adults with disabilities to people of all ages with disabilities in order to better reflect the population of need. However, because we were not able to track programs over time, the data cannot be compared with that collected for prior *Scorecards* for the purpose of measuring change over time.

The Home Health and Personal Care Aide Supply measure changed slightly. The count of aides now includes only those who worked in the past year; previously, they could have been out of the workforce for up to five years. The denominator was also changed from age 65+ to adults with activities of daily living (ADL) disability to better reflect the population of need.

The Assisted Living and Residential Care Supply measure also changed slightly. We are using a new data source with a uniform definition of assisted living/residential care across states. The denominator was also changed from age 65+ to age 75+ to better reflect the population of need.

Quality of Life and Quality of Care

The 2014 *Scorecard* contained six indicators of quality across two areas: quality of life in the community for people with disabilities and quality of care in nursing homes. This report contains only three quality indicators in these two areas, as described below.

Exhibit 5 Quality of Life and Quality of Care Indicators in the 2017 State LTSS *Scorecard*

2017 ***Scorecard*** Indicator	Change over Time	Status Relative to 2014 ***Scorecard***
Quality of Life in the Community		
Rate of employment for adults with ADL disability ages 18–64 relative to rate of employment for adults without ADL disability ages 18–64	Yes	Repeated without change
Quality of Care in Nursing Homes		
Percent of high-risk nursing home residents with pressure sores	Yes	Repeated without change
Percent of long-stay nursing home residents who are receiving an antipsychotic medication	Yes	Repeated without change

The three remaining indicators of quality of life and quality of care remain the same as those reported in the 2014 report and are repeated from the 2014 *Scorecard* without change. For these indicators, the data from the first *Scorecard* can be used as baseline to analyze change over time.

Support for Family Caregivers

The Support for Family Caregivers dimension has been changed substantially from the 2014 *Scorecard*. The dimension is a single-policy composite spanning four areas of performance.

Exhibit 6 Support for Family Caregivers Indicators in the 2017 State LTSS *Scorecard*

Area of Performance / Indicator	Change over Time	Status Relative to 2014 ***Scorecard***
Supporting working caregivers	Yes	Split from Legal and System Supports
Person- and family-centered care	Yes	Split from Legal and System Supports
Nurse delegation and scope of practice	Yes	Revised definition
Transportation policies	Yes	New indicator; baseline available for comparing change over time

The areas of performance are ranked separately in order to illustrate state performance in these areas. The dimension rank is based on adding up the raw scores across all four areas of performance, not by averaging the indicator ranks. Scoring for these policy-based measures is discussed in the detailed indicator descriptions section below.

Effective Transitions

The 2017 *Scorecard* repeats from the 2014 *Scorecard* all six indicators in the Effective Transitions dimension. Five of these indicators are repeated without change.

Exhibit 7 **Effective Transitions Indicators in the 2017 State LTSS *Scorecard***

Indicator	Change over Time	Status Relative to 2014 ***Scorecard***
Percentage of nursing home residents with low care needs	Yes	Repeated without change
Percent of home health patients with a hospital admission	Yes	Repeated without change
Percent of long-stay nursing home residents hospitalized within a six-month period	Yes	Repeated without change
Percent of nursing home residents with one or more potentially burdensome transitions at end of life	Yes	Revised definition
Percent of new nursing home stays lasting 100 days or more	Yes	Repeated without change
Percent of people with 90+ day nursing home stays successfully transitioning back to the community	Yes	Repeated without change

There was a change in the definition of the term *burdensome transitions*. In the 2014 *Scorecard*, the measure included only nursing home decedents who had moderate to severe dementia. In the current *Scorecard*, all decedents eligible for the measure (by age, time in the nursing home, and Medicare participation) are included.

DETAILED INDICATOR DESCRIPTIONS

Indicator	Description and Data Source
1	**Median annual nursing home private pay cost as a percentage of median household income ages 65+:** This is the ratio of the median daily private-room rate (multiplied by 365 days) divided by the median household income for households headed by someone age 65 or older. The ratio of the median nursing home cost to median income was calculated at the "region" level and then averaged across all regions in a state, weighted by the proportion of the state population in each region. Regions are defined by Genworth as collections of counties and map approximately to the Metropolitan Statistical Areas (MSA) established by the US Office of Management and Budget. MSA boundaries are redrawn every 10 years; for this *Scorecard*, the baseline and current-year data are based on different MSA vintages. Change over time in this measure may therefore be due to a combination of changes in one or more of the following: cost (numerator), income (denominator), and market (region definition). Cost data for the current year are from the *Genworth 2016 Cost of Care Survey* and income data are from the AARP Public Policy Institute (PPI) analysis of the *2015 American Community Survey Public Use Microdata Sample*. Baseline cost data are from the *Genworth 2013 Cost of Care Survey*, and income data are from the *2012 American Community Survey*. Two markets (Fairbanks, AK, and El Centro, CA) were missing baseline cost data, so 2011 data were used for El Centro and 2014 for Fairbanks. Genworth, *Genworth 2013 Cost of Care Survey* and *Genworth 2016 Cost of Care Survey* (Richmond, VA: Genworth Financial, 2013, 2016). Detailed tables we provided by Genworth to AARP Public Policy Institute for use in the indicator calculations. Summary reports are available at https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/130568_032213_Cost%20of%20Care_Final_nonsecure.pdf and https://www.genworth.com/about-us/industry-expertise/cost-of-care.html. US Census Bureau, ACS PUMS, *American Community Survey Public Use Microdata Sample* (Washington, DC: US Census Bureau, 2012, 2015), https://www.census.gov/programs-surveys/acs/data/pums.html.
2	**Median annual home care private pay cost as a percentage of median household income ages 65+:** This is the ratio of the median annual private pay cost of licensed home health aide services (based on 30 hours of care per week multiplied by 52 weeks) divided by the median household income for households headed by someone age 65 or older. The ratio of the median nursing home cost to median income was calculated at the "region" level and then averaged across all regions in a state, weighted by the proportion of the state population in each region.

<table>
<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>2
(cont'd)</td><td>Regions are defined by Genworth as collections of counties and map approximately to the Metropolitan Statistical Areas established by the US Office of Management and Budget. MSA boundaries are redrawn every 10 years; for this Scorecard, the baseline and current-year data are based on different MSA vintages. Change over time in this measure may therefore be due to a combination of changes in one or more of the following: cost (numerator), income (denominator), and market (region definition).

Cost data are from the Genworth 2016 Cost of Care Survey and income data are from the AARP Public Policy Institute analysis of the 2015 American Community Survey Public Use Microdata Sample. Baseline cost data are from the Genworth 2013 Cost of Care Survey and income data are from the 2012 American Community Survey.

Several markets were missing current and/or baseline cost data. For these markets, the most recent past data for the same or substantially similar market was used. If no baseline or earlier data were available, more recent data was used for the baseline calculation. Because market definitions may change from year to year, a prior-year market may comprise different counties. Typically, the changes involve peripheral counties, and the core counties (and majority of the population) are consistent.

For current-year data, three markets used 2015 data instead of 2016. For baseline data, 12 markets used 2012 data instead of 2013, 3 markets used 2011, 2 markets used 2010, and 4 markets used 2015.

No markets were missing data after alternate years were substituted, and no market used the same data for both current-year and baseline year calculations.

Genworth, Genworth 2013 Cost of Care Survey and Genworth 2016 Cost of Care Survey (Richmond, VA: Genworth Financial, 2013, 2016). Detailed tables we provided by Genworth to AARP Public Policy Institute for use in the indicator calculations. Summary reports are available at https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/130568_032213_Cost%20of%20Care_Final_nonsecure.pdf and https://www.genworth.com/about-us/industry-expertise/cost-of-care.html.

US Census Bureau, ACS PUMS, American Community Survey Public Use Microdata Sample. (Washington, DC: US Census Bureau, 2012, 2015), https://www.census.gov/programs-surveys/acs/data/pums.html.</td></tr>
<tr><td>3</td><td>Private long-term care insurance policies in effect per 1,000 population ages 40+:

This is the number of group and individual stand-alone and hybrid private long-term care insurance (LTCI) policies in force (for people of all ages) per 1,000 population ages 40 or older in the state. This is not exactly the proportion of people ages 40 and older with private LTCI, because data on the age of policyholders at the state level are not available. In 2009, 74% of group policyholders and 95% of individual policyholders were ages 40 or older.</td></tr>
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Indicator	Description and Data Source
3 (cont'd)	LTCI policy data are from the AARP Public Policy Institute analysis of 2015 National Association of Insurance Commissioners (NAIC) Long-Term Care Insurance Experience Reporting – Form 5, end-of-year inforce counts, by company type. In addition, California Public Employee Retirement System (CalPERS) group LTCI policies and federal LTCI group policy counts are separately reported. NAIC does not report CalPERS or federal LTCI counts. Population data are from the US Census Bureau Population Estimates, 2015 vintage. 2012 baseline LTCI policy and population data are from the same sources. Baseline policy count for Maine is treated as missing. In the NAIC source data, there are excess policy counts erroneously attributed to Maine for years 2012 and earlier. NAIC, "Long-Term Care Insurance Experience Reporting – Form 5" (unpublished, Kansas City, MO: National Association of Insurance Commissioners, 2012, 2015), http://store.naic.org/prod_serv_home.htm. CalPERS, *Facts at a Glance: January 2013* and *2014-15 Comprehensive Annual Financial Report* (Sacramento, CA: California Public Employees' Retirement System, 2012, 2015), http://www.calpers.ca.gov/. Long Term Care Partners LLC, "Federal Long-Term Care Insurance Program data" (unpublished, Boston, MA: Long Term Care Partners LLC, 2012, 2015). US Census Bureau, *Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States: April 1, 2010 to July 1, 2015* (Washington, DC: US Census Bureau, 2015), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2015_PEPAGESEX&prodType=table.
4	**Percent of adults ages 21+ with ADL disability at or below 250% of poverty receiving Medicaid or other government assistance health insurance:** This is the percent of adults ages 21 or older with a self-care difficultly (difficulty dressing or bathing; a reasonable approximation to activities of daily living disability) at or below 250%t of the poverty threshold who have health insurance through Medicaid, medical assistance, or any kind of government assistance plan for those with low incomes or a disability. We chose 250% of poverty in order to fully capture the effect of state policies extending Medicaid eligibility for LTSS up to 300% of Supplemental Security Income. Data are from AARP Public Policy Institute analysis of 2014–15 *American Community Survey Public Use Microdata Sample*. 2011–12 baseline data are from the same source. US Census Bureau, ACS PUMS, *American Community Survey Public Use Microdata Sample* (Washington, DC: US Census Bureau, 2011, 2012, 2014, 2015), https://www.census.gov/programs-surveys/acs/data/pums.html.

Indicator	Description and Data Source
5	**Medicaid LTSS beneficiaries per 100 people with ADL disability:** This measure is a count of unique Medicaid LTSS users in each state, of all ages, divided by the number of people in the state with an ADL disability (difficulty with self-care) as measured by the *American Community Survey*. Most, but not all, Medicaid LTSS users have ADL/self-care disabilities. Some have LTSS needs, on account of intellectual disabilities or dementia, but do have difficulty with self-care. Because of data limitations, it was not possible to subset LTSS users by type of disability for a count of LTSS users with ADL disabilities. Therefore, this measure is not a true ratio, and in two states—District of Columbia and Minnesota— the number of people of all ages who received Medicaid LTSS in 2012 was greater than the number of people of all ages with ADL disabilities. Denominator data are from the *American Community Survey*, via Factfinder. Numerator data are from Truven Health Analytics 2012 (most current year) and 2010 (reference year) Medicaid beneficiary reports prepared for the Centers for Medicare & Medicaid Services (CMS), based on analysis of Medicaid Analytic Extract (MAX) data by Mathematica Policy Research. Nine states in the 2012 report and 10 states in 2010 were excluded from the state analysis in the beneficiaries report due to missing, incomplete, or otherwise unreliable data. In addition, the 2012 report repeated 2010 data for Colorado, the District of Columbia, and Idaho because no more recent data were available; the *Scorecard* team also flagged Georgia (2010) and Hawaii (2012). The data for these states was calculated as follows: Alabama (both years). Implausibly high counts of private-duty nursing beneficiaries. AARP PPI estimated the number of participants excluding private-duty nursing beneficiaries. Arizona (both years). Missing managed care data. Count of HCBS beneficiaries from appropriate Kaiser/University of Southern California, San Francisco (USCF) reports was added to count of nursing home beneficiaries from the Truven reports. Colorado, District of Columbia, Idaho (2012 only). Missing 2011 and 2012 data. Data from 2010 were repeated for 2012. Change over time was not calculated. Georgia (2010). Implausibly high count of targeted case management. Used 2011 as a base year instead. Hawaii (both years). Nursing home beneficiaries underreported. Count of nursing home beneficiaries from best CMS Medicare and Medicaid Statistical Supplement (most recent data available was 2009, which was used for both base and current year) was added to count of HCBS beneficiaries from the Truven reports.

Indicator	Description and Data Source
5 (cont'd)	Kansas, Maine (both years). No MAX data reported. Sum of nursing home, 1915(c) waiver, and personal care beneficiaries from appropriate Kaiser/USCF reports was used instead. New Jersey (2012). Data anomalies. Used 2011 as current year instead. New Mexico, Wisconsin (both years). Missing managed care data. Count of personal care beneficiaries from appropriate Kaiser/USCF reports was added to count of nursing home beneficiaries from the Truven reports. Tennessee (2012). Potentially missing managed care data in both years; however, we found 2010 Truven report data to be consistent with other sources and used them as is. For 2012, estimated annual count of CHOICES HCBS beneficiaries (1.415 x single month count) was added to the count of LTSS beneficiaries from the Truven report. Texas (both years). Potentially missing managed care data; however, topline counts were consistent with other sources, no better source was found, and the Truven data were used as is. Utah (2010). MAX data not available; data were taken from a validation file and not comparable to other years. Used 2011 as baseline year instead. US Census Bureau, ACS, *American Community Survey* (Washington, DC: US Census Bureau, 2010, 2012), data table C18106, SEX BY AGE BY SELF CARE DIFFICULTY, available at American FactFinder, http://factfinder2.census.gov. Steve Eiken, *Medicaid Long-Term Services and Supports Beneficiaries in 2012* (Cambridge, MA: Truven Health Analytics, 2016), https://www.medicaid.gov/medicaid/ltss/downloads/ltss-beneficiaries-2012.pdf. Steve Eiken et al., *How Many Medicaid Beneficiaries Receive Long-Term Services and Supports?* (Cambridge, MA: Truven Health Analytics, 2014), https://www.medicaid.gov/medicaid/ltss/downloads/ltss-beneficiaries-report-2010.pdf. "Medicare and Medicaid Statistical Supplement Table 13.25, 2013 Edition," CMS, 2013, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/2013.html. Terence Ng et al., "Medicaid Home and Community-Based Services Programs: 2012 Data Update," 2014, http://kff.org/medicaid/report/medicaid-home-and-community-based-services-programs-2012-data-update/. Terence Ng et al., "Medicaid Home and Community-Based Services Programs: 2010 Data Update," 2010, https://kaiserfamilyfoundation.files.wordpress.com/2014/03/7720-07-medicaid-home-and-community-based-services-programs_2010-data-update1.pdf.

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<tr><th>Indicator</th><th>Description and Data Source</th></tr>
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ADRC/No Wrong Door Functions (composite indicator, scale 0–100%):
This composite indicator comprises functional assessment scores from a voluntary, self-reported survey fielded by AARP for each state's Aging and Disability Resource Center/No Wrong Door (ADRC/NWD) System. Assessments rated states' progress toward developing NWD Systems using 41 criteria across 5 dimensions:
1. State Governance and Administration (10 criteria)
2. Populations (5 criteria)
3. Public Outreach and Coordination with Key Referral Sources (8 criteria)
4. Person-Centered Counseling (9 criteria)
5. Streamlined Eligibility for Public Programs (9 criteria)

States were awarded a point value on the functional status of each criterion. Each criterion received a maximum of 3 points, ranging from 0 (not in place) to 3 (fully operational statewide). Criteria that were informed by more than one question were scored based on the average of the individual questions. Compared to prior iterations of the Scorecard, greater weight was placed on states' survey responses, and independent validation of survey responses was minimal.

State scores were summed across all criteria to a total of 123 possible points from these functionality criteria. Scores are listed in the LTSS Scorecard as a percentage of total possible points, rounded to the nearest whole percent.

List of 41 criteria by function and number of questions for each criterion:

I. State Governance and Administration (10 criteria)
1. Governor and/or State Legislature's Support to Develop NWD System (1 question)
2. Multistate Agency Coordinating Body (1 question)
3. Formal Assessment of Access Programs and Functions (1 question)
4. Multiyear Plan to Implement NWD System (1 question)
5. External Stakeholder Involvement (1 question)
6. State Funding (1 question)
7. Designation of Entities (1 question)
8. Continuous Quality Improvement (3 questions)
9. Staff Capacity (2 questions)
10. Information Technology (2 questions)
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Indicator	Description and Data Source
6 (cont'd)	**II. Populations (5 criteria)** 1. Older Adult Population (1 question) 2. People with Physical Disabilities (1 question) 3. People with Intellectual and Developmental Disabilities (1 questions) 4. People with Mental Illness and Behavioral Health Needs (1 question) 5. Family Caregiver Population (1 question) **III. Public Outreach and Coordination with Key Referral Sources (8 criteria)** 1. Outreach and Marketing Plan (1 question) 2. Searchable Website and 1-800 Phone Number (2 questions) 3. Information and Referral and State Health Insurance Assistance Program SHIP (2 questions) 4. Section Q – Local Contact Agencies (1 question) 5. Transitions – Hospitals or Rehab Facilities to Facilitate Transition to Home (1 question) 6. Transitions – Youth (1 question) 7. Veterans Administration (VA) Medical Centers to Provide Veteran-Directed HCBS (1 question) 8. Statewide Reach (1 question) **IV. Person-Centered Counseling (PCC) (9 criteria)** 1. Standards Are Used to Define PCC (1 question) 2. Management Supports PCC and Planning (1 question) 3. Basic Competencies to Conduct Person-Centered Planning (1 question) 4. Specialized Competencies to Conduct Person-Centered Planning (4 questions) 5. Established Protocols for Developing Person-Centered Plans (1 question) 6. Variety of Organizations to Serve Different LTSS Populations (1 question) 7. Future Planning Needs and Private Pay (2 questions) 8. Follow-Up (1 question) 9. Statewide Reach (1 question) **V. Streamlined Eligibility for Public Programs (9 criteria)** 1. Improving Efficiencies (1 question) 2. NWD Protocols (1 question) 3. Application Assistance (1 question) 4. Tracking Procedures (1 question) 5. Ease of Access (2 questions) 6. Targeting People Who Are High Risk of Institutionalization (1 question) 7. Diversion Protocol Is in Place (2 questions)

Indicator	Description and Data Source
6 (cont'd)	8. Presumptive Eligibility (1 question from a different survey source) 9. Statewide Reach (1 question) AARP PPI, "ADRC /No Wrong Door data collected from states through a detailed self-reported survey in collaboration with The Lewin Group and The US Administration for Community Living" (unpublished, Washington, DC: AARP Public Policy Institute, 2016).
7	**Percent of Medicaid- and state-funded LTSS spending going to HCBS for older people and adults with physical disabilities:** This is the percentage of Medicaid LTSS spending for older people and adults with physical disabilities (defined as nursing homes, personal care, aged/disabled waivers, home health, private duty nursing, and other programs used primarily by older people and adults with physical disabilities) going to HCBS. State-funded services are also included where possible; these expenditures are small nationally (about 1% of Medicaid) but significant for some states. Medicaid data are from analysis of CMS data by Truven Health Analytics, an IBM Company, and include managed care. State-funded data are from AARP PPI surveys of state agencies for the LTSS *Scorecard*. The most current data year is 2014, where possible. Several adjustments were necessary due to issues with data quality and completeness. Oregon's 2014 expenditures for Community First Choice (CFC) were allocated according to historical patterns, with 41% of CFC spending being for older adults and people with physical disabilities and 59% for other populations (including people with intellectual/developmental disabilities). Medicaid data from 2013 were used for New Hampshire. State funding for 2011 was repeated for Illinois. The baseline data year is 2011, where possible. Several adjustments were necessary due to issues with data quality and completeness. Two states use a different Medicaid baseline year; New Jersey uses 2012 as a base year, and New Mexico uses 2010 as a base year. State funding for 2010 was used for Iowa and North Carolina. Truven Health Analytics, *Medicaid Expenditures for Long-Term Services and Supports in 2014* (Cambridge, MA: Truven Health Analytics, 2011, 2014). AARP PPI, "LTSS Economic Survey" and "State LTSS *Scorecard* Survey" (unpublished, Washington, DC: AARP PPI, 2012, 2016).

Indicator	Description and Data Source
8	**Percent of new Medicaid aged/disabled LTSS users first receiving services in the community:** This is the proportion of Medicaid LTSS beneficiaries in 2012 who did not receive any LTSS in 2011 and who in the first calendar month of receiving LTSS, received HCBS only and not institutional services. Participants must have met the following criteria: they were either 65 or older by December 31, 2009, or were age 21–64 by December 31, 2009; and (a) had an eligibility code of “disabled/blind,” (b) did not use Intermediate Care Facilities for Individuals with Mental Retardation (ICF/MR) or psychiatric facility services, and (c) were not enrolled in a 1915(c) waiver for people with Mental Retardation/Developmental Disability (MR/DD) or mental illness. Beneficiaries were determined to be users of institutional services during a month if they had a claim in the 2009 MAX LT file indicating a nursing home stay; they were determined to be users of HCBS if their records in the 2009 PS or OT files indicated they were enrolled in a 1915(c) waiver, used waiver services, or had claims that indicated the use of state plan personal care services, residential care, adult day care, in-home private duty nursing, or at least four consecutive months of home health care. In order to assess whether home health care services provided during January, February, and March 2012 were part of a block of four consecutive months of service, home health use in October, November, and December 2011 was also analyzed. Reference year data was the proportion of Medicaid LTSS beneficiaries in 2009 who did not receive any LTSS in 2008. In addition, the same measure was calculated for Medicaid LTSS beneficiaries in 2007 who did not receive any LTSS in 2006 for the 2011 *Scorecard*. While not reported in the 2017 *Scorecard*, these additional data points were used in the imputation model for missing 2009 or 2012 values. Because of missing, incomplete, or unreliable MAX records, data were missing for a large number of states (13 in 2012, 8 in 2009, and 7 in 2007). Rather than leave these values as missing, they were imputed based on other balancing metrics. All three years of data were fit to a regression model: $M(\text{state,year}) = A + B1*T(\text{state,year}) + B2*K(\text{state,year}) + E(\text{state,year})$ Where M is the new users balance measure, T is the spending balance percentage from Truven Health Analytics, and K is the participant balance percentage from Kaiser/UCSF (HCBS counts) and CMS (nursing home counts). K is given by the following formula: $K = \frac{max(Aged/PD\ Waivers, PCS) + sum(Aged/PD\ Waivers, PCS)}{max(Aged/PD\ Waivers, PCS) + sum(Aged/PD\ Waivers, PCS) + 2 * Nursing\ Homes}$ In a small number of cases, some covariate data were missing or unreliable, but it was possible to estimate or fill in (e.g., with adjacent years or alternate sources) except for New Mexico (2012). Years where one or more covariates had to be estimated include Arizona (all years), Hawaii (2012), New Jersey (2007 and 2009), New Mexico (2009 and 2012), Rhode Island (2009 and 2012), and Tennessee (2007 and 2012).

Indicator	Description and Data Source
8 (cont'd)	Predicted values $\{A + B1*T(\text{state,year}) + B2*K(\text{state,year})\}$ were calculated for every state/year where there is covariate data (missing only New Mexico 2012) and residuals E(state,year) wherever there are actual data. The residual isn't an error; it contains a lot of state-specific information. This includes the relative balancing performance for new users relative to other balance measures, and the amount of participant duplication between HCBS programs. For states with one missing data year (except New Mexico), that data point is imputed by adding the predicted value from the regression model and the average residual for the other two years. $M(\text{state,year,imputed}) = A + B1*T(\text{state,year}) + B2*K(\text{state,year}) + \text{average } \{E(\text{state,other years})\}$ For New Mexico, there is no MAX data for 2012, and the covariate data are not of sufficient quality for us to estimate with any confidence. We simply repeat the M value from 2009. For states with two missing data years, those data points are imputed by adding the predicted value from the regression model and the residual for the other years, regressed halfway to zero. $M(\text{state,year,imputed}) = A + B1*T(\text{state,year}) + B2*K(\text{state,year}) + 0.5*E(\text{state,other year})$ For states with three missing data years, all data points are imputed using the predicted value only. $M(\text{state,year,imputed}) = A + B1*T(\text{state,year}) + B2*K(\text{state,year})$ Imputed LTSS new user balance were used for Alaska (2012), Arizona (all years), Colorado (2012), District of Columbia (2012), Georgia (2009), Hawaii (2009 and 2012), Idaho (2012), Kansas (2012), Kentucky (2007), Maine (all years), Michigan (2007), New Jersey (2012), New Mexico (2012), Rhode Island (2012), Tennessee (2012), Texas (2007 and 2009), Utah (2009), Virginia (2007 and 2009), and Wisconsin (all years). Because so many states had imputed data, it was not possible to calculate a US percentage directly. The national percentage of new users first receiving services in the community was calculated by the average of state percentages, weighted by total Medicaid LTSS users. Carol Irvin, et al., C. Irvin et al., *Pathways to Independence: Transitioning Adults Under Age 65 from Nursing Home to Community Living* (Cambridge, MA: Mathematica Policy Research, 2012), table 5, Indicators of performance of state long-term services and supports systems, https://www.medicaid.gov/medicaid/ltss/downloads/mfpfieldreport19.pdf. Mathematica Policy Research analysis of 2006–2009 Medicaid Analytic eXtract (CMS, MAX 2008, 2009) for the State LTSS *Scorecard* (unpublished).

Indicator	Description and Data Source
8 (cont'd)	Sources for Regression model covariates: Steve Eiken et al., "Medicaid Expenditures for Long-Term Services and Supports (LTSS) in FY 2014", 2016, Table AS, https://www.medicaid.gov/medicaid/ltss/downloads/ltss-expenditures-2014.pdf. Steve Eiken et al., "Medicaid Expenditures for Long Term Services and Supports (FY 2011)," 2013, http://www.nasuad.org/node/60501. CMS (2009, 2011, 2013). Medicare and Medicaid Statistical Supplement Table 13.25, 2009, 2011, and 2013 editions (2007, 2009, 2011 data years). https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/2013.html Terence Ng et al., "Medicaid Home and Community-Based Services Programs: 2012 Data Update," 2015, http://kff.org/medicaid/report/medicaid-home-and-community-based-services-programs-2012-data-update/. Terence Ng et al., "Medicaid Home and Community-Based Services Programs: 2009 Data Update," 2012, https://kaiserfamilyfoundation.files.wordpress.com/2013/01/7720-06.pdf. Terence Ng, Charlene Harrington, and Molly O'Malley, *Medicaid Home and Community-Based Services Programs: Data Update* (University of California San Francisco and Kaiser Family Foundation, December 2011). Report is no longer available online.
9	**Number of people participant directing services per 1,000 population with disabilities:** This is the number of people receiving participant-directed services per 1,000 people with any disability in the state. Note that not all people with disabilities have LTSS needs. The number of people receiving participant-directed services is from the National Inventory of Self-Directed Programs in the United States 2016 survey data. Data for the inventory were collected from April to September 2016. Sources of data included state Medicaid waiver information, information from Financial Management Services providers, and telephone interviews with self-directed LTSS program administrators. The number of people with disabilities is from the 2015 *American Community Survey*. National Resource Center for Participant-Directed Services, "National Inventory of Self-Directed Programs in the United States Survey" (unpublished, Boston, MA: National Resource Center for Participant-Directed Services, Boston College, 2016). US Census Bureau, ACS, *American Community Survey* (Washington, DC: US Census Bureau, 2010–15), data table B18101, SEX BY AGE BY DISABILITY STATUS, available at American FactFinder, http://factfinder2.census.gov.

<table>
<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>10</td><td>
Home health and personal care aides per 100 population ages 18+ with an ADL disability:

This is the number of personal care, nursing, psychiatric, and home health aide direct care workers currently in the workforce per 100 population age 18+ with an ADL. Aides are those with occupation code 4610 (personal care aide) or 3600 (nursing psychiatric, home health aide) and industry code 8170 (home health care services), 8370 (social services), or 9290 (private households), and who worked in the past 12 months.

Current year data are from the 2013, 2014, and 2015 American Community Survey, Public Use Microdata Sample, and baseline data from 2010, 2011, and 2012 are from the same source. Denominator data are also from the American Community Survey, via Factfinder.

US Census Bureau, ACS PUMS, American Community Survey Public Use Microdata Sample (Washington, DC: US Census Bureau, 2010–15), https://www.census.gov/programs-surveys/acs/data/pums.html.

US Census Bureau, ACS, American Community Survey (Washington, DC: US Census Bureau, 2010–15), data table B18106: SEX BY AGE BY SELF-CARE DIFFICULTY, available at American FactFinder, http://factfinder2.census.gov.
</td></tr>
<tr><td>11</td><td>
Assisted living and residential care units per 1,000 people ages 75+:

This is the number of assisted living and residential care units per 1,000 population age 75+. Assisted living and residential care units are taken from two National Center for Health Statistics (NCHS) surveys. To be eligible for inclusion in these studies, a residential care community must have been licensed, registered, listed, certified, or otherwise regulated by the state to

• Provide room and board with at least two meals a day, with 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 community; and
• Serve a predominantly adult population.

Excluded were residential care communities licensed to exclusively serve individuals with severe mental illness or an intellectual disability/developmental disability. Nursing homes were also excluded.

Data for the 2014 assisted living and residential care units are from the National Study of Long-Term Care Providers Survey. Comparable data were not available for Connecticut and Iowa. Connecticut’s licensing structure for assisted living does not permit a unit count. The vast majority of Iowa’s assisted living/residential care facilities were categorically ineligible for the National Study of Long-Term Care Providers (NSLTCP) due to the operational definition used in the survey.
</td></tr>
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<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>11
(cont'd)</td><td>National data for the 2010 counts are from the National Survey of Residential Care Facilities. The 2010 national study did not support state-level estimates of residential care beds. State counts are based on NCHS calculations to allocate residential care beds at the state level. In 2010, data were unavailable for Connecticut. Baseline data for Florida, Illinois, Iowa, and Minnesota are treated as missing in the Scorecard because of concerns that change in supply over time from 2010 to 2014 was due primarily to regulatory changes in the states or new information made available during development of the sampling frame, and not to an actual change in the number of units.

Population data are from the US Census Bureau Population Estimates, 2015 vintage.

NCHS (2016). Analysis based on data from the 2010 National Survey of Residential Care Facilities (unpublished).

NCHS, National Study of Long-Term Care Providers (Hyattsville, MD: National Center for Health Statistics, 2014), https://www.cdc.gov/nchs/nsltcp/.

US Census Bureau, Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States: April 1, 2010 to July 1, 2015 (Washington, DC: US Census Bureau, 2015), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2015_PEPAGESEX&prodType=table.</td></tr>
<tr><td>12</td><td>Subsidized housing opportunities (place based and vouchers) as a percentage of all housing units:
This is the number of place-based subsidized housing units and the number of authorized federal housing choice vouchers, as a percentage of all housing units in the state.

State-level housing choice voucher data are from the Center for Budget and Policy Priorities reports, all authorized vouchers. State-level data for place-based units are from the National Housing Preservation Database, total units of any subsidy type. Total housing units are from the American Community Survey, via American FactFinder. Current year (2015) and baseline (2011) are available from the same sources.

NHPD (2012, 2016). AARP Public Policy Institute analysis of National Housing Preservation Database, downloaded 3/14/2012 and 9/14/2016. The NHPD pulls from multiple other sources with varying update frequencies. At the time that baseline and current data were downloaded, most sources were updated through 2011 and 2015.

Center on Budget and Policy Priorities (CBPP), Housing Vouchers (Washington, DC: Center on Budget and Policy Priorities, 2011, 2015), http://www.cbpp.org/topics/housing-vouchers.

US Census Bureau, ACS, American Community Survey (Washington, DC: US Census Bureau, 2011, 2015), data table B25001, available at American FactFinder, http://factfinder2.census.gov.</td></tr>
</table>

Indicator	Description and Data Source
13	**Rate of employment for adults with ADL disability ages 18-64 relative to rate of employment for adults without ADL disability ages 18-64:** This is the relative rate of employment (full or part time) for people ages 18 to 64 with a self-care difficulty (difficulty dressing or bathing; a reasonable approximation to ADL disability) compared with people ages 18 to 64 without a self-care difficulty. Employment rate is calculated as the percentage of all people who are employed, including those who are not in the labor force, as many people with disabilities are not in the labor force even though they may have the skills and desire to work. Current year 2014 and 2015 data are from the *American Community Survey*, American FactFinder. Baseline 2011–2012 data are from 2011 and 2012 and come from the same source. US Census Bureau, ACS, *American Community Survey* (Washington, DC: US Census Bureau, 2011–12, 2014–15), data table B18120, available at American FactFinder, http://factfinder2.census.gov.
14	**Percent of high-risk nursing home residents with pressure sores:** This is the percent of long-stay nursing home residents impaired in bed mobility or transfer, comatose, or suffering malnutrition who have pressure sores (stage 2–4) on target assessment. Current year, four-quarter average Q2–Q4, 2015 and Q1, 2016, data from CMS Minimum Data Set (MDS) 3.0 for Nursing Homes. Baseline, three quarter average Q1–Q3, 2013 data from same source. CMS, MDS 3.0 (n.d.). Centers for Medicare & Medicaid Services, *Minimum Data Set, Quality Measure QM403,* Q2–Q4, 2015 and Q1, 2016, accessed on Nursing Home Compare in September 2016 and Q1–Q3, 2013, accessed on Nursing Home Compare in January 2014. Baltimore, MD: US Department of Health & Human Services. https://www.medicare.gov/NursingHomeCompare/Data/Current-Data-Collection-Period.html.
15	**Percent of long-stay nursing home residents who are receiving an antipsychotic medication:** This is the percentage of long-stay nursing home residents, defined as 100 or more cumulative days in the nursing facility, who are receiving antipsychotic medication on target assessment. Criteria exclude nursing home residents with a diagnosis of bipolar disorder, schizophrenia, Tourette's syndrome, and Huntington's disease. Current year, four-quarter average Q2–Q4, 2015 and Q1, 2016, data from CMS Minimum Data Set (MDS) 3.0 for Nursing Homes. Baseline, three quarter average Q1–Q3, 2013, data from same source.

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<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>15
(cont'd)</td><td>CMS, MDS 3.0 (n.d.). Centers for Medicare & Medicaid Services, Minimum Data Set, Quality Measure QM419, Q2–Q4, 2015 and Q1, 2016, accessed on Nursing Home Compare in September 2016 and Q1–Q3, 2013, accessed on Nursing Home Compare in January 2014. Baltimore, MD: US Department of Health & Human Services. https://www.medicare.gov/NursingHomeCompare/Data/Current-Data-Collection-Period.html</td></tr>
<tr><td>16</td><td>Supporting working caregivers (composite indicator, scale 0–9.0):
This indicator is constructed along four components:

Family medical leave. This component evaluates the extent to which states exceed the federal Family Medical Leave Act (FMLA) requirements for covered employers, covered employee eligibility, length of leave, and type of leave allowed. Scoring: States received scores for the degree to which they exceeded federal FMLA requirements up to a total of 4.0 possible points as follows:
1.0 point for states exceeding federal FMLA for covered employers with any number of employees and 0.5 points for employers with 15–30 employees
1.0 point for states exceeding federal FMLA for covered eligibility (time with employer) of less than 1,000 hours and 0.5 points for 1,000 hours over a 12-month period
0.25 points each (maximum of 1.0 point) for states exceeding federal FMLA for definition of family member (covered relationships) that includes (a) parent-in-law, (b) stepparent, (c) grandparent, and (d) grandparent-in-law
1.0 point for states exceeding federal FMLA for allowing 16 weeks over a 2-year period and 0.5 points of 12–15 weeks over a 2-year period
Current-year 2016 data are from Expecting Better for All Working Families: A Special Section of the Fourth Edition of Expecting Better and legislative updates are from National Partnership for Women & Families Work & Family Policy Database, and US Department of Labor, Wage and Hour Division: Federal vs. State Family and Medical Leave Laws. Baseline 2014 data are from Expecting Better for All Working Families: A Special Section of the Second Edition of Expecting Better and legislative updates are from National Partnership for Women & Families Work & Family Policy Database.

NPWF (2014, 2016). Expecting Better for All Working Families: A Special Section of the Fourth Edition of Expecting Better, Expecting Better for All Working Families: A Special Section of the Second Edition of Expecting Better, and National Partnership for Women & Families Work & Family Policy Database (Washington, DC: National Partnership for Women & Families, 2014, 2016), http://www.nationalpartnership.org/research-library/work-family/expecting-better-2016.pdf, http://www.nationalpartnership.org/research-library/work-family/expecting-better.pdf, and http://www.nationalpartnership.org/issues/work-family/work-family-policy-database/.</td></tr>
</table>

Indicator	Description and Data Source
16 (cont'd)	US Department of Labor, *Wage and Hour Division: Federal vs. State Family and Medical Leave Laws* (Washington, DC: US Department of Labor, 2016) http://www.dol.gov/whd/state/fmla/. **Mandatory paid family leave and sick days.** This component evaluates the extent to which states offer additional benefits beyond FMLA to family caregivers, including requirements that employers provide paid family leave and mandate the provision of paid sick days. Scoring: 2.0 points for paid family leave, 1.0 point for statewide mandatory paid sick days, and 0.3 points if not statewide. Current-year 2016 data are from legislative updates from *Expecting Better for All Working Families: A Special Section of the Fourth Edition of Expecting Better, Expecting Better for All Working Families: A Special Section of the Second Edition of Expecting Better*, National Partnership for Women & Families Work & Family (NPWF) *Policy Database*, NPWF *Paid Sick Days Statutes*, and National Conference of State Legislatures Paid Sick Leave. Baseline 2014 data are from *Expecting Better for All Working Families: A Special Section of the Second Edition of Expecting Better* and legislative updates are from National Partnership for Women & Families Work & Family *Policy Database*. NPWF (2014, 2016). *Expecting Better for All Working Families: A Special Section of the Fourth Edition of Expecting Better, Expecting Better for All Working Families: A Special Section of the Second Edition of Expecting Better*, National Partnership for Women & Families Work & Family *Policy Database*, accessed in December 2013 and October 2016, and National Partnership for Women & Families *Sick Day Statutes*, accessed in October 2016. Washington, DC: National Partnership for Women & Families. http://www.nationalpartnership.org/research-library/work-family/expecting-better-2016.pdf, http://www.nationalpartnership.org/research-library/work-family/expecting-better.pdf, http://www.nationalpartnership. org/issues/work-family/work-family-policy-database/, and http://www.nationalpartnership.org/research-library/work-family/psd/paid-sick-days-statutes.pdf. National Conference of State Legislatures, *Paid Sick Leave* (Washington, DC: National Conference of State Legislatures, 2016), http://www.ncsl.org/research/labor-and-employment/paid-sick-leave.aspx **Unemployment insurance.** This component evaluates the extent to which state unemployment insurance laws or regulations address "good cause" for job loss due to an illness or disability of a member of the individual's immediate family. Scoring: States received 1.0 point if unemployment insurance laws or regulations include illness or disability of a member of the individual's immediate family as "good cause" for voluntarily leaving a job. Current-year 2016 data are from *Access to Unemployment Insurance Benefits for Family Caregivers: An Analysis of State Rules and Practices.* Baseline 2014 data are from National Employment Law Project 2012 Briefing Paper *Modernizing Unemployment Insurance: Federal Incentives Pave the Way for State Reforms.*

Indicator	Description and Data Source
16 (cont'd)	AARP PPI, Access to Unemployment Insurance *Benefits for Family Caregivers: An Analysis of State Rules and Practices* (Washington, DC: AARP Public Policy Institute, 2015), http://www.longtermscorecard.org/publications National Employment Law Project, *Modernizing Unemployment Insurance: Federal Incentives Pave the Way for State Reforms* (New York, NY: National Employment Law Project, 2012), http://www.nelp.org/publication/modernizing-unemployment-insurance-federal-incentives-pave-the-way-for-state-reforms/. **State policies that protect family caregivers from employment discrimination:** This is the extent to which a state (or locality) law expressly includes family responsibilities, including care provided to aging parents or ill or disabled spouses of family members, as a protected classification in the context that prohibits discrimination against employees who have family responsibilities. Scoring: 1.0 point for statewide laws prohibiting discrimination and 0.3 points if not statewide. Current-year 2014 data are from Center for WorkLife Law (WLL) at the University of California, Hastings College of the Law, *Work Life Law: State Law/Legislation Tracking* from AARP Public Policy Institute. Baseline 2012 data are from AARP Public Policy Institute, with support from The SCAN Foundation and The Commonwealth Fund, *Protecting Family Caregivers from Employment Discrimination*. WLL, WorkLife Law: State Law/Legislation Tracking (San Francisco, CA: Center for WorkLife Law at the University of California, Hastings College of the Law, 2014), http://worklifelaw.org/frd/frd-resources/public-policy/AARP PPI, *Protecting Family Caregivers from Employment Discrimination* (Washington, DC: AARP Public Policy Institute, 2012), http://www.aarp.org/content/dam/aarp/research/public_policy_institute/health/protecting-caregivers-employment-discrimination-insight-AARP-ppi-ltc.pdf.

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<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>17</td><td>
Person- and family-centered care (composite indicator, scale 0–5.5): This indicator is constructed along three components:

State policies on financial protection for spouses of Medicaid beneficiaries who receive HCBS:

This component evaluated the extent to which the state Minimum Maintenance of Needs Allowance (MMNA) permits the community spouse to retain the federal maximum income allowance and asset resource protections, and whether spouses of HCBS waiver recipients receive the full level of income and asset protection afforded to spouses of nursing home residents.

Scoring: States received scores for income and asset protections up to a total of 2.0 possible points as follows:

• 1.0 point for states where the MMNA federal maximum income allowance of $2,980.50 is the state minimum income allowance protection, 0.5 points for states that permit the full range between the federal minimum $1,991.25 and federal maximum $2,980.50 income allowance protection, and midrange values have computed scores
• 1.0 point for states where the MMNA federal maximum asset resource protection of $119,220 is the minimum standard, and a weighted computation score for states that use an amount above the federal minimum $23,844 asset resource protection: (X – $23,844)/($119,220 – $23,844)

Current-year 2016 state policies on financial protection for spouses of Medicaid beneficiaries who receive HCBS from Krause Financial Services (KFS), State-Specific Medicaid Resources, state data last updated Q4, 2015 through Q. 2016. Baseline 2012 data are from Part I Medicaid in Tax, Estate & Financial Planning for the Elderly: Forms and Practice, and AARP Public Policy Institute independent research on statutes for Medicaid HCBS waivers recipients receiving full income and asset protection.

KFS, State-Specific Medicaid Resources (De Pere, WI: Krauss Financial Services, 2015–16), https://www.medicaidannuity.com/resources/state-resource/.

Eric Carlson. “Part I Medicaid,” in Tax, Estate & Financial Planning for the Elderly: Forms and Practice (New York, NY: Matthew Bender & Company Inc, 2012).

State assessment of family caregiver needs. This is the extent to which a state conducts a mandatory or optional assessment of family caregivers for their own needs when an older adult or adult with physical disabilities for whom they are caring is being assessed for one or more LTSS programs. Programs for which the caregiver assessment tool is used included (a) 1915(c); (b) 1115 demonstration; (c) Medicaid state plan personal care services; (d) 1915(i); (e) 1915(j); (f) Medicaid state plan (k) Community First Choice; (g) National Family Caregiver Support Program, Older Americans Act (OAA); (h) state-funded family caregiver support program; (i) state-funded HCBS; and (j) other.
</td></tr>
</table>

Indicator	Description and Data Source
17 (cont'd)	Scoring: 1.0 point if the caregiver assessment is mandatory and 0.3 points if the assessment is optional and used in at least 1 of the 12 programs listed above for older adults and/or adults with physical disabilities, for a maximum of 1.0 point. States are awarded 0.3 points for each additional program (up to 5 programs) beyond the first program linked to a mandatory or optional assessment, for a maximum of 1.5 points. Total allowable points states awarded for this component can be 2.5. Current year 2016 data are from AARP Public Policy Institute State LTSS Scorecard Survey (unpublished). Baseline 2012 data are from AARP Public Policy Institute LTSS Economic Survey (unpublished). AARP PPI, "State LTSS Scorecard Survey" (unpublished, Washington, DC: AARP Public Policy Institute, 2016). AARP PPI, "LTSS Economic Survey" (unpublished, Washington, DC: AARP Public Policy Institute, 2012). **CARE Act.** States that passed Caregiver Advise, Record, Enable (CARE) Act legislation and is signed into law. The CARE Act helps family caregivers from the moment their loved ones go into the hospital to when they return home. The CARE Act requires hospitals to (a) record the name of the family caregiver on the medical record of a loved one, (b) inform the family caregivers when the patient is to be discharged, and (c) provide the family caregiver with education and instruction of the medical tasks he or she will need to perform for the patient at home. Scoring: States that pass CARE Act legislation and had a bill signed into law received 1.0 point. Current-year 2016 data were obtained from AARP State Advocacy & Strategy Integration internal communications. No baseline data are available. AARP State Advocacy & Strategy Integration unpublished internal communications, 2016.
18	**Nurse delegation and scope of practice (composite indicator, scale 0–5.0):** This indicator is constructed along two components: **Number of health maintenance tasks able to be delegated to LTSS workers (out of 16 tasks):** The number of 16 tasks that can be performed by a direct care aide through delegation by a registered nurse:

Indicator	Description and Data Source
18 (cont'd)	**Medication Administration** 1. Oral medication 2. As needed medication 3. Prefilled insulin/insulin pen 4. Draw-up insulin 5. Other injectable medication 6. Glucometer testing 7. Medication through tubes 8. Insertion of suppositories 9. Eye/ear drops **Tube Feeding and Gastric Care** 10. Gastrostomy tube feeding 11. Administer enema **Bladder Regimen and Skin/Appliance Care** 12. Perform intermittent catheterization 13. Perform ostomy care including skin care and 14. changing appliance **Respiratory Care** 15. Perform nebulizer treatment 16. Administer oxygen therapy 17. Perform ventilator respiratory care
	Scoring: States received 0.25 points for each of the 16 health maintenance tasks that can be delegated by a registered nurse to an LTSS direct care worker, for a total of 4.0 points. Current-year 2016 data were collected from AARP Public Policy Institute survey on nurse delegation in home settings. AARP interpreted state board of nursing regulations for 12 states that did not respond to the survey on nurse delegation (Delaware, District of Columbia, Indiana, Kentucky, Louisiana, Michigan, Mississippi, Montana, New Mexico, Oklahoma, Texas, and Utah). Due to data limitations, 2013 data were repeated for South Carolina. Baseline 2013 data are from the AARP Public Policy Institute 2013 survey on nurse delegation in home settings. AARP PPI, "Survey on Nurse Delegation in Home Settings" (unpublished, Washington, DC: AARP Public Policy Institute, 2013, 2016). **Nurse practitioner scope of practice:** This is the extent to which state practice and licensure laws permit a nurse practitioner (NP) to be able to practice to the fullest extent of his or her education and training. Scope of practice includes three levels of authority: (a) Under full practice authority, the NP is permitted to evaluate patients; diagnose, order, and interpret diagnostic tests; initiate and manage treatments; and prescribe medications. (b) Reduced practice requires a collaborative practice agreement with a physician specifying the scope of practice allowed. (c) Restricted practice requires a physician to oversee all care provided by the NP. Scoring: States that permit full scope of practice received 1.0 point, states that permit reduced scope of practice received 0.5 point, and states that have restricted practice received 0 points. Current-year 2016 data are from AARP Public Policy Institute analysis of nurse practitioner state practices, American Association of Nurse Practitioners, *Nurse Practitioner State Practice Environment*. Baseline 2013 data are from the same source. American Association of Nurse Practitioners (AANP), *Nurse Practitioner State Practice Environment* (Austin, TX: American Association of Nurse Practitioners, 2013, 2016), https://www.aanp.org/legislation-regulation/state-legislation/state-practice-environment.

Indicator	Description and Data Source
19	**Transportation policies (composite indicator, scale 0–5.0):** Transportation policies that support of family caregivers include several components over various time periods: 1. Volunteer driver policies (current year 2015, baseline 2012): (1a) protection from unreasonable or unfair increases in liability or insurance rates; (1b) nonprofit volunteer driver programs are exempted from livery laws; and (1c) state laws facilitate private investment in volunteer driver programs 2. Statewide human services transportation coordinating councils (current year 2016, baseline 2010) 3. Medicaid nonmedical transportation (current year 2012, baseline 2010) Scoring: States with volunteer driver policies and statewide transportation coordinating councils received 1.0 if the state had a policy and 0 points if the state did not have a policy. States with Medicaid nonmedical transportation expenditures exceeding $5.00 per adult age 18+ with disabilities received 1.0 points, those that spent less than $5.00 but more than $0.25 received 0.5 points, and states spending less than $0.25 per adult with disabilities received 0 points. ITN America/AARP PPI (2016 analysis of data from ITN America, 50 State Policy Project, http://policy.itnamerica.org/?page_id=2881 NCSL (2016). February 2016 data on statewide transportation coordinating councils provided by the National Conference of State Legislatures to AARP for the Livability Index (unpublished, Washington, DC: National Conference of State Legislatures, 2016) Nicholas J. Farber and James B. Reed, *State Human Service Transportation Coordinating Councils: An Overview and State-By-State Profiles* (Washington, DC: National Conference of State Legislatures, 2010), http://www.ncsl.org/documents/transportation/HSTCCover.pdf. Wendy Fox-Grage and Jana Lynott, *Expanding Specialized Transportation: New Opportunities under the Affordable Care Act* (Washington, DC: AARP Public Policy Institute, 2010), http://www.aarp.org/content/dam/aarp/ppi/2015/AARP-New-ACA-Transportation-Opportunities.pdf. UCSF (2016). 2012 Medicaid nonmedical transportation data provided to AARP for use in the LTSS State *Scorecard* (unpublished, San Francisco, CA: University of California, 2016) US Census Bureau, ACS, *American Community Survey*. (Washington, DC: US Census Bureau, 2010, 2012), data table B18101, SEX BY AGE BY DISABILITY STATUS, available at American FactFinder, http://factfinder2.census.gov.

Indicator	Description and Data Source
20	**Percent of nursing home residents with low care needs:** This is the percentage of nursing home residents ages 65 and older who met the criteria of having low care needs. Low care status is met if a resident does not require physical assistance in any of the four late-loss ADLs (bed mobility, transferring, using the toilet, and eating) and is not classified in either the "Special Rehab" or "Clinically Complex" Resource Utilization Group (RUG-IV). Low care status may apply to a resident who is also classified in either of the lowest 2 of the 44 RUG-IV groups. Analysis of 2014 MDS state-level care data are as reported in LTCFocUS.org, by V. Mor at Brown University. Baseline 2012 data are from the same source. Brown University (2012, 2014). Changing Long-Term Care in America Project at Brown University funded in part by the National Institute on Aging (1P01AG027296). Providence, RI: Brown University School of Public Health. http://ltcfocus.org/
21	**Percent of home health patients with a hospital admission:** This is the percent of patients who were admitted to an acute care hospital for at least 24 hours while a home health care patient. Current year 2015 data are from CMS, OASIS C Based Home Health Agency Patient Outcome, Process and Potentially Avoidable Event Reports, Risk-adjusted Home Health Outcome Report for Utilization Outcomes January–December 2015. Baseline 2012 data are from the same source for January–December 2012. CMS, OASIS, *OASIS C Based Home Health Agency Patient Outcome, Process and Potentially Avoidable Event Reports, Risk-Adjusted Home Health Outcome Report for Utilization Outcomes* (Baltimore, MD: US Department of Health & Human Services, n.d.), https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/OASIS/09aa_hhareports.html.
22	**Percent of long-stay nursing home residents hospitalized within a six-month period:** This is the percent of long-stay residents (residing in a nursing home for at least 90 consecutive days) who were ever hospitalized within six months of baseline assessment. The national percentage was not provided in the source data. The US rate was estimated by the average of state rates, weighted by total nursing home population in each state. V. Mor, Brown University, analysis of 2012 and 2014 Medicare enrollment data, Medicare Provider and Analysis Review File (CMS, MEDPAR 2012, 2014).

<table>
<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>23</td><td>Percent of nursing home residents with one or more potentially burdensome transitions at end of life:

This is the percentage of nursing home decedents who had at least one potentially burdensome transition at end of life. A potentially burdensome transition is defined as

1. Any transfer in the last 3 days of life;
2. A lack of continuity of a nursing home before and after a hospitalization in the last 120 days of life (i.e., going from nursing home A to the hospital and then to nursing home B);
3. Three or more hospitalizations in the last 90 days of life;
4. Two or more hospitalizations for dehydration in the last 120 days of life;
5. Two or more hospitalizations for pneumonia in 120 days; and
6. Two or more hospitalizations for septicemia in the last 120 days of life.

The study population was identified using data from MDS 3.0, which captures data on nursing home resident assessments, and Medicare claims data between January 1, 2013, and December 31, 2013 (current year); and January 1, 2011, and December 31, 2011 (baseline year). Subject eligibility criteria included the following: (a) insured by Medicare fee-for-service, (b) a resident of a nursing home within 120 days prior to death, and (c) age 66 or older.

University of Washington and Brown University (2011, 2013). J. Teno and V. Mor. Changing Long Term Care in America Project at Brown University funded in part by the National Institute on Aging (1P01AG027296) and in part by the Robert Wood Johnson Foundation. Providence, RI: University of Washington and Brown University.</td></tr>
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<tr><th>Indicator</th><th>Description and Data Source</th></tr>
<tr><td>24</td><td>
Percent of new nursing home stays lasting 100 days or more:

This is a measure of the proportion of new nursing home residents in a given year whose stay lasts for 100 days or more.

Data are from an analysis of the Chronic Conditions Warehouse (CCW) Timeline file by Mathematica Policy Research. The CCW Timeline file includes a daily service-use status for all Medicare enrollees during the calendar year, with each enrollee being assigned a single status for each day of the year. For the purposes of calculating this measure, statuses were collapsed to four values: nursing home (including Medicare skilled nursing), inpatient, community (including home health and assisted living), or deceased.

Nursing home stays were categorized as “new” if they were immediately preceded by an inpatient day and the enrollee was not in a nursing home for at least 30 consecutive days before the beginning of the stay. Intervening events are addressed by considering inpatient stays after which the enrollee returns to a nursing home to be part of a continuous nursing home stay.

A stay is deemed to have lasted 100 days or more if the person is either (a) in a nursing home on day 100 and was in a nursing home for at least 75% of the 100-day period, or (b) alive on day 100 and with no intervening days in the community. A person is assumed to have returned to the community before 100 days if he or she (a) spent more than 25% of the 100 days out of the nursing home or (b) were alive but not in a nursing home on day 100 and had at least 1 day in the community. People dying before either 100 days or 26 community days, whichever comes first, were excluded from the analysis.

Carol Irvin et al., Pathways to Independence: Transitioning Adults Under Age 65 from Nursing Home to Community Living (Cambridge, MA: Mathematica Policy Research, 2012), table 5, Indicators of performance of state long-term services and supports systems, https://www.medicaid.gov/medicaid/ltss/downloads/mfpfieldreport19.pdf.

Mathematica Policy Research, unpublished analysis of 2009 Chronic Conditions Warehouse Timeline file for LTSS State Scorecard (Cambridge, MA: Mathematica Policy Research, 2009).
</td></tr>
</table>

Indicator	Description and Data Source
25	**Percent of people with 90+ day nursing home stays successfully transitioning back to the community:** This is a measure of the proportion of Medicare beneficiaries of all ages with 90+ day nursing stays who successfully transition back to the community. Data are from an analysis of the 2009 CCW Timeline file by Mathematica Policy Research. The CCW Timeline file includes a daily service-use status for all Medicare enrollees during the calendar year, with each enrollee being assigned a single status for each day of the year. For the purposes of calculating this measure, statuses were collapsed to four values: nursing home (including Medicare skilled nursing), inpatient, community (including home health and assisted living), or deceased. A person was considered to have a 90+ day if there exists a 90-day period in which he or she was in a nursing home on day 1 and day 90 as well as at least 75% of the days in between. Successful transitions back to the community are defined as 30 consecutive days not in a nursing home after the 90+ day stay, at least 75% of which were community days. Carol Irvin et al., *Pathways to Independence: Transitioning Adults Under Age 65 from Nursing Home to Community Living* (Cambridge, MA: Mathematica Policy Research, 2012), table 5, Indicators of performance of state long-term services and supports systems, https://www.medicaid.gov/medicaid/ltss/downloads/mfpfieldreport19.pdf. Mathematica Policy Research, unpublished analysis of 2009 Chronic Conditions Warehouse Timeline file for LTSS State *Scorecard* (Cambridge, MA: Mathematica Policy Research, 2009).