Exhibit B4 Detailed Indicator Descriptions

Indicator Description and Data Sources

1 Median Annual Nursing Home Private Pay Cost as a Percentage of Median Household Income Ages 65+: The ratio of the median daily private-room rate (multiplied by 365 days) divided by the median household income for households headed by someone aged 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 2019 Cost of Care Survey and income data are from the AARP Public Policy Institute (PPI) analysis of the 2018 American Community Survey Public Use Microdata Sample. Baseline cost data are from the Genworth 2016 Cost of Care Survey, and income data are from the 2015 American Community Survey.


2 Median Annual Home Care Private Pay Cost as a Percentage of Median Household Income Ages 65+: 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 aged 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 2019 Cost of Care Survey and income data are from the AARP Public Policy Institute analysis (PPI) of the 2018 American Community Survey Public Use Microdata Sample. Baseline cost data are from the Genworth 2016 Cost of Care Survey, and income data are from the 2015 American Community Survey.


3 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+ with private LTCI, because data on the age of policyholders at the state level are not available. Historically, about three-fourths of group policyholders and nearly all individual policyholders have been ages 40+.
LTCI policy data are from the AARP Public Policy Institute analysis of 2018 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 are separately reported as NAIC does not report CalPERS counts. LTCI policy data excludes federal LTCI group policy counts as the Office of Personnel Management would not authorize the release of 2018 data. 2015 baseline LTCI policy data was rebased to exclude 2015 federal LTCI group policy counts.

Population data are from the US Census Bureau Population Estimates, 2018. 2015 baseline LTCI policy and population data are from the same sources.


4 Percentage of Adults Ages 21+ with ADL Disability at or Below 250% of Poverty Receiving Medicaid or Other Government Assistance Health Insurance:

The percentage of adults ages 21+ with a self-care difficulty (difficulty dressing or bathing; a reasonable approximation to activities of daily living disability) at or below 250% 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.

The percentage of the target population that has Medicaid or other government assistance health insurance was calculated for each year, and this percentage was averaged across the three “current years” and two “reference years” to create the current and baseline indicator values.

Data are from AARP Public Policy Institute analysis of 2016–2018 American Community Survey Public Use Microdata Sample. 2014–2015 baseline data are from the same source.


5 Estimated Medicaid LTSS Users per 100 Population with ADL Disability:

This measure is an estimate of the number of older people and people with physical disabilities receiving Medicaid LTSS during the year, divided by the number of people in the state with an ADL disability (difficulty with self-care) as measured by the American Community Survey. Because of changes in data availability, this measure is not comparable to similar measures in previous Scorecards.

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.

Denominator data are from the American Community Survey.

Numerator data are estimated by the AARP Public Policy Institute from multiple sources. Nursing home users and HCBS users are estimated separately and added together. Therefore, a single individual receiving services in the community and in a nursing home would be estimated twice. However, this group is fairly small and this measurement issue is constant across all states so has little impact on state ranking on this indicator. This indicator is an estimate derived from multiple sources, not a precise measurement. Small differences in indicator value or rank may not be meaningful; however, the uncertainty in any state’s estimate is small compared to the variation between states.

Nursing home users are estimated from the CMS Medicare and Medicaid Statistical Supplement (data available 2003-04, 2006-11) and Kaiser Family Foundation and UCSF analysis of 12 months of OSCAR data (available 2003-17). The Statistical Supplement contains the number of unique Medicaid nursing homes in each data year; the OSCAR analysis is a near-census of nursing home residents, and contains data on primary payer.
For each of the 8 years that both sources had data, we calculated a conversion factor for each state.

\[ K_{\text{state,year}} = \frac{U_{\text{state,year}}}{C_{\text{state,year}}} \]

Where \( U_{\text{state,year}} \) is unique Medicaid nursing home user count from the Statistical Supplement and \( C_{\text{state,year}} \) is the near-census of nursing home current residents with Medicaid as primary payer from analysis of OSCAR data.

Obvious outliers and implausible values were removed, and the remaining values were averaged to create a state-specific scale factor \( K'_{\text{state}} \). 17 states had at least one data year removed, and 7 states had three or more years removed. For Arizona, which did not have any plausible values in the data, the national average value \( K = 1.863 \) was used.

For the current year (2017) and reference year (2014), the estimated number of unique Medicaid nursing home users was given by

\[ E^{\text{NH}}_{\text{state,year}} = K'_{\text{state}} \times C_{\text{state,year}} \]

HCBS users are estimated from Kaiser Family Foundation’s (KFF) Medicaid Home and Community-Based Services Enrollment and Spending report series, supplemented by additional sources on a case by case basis. This report provides counts of HCBS users by type of service (3 types in 2014: home health, personal care, and 1915(c) waivers; 6 types in 2017: home health, personal care, 1915(c) waivers, 1915(k), community first choice (CFC), 1115 waivers); counts are not unduplicated between service type, and duplication may be significant and cannot be ignored. Current year data were 2017 (from the 2019 KFF report) and reference year data were 2014 (from the 2018 report).

The general formula for the estimated number of unique HCBS users in a state is

\[ E^{\text{HCBS}}_{\text{state,year}} = \frac{1}{2} \left( \sum_{\text{types}} H_{\text{state,year,type}} + \max_{\text{types}} \left( H_{\text{state,year,type}} \right) \right) \]

where \( H_{\text{state,year,type}} \) is the data in the KFF Enrollment and Spending report and the first half of the right side equation is the total number of HCBS users if there is no duplication between service types, and the second half is the total number of HCBS users if there is 100% duplication to the maximum extent possible given the reported data. The estimated unduplicated count is the midpoint between these two extremes. The service types indexed in the equation above are all that are included in the KFF report, including only aged and physically disabled 1915(c) waivers (excluding other populations such as intellectual/developmental disabilities).

AARP Public Policy Institute followed up with many states (contact with state officials, other stakeholders, and/or state-specific data reports) because of inconsistent or implausible data values. One or more adjustments were applied in 16 states. Adjustments to state estimates are listed below:

- Delaware, Hawaii, New Mexico, Rhode Island, Tennessee, Vermont (1115 waiver states, 2017 numbers are plausible but there is a significant undercount of users in 2014) — 2014 data are estimated using an assumption of the same user balance (ratio of HCBS to nursing home users) as in 2017.
- Arizona — 2017 total HCBS users are estimated from 2014 data, based on an increase of 12.9% since 2014. Rate of increase from analysis of state reports for adults (ages 22+) receiving care in the community. [https://www.azahcccs.gov/Resources/Reports/federal.html](https://www.azahcccs.gov/Resources/Reports/federal.html).
- California — Because of overlap of these service types with the state’s 1115 waiver, personal care and CFC were not included in the calculation for data year 2017. For 2014, an 1115 count was estimated assuming the same rate of growth seen in personal care services, and this was substituted for the personal care services count in the calculation.
- District of Columbia — 2015 data (provided by state Medicaid agency) used instead of 2014 for baseline calculation.
- Iowa, South Dakota — 2013 home health user counts were used (instead of 2014 and 2017) for calculating both baseline (2014) are current (2017) values.
- Massachusetts — 2014 total HCBS users are estimated 2017 data, based on an increase of 13.1% between 2014 and 2017. Rate of increase from analysis of data provided to AARP by state Medicaid agency.
- Oregon — 2017 data do not include CFC in the calculation. It appears that CFC recipients are also being counted as 1915(c) users, including both in the equation would produce a significant over count.
- Texas — 2014 data are estimated to have the same user balance (ratio of HCBS to nursing home users) as in 2017.
- Washington — Because of overlap of these service types with CFC, personal care and aged/disabled 1915(c) waivers were not included in the calculation for data year 2017.
Numerator data sources:
“Table 13.25 - Medicaid Persons Served (Beneficiaries), by Type of Service and Area of Residence: Fiscal Year 2011” in the 2013 edition (previous editions may have different table numbering). Available at https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Archives/MMSS.

Denominator data source:

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.

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:

1. 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)

2. Populations (5 criteria)
   1. Older Adult Population (1 question)
   2. People with Physical Disabilities (1 question)
   3. People with Intellectual and Developmental Disabilities (1 question)
   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)
8. Presumptive Eligibility (1 question from a different survey source)
9. Statewide Reach (1 question)

AARP PPI, ADRC/No Wrong Door state survey conducted in collaboration with The Lewin Group and US Administration for Community Living” (unpublished, Washington, DC: AARP Public Policy Institute, 2019). Baseline 2016 data are from 2016 and come from the same source.

7 Percentage of Medicaid- and State-Funded LTSS Spending Going to HCBS for Older People and Adults with Physical Disabilities:
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 IBM Watson Health analysis of CMS data and include managed care spending.

The most current data year is 2016 and the reference data year is 2013, where possible. Several adjustments were necessary due to issues with data quality and completeness. 2014 was used for Alaska, California, Idaho, and Kansas. Oregon’s 2016 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).

The baseline data year is 2013, where possible. Several adjustments were necessary due to issues with data quality and completeness. New Jersey “HCBS Unspecified AD” spending (managed care) was taken from the previous annual report in this series. New Mexico uses 2014 as a base year. Oregon’s CFC expenditures are allocated 41% to older adults and people with physical disabilities and 59% for other populations, as above.

State-funded HCBS data are from 2018 (current year) and 2014 (reference year). During the most recent data collection, errors in previous 2014 data were noted in certain states, and corrected by others. As a result, for 8 states, 2014 state-funded LTSS spending estimates were interpolated by averaging the current data collection (2018 data) and 2011 data collected for the 2014 State LTSS Scorecard: Arizona, the District of Columbia, Idaho, Illinois, Louisiana, Massachusetts,
North Carolina, and Oklahoma. For Maine, the reference year state funded expenditures is set equal to the current (2017/2018) spending.


8 Estimated Percentage of Medicaid Aged/Disabled LTSS Users Receiving HCBS:

This measure is an estimate, among older people and people with physical disabilities who received Medicaid LTSS during the year, of the percentage that received services in their home or community (as opposed to a nursing home). Because of changes in data availability, this measure is not comparable to previous Scorecards, in which the balance of new users receiving HCBS was calculated.

The data used for this indicator are the estimated number of HCBS users $EHCBS_{state,year}$ and nursing home users $ENH_{state,year}$ in the numerator of indicator 5: Estimated Medicaid LTSS users per 100 population with ADL disability above. Please see that indicator write-up for the details of estimating $EHCBS_{state,year}$ and $ENH_{state,year}$.

This indicator value is calculated as

$$
\%HCBS = \frac{EHCBS_{state,year}}{EHCBS_{state,year} + ENH_{state,year}}
$$

In addition to the adjustments detailed in the description of indicator 5, reference year data (2014) were not included for Delaware, Hawaii, New Mexico, Rhode Island, Tennessee, Texas, and Vermont due to incomplete data or a lack of comparability to current data.

Estimates are AARP Public Policy Institute calculations based primarily on:


9 Number of People Self-Directing Services per 1,000 Population with Disabilities:

This is the number of people receiving self-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 self-directed services is from the National Inventory of Self-Directed Programs in the United States 2019 survey data. Data for the inventory were collected from April to August 2019. 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 2018 American Community Survey.


10 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 ages 18+ with an ADL. For 2013-2017, aides are those with occupation code 4610 (personal care aide) or 3600 (nursing, psychiatric, or home health aide) and industry code 8170 (home health care services), 8370 (social services), or 9290 (private households), and who worked in the last 12 months. For 2018, the occupation codes were updated to 3601 (home health aide), 3602 (personal care aide), 3603 (nursing assistant), or 3605 (orderlies and psychiatric aides).

Current year data are from the 2016, 2017, and 2018 American Community Survey, Public Use Microdata Sample and baseline data from 2013, 2014, and 2015 are from the same source. Denominator data also from the American Community Survey, via American FactFinder.

The supply to population ratio was calculated for each year, and this ratio was averaged across the three “current years” and three “reference years” to create the current and baseline indicator values.


11 Assisted Living and Residential Care Units per 1,000 Population Ages 75+:

This is the number of assisted living and residential care units per 1,000 population ages 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, around-the-clock on-site 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 intellectual disability/developmental disability. Nursing homes were also excluded.

Data for the current-year 2016 and baseline 2014 assisted living and residential care units are from the National Study of Long-Term Care Providers Survey.

For 2016, no estimates were presented for the District of Columbia because the data did not meet confidentiality or reliability standards for NCHS. A 2015 capacity of 814 beds - data previously collected by AARP (unpublished) - was used for calculating the indicator value for DC.

Both 2014 and 2016 data for Connecticut and Iowa are not reported in the Scorecard. 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.

2014 baseline data for Hawaii and Wyoming are treated as missing in the Scorecard because of concerns that change in supply over time from 2014 to 2016 was due to a change in the composition of the sampling frame, and not to an actual change in the number of units. For both states, the two years of NCHS data are very far apart in magnitude, and further investigation, including alternate data sources, could not resolve the observed differences.

Because publicly reported assisted living and residential care capacity is rounded to the nearest hundred, the capacity per 1,000 people ages 75+ was calculated by NCHS and reported rounded to the nearest whole number.

Population data for 2016 (current year) are from the US Census Bureau Population Estimates, 2017 vintage. Baseline 2014 population data are from the same source, 2015 vintage.


12 Adult Day Services Total Licensed Capacity per 10,000 Population Ages 65+

This is the maximum number of participants, per 10,000 population ages 65+, allowed at any one time at licensed adult day services centers in each state.

Adult day services capacity refers to the maximum number of participants allowed at an adult day services center location. The allowable daily capacity is usually determined by law or by fire code, but may also be a program decision. Adult day capacity data are from two National Study of Long-Term Care Providers (NSLTCP) surveys. To be eligible for inclusion in these surveys, all adult day services centers identified as adult day care, adult day services, or adult day health services centers and had to: 1) be included in the National Adult Day Services Association database; 2) be licensed or certified by the state to provide adult day services, or accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF); or 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); 3) have one or more average daily attendance of participants based on a typical week; and 4) have one or more participants enrolled at the center at the location at the time of the survey.

Data for current year 2016 and reference year 2014 total licensed adult day services capacity are from the National Study of Long-Term Care Providers survey. For 2016, no estimates for adult day services centers were presented for Delaware, the District of Columbia, West Virginia, and Wyoming, and for 2014, no estimates were presented for the District of Columbia, Idaho, Kansas, Utah, West Virginia, and Wyoming, because none of the estimates for these sectors meet confidentiality or reliability standards for NCHS.

For the Scorecard, the 2014 data was repeated for the 2016 indicator value for Delaware. All other states are treated as missing data.

Because publicly reported adult day services capacity data is rounded to the nearest hundred, the capacity per 10,000 people ages 65 and older was calculated by NCHS and reported rounded to the nearest whole number.

Population data for 2016 (current year) are from the US Census Bureau Population Estimates, 2017 vintage. Baseline 2014 population data are from the same source, 2015 vintage.


13 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 (CBPP) reports, all authorized vouchers. State-level data for place-based units are from the National Housing Preservation Database (NHPD), total units of any subsidy type. Total housing units are from the American Community Survey, via American FactFinder. Current year (2018) and baseline (2015) available from same sources.

NHPD (2016, 2019). AARP Public Policy Institute analysis of National Housing Preservation Database, downloaded 9/14/2016 and 6/6/2019. 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 2015 and 2017.


14 Rate of Employment for Adults with ADL Disability Ages 18 to 64 Relative to Rate of Employment for Adults without ADL Disability Ages 18 to 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.

The ratio of employment rate for adults with ADL disability to adults without ADL disability was calculated for each year, and this ratio was averaged across the three “current years” and three “reference years” to create the current and baseline indicator values.


15 Percentage of Long-Stay, High-Risk Nursing Home Residents with Pressure Sores:

Percentage of long-stay, high-risk nursing home residents impaired in bed mobility or transfer, comatose, or suffering malnutrition who have pressure sores (stage 2–4 or unstageable) on target assessment.

Current year, four quarter average Q1 – Q4, 2018 data from CMS Minimum Data Set (MDS) 3.0 for Nursing Homes. Data includes stage 2–4 and three unstageable pressure ulcer conditions. Unstageable pressure sores may be open or closed wounds that are completely covered with eschar (hard, black, dead tissue) or a non-removable dressing or device, making them difficult to diagnosis. Prior year CMS data, reported in previous Scorecards, did not include unstageable pressure ulcers.


16 Percentage of Long-Stay Nursing Home Residents who are Receiving an Antipsychotic Medication:

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 schizophrenia, Tourette’s syndrome, and Huntington’s disease.

Current year, four quarter average Q1 – Q4, 2018 , data from CMS Minimum Data Set (MDS) 3.0 for Nursing Homes. Baseline, four quarter average Q2 – Q4, 2015 and Q1, 2016, data from same source.


17 HCBS Quality Cross-State Benchmarking Capability:

This indicator is constructed from state adoption of four tools that relate to HCBS quality measurement and assurance, or quality of life for people with LTSS needs:

- NCI-AD
- HCBS CAHPS
- BRFSS Emotional Support and Life Satisfaction Module
- Statewide NCQA Accreditation

Scoring Algorithm:

- NCI-AD
  1.2 points for any participation
  1.6 points for sample size >500 (greatest sample size of last two published annual reports)
  2.0 points for sample size >800
  2.5 points for sample size >1200
- HCBS CAHPS
  1.0 point for using within the past 2 years
  1.5 points for current/last year
If state is doing both NCI-AD and HCBS CAHPS, the CAHPS credit is reduced by 1.0 because of substitution effect between the tools (a state using one tool robustly is better than using both tools at a minimum level). A state using HCBS CAHPS within the last year would still get 0.5 points of credit for greater frequency of use. For example, Kansas reported using CAHPS in 2019, and therefore earned 1.5 points of credit. However, because the state already received credit for NCI-AD, they are only awarded 0.5 points for HCBS CAHPS instead of the full 1.5 points. Similar -1.0 point adjustments were made to Mississippi, New Jersey, and Pennsylvania.

- **BRFSS ES/QOL Module**
  - 0.6 points for 1 year fielding module 2015-17
  - 0.8 points for 2 years
  - 1.0 point for 3 years

- **NCQA Statewide**
  - 1.0 point for case management for LTSS
  - or
  - 1.0 point for LTSS distinction required

**Data sources:**

### 18 Supporting Working Caregivers (maximum possible score 17.0):

This indicator is constructed along six policies:

- **Family Medical Leave.** This policy evaluates the extent to which states exceed the federal Family Medical Leave Act (FMLA) requirements for covered employers, covered employee eligibility, covered relationships, and length 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 15 or fewer employees and 0.5 points for employers with 16 - 30 employees
- 1.0 point for states exceeding federal FMLA for covered eligibility (time with employer) of less than 1,000 hours, 6 months of work, or no minimum work requirement 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) sibling, (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


Mandatory Paid Family Leave and Sick Days. These policies evaluate 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. The mandatory paid family leave policy evaluates statewide requirements for covered employers, covered relationships, and length of leave allowed. The mandatory paid sick days policy evaluates statewide requirements for covered employers and number of sick days allowed.

Scoring: States received up to 4.0 possible points for statewide paid family leave and up to 3.0 points for mandatory paid sick days leave as follows:

Mandatory Paid Family Leave
- 1.0 point for statewide laws mandating paid family leave and 0.5 points if enacted statewide law is not effective until after June 2020
- 1.0 point for statewide laws mandating paid family leave for covered employers with 15 or fewer employees, 0.5 points for employers with 16 - 30 employees, and one-half credit if statewide laws do not become effective until after June 2020
- 0.25 points each (maximum of 1.0 point) for statewide laws mandating paid family leave for definition of family member (covered relationships) that includes (a) parent-in-law, (b) sibling, (c) grandparent, and (d) grandparent-in-law, and one-half credit if statewide laws do not become effective until after June 2020
- 1.0 point for statewide laws mandating paid family leave for allowing 10 or more weeks of paid leave, 0.5 points for less than 10 weeks of paid leave, and one-half credit if statewide laws do not become effective until after June 2020.

Mandatory Paid Sick Days
- 1.0 point for statewide laws mandating paid sick days or paid personal time off and 0.5 points if statewide laws do not become effective until after June 2020
- 1.0 point for statewide laws mandating paid sick days or paid personal time off for covered employers with less than 10 employees, 0.5 points for employers with 10 - 49 employees, and one-half credit if statewide laws do not become effective until after June 2020
- 1.0 point for statewide laws mandating paid sick days or paid personal time off for allowing 40 or more hours of accrued annual leave, 0.5 points from less than 40 hours of accrued annual leave, and one-half credit if statewide laws do not become effective until after June 2020.

Flexible Use of Sick Leave. This policy evaluates the extent to which states and localities require private sector employers to have workplace benefits that allow employees to use a portion of accrued sick time for purposes beyond their own illness, including family caregiving. The flexible use of sick leave policy evaluates state and local legislation for covered employers, covered relationships, and number of days allowed.

Scoring: States received up to 3.0 points for flexible use of sick leave as follows:
- 1.0 point for state or local laws requiring flexible use of sick leave for covered employers with 15 or fewer employees, 0.5 points for employers with 16 - 30 employees, and one-half credit if state or local laws do not become effective until after June 2020
- 0.25 points each (maximum of 1.0 point) for state or local laws requiring flexible use of sick leave for definition of family member (covered relationships) that includes (a) parent-in-law, (b) sibling, (c) grandparent, and (d) grandparent-in-law, and one-half credit if state or local laws do not become effective until after June 2020
- 1.0 point for state or local laws requiring 10 or more days of flexible use of sick leave, 0.5 points for less than 10 days, and one-half credit if legislation does not become effective until after June 2020.


Unemployment Insurance. This policy evaluated 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.


State Policies that Protect Family Caregivers from Employment Discrimination:
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: 2.0 points for statewide laws with defined policy prohibiting discrimination and 1.0 point if statewide but undefined familial status or family responsibility policy. 1.0 point for states with one or more locality laws with a defined policy prohibiting discrimination and 0.5 points if locality law does not define familial status or family responsibility.

Current-year 2019 data are from Center for WorkLife Law (WLL) at the University of California, Hastings College of the Law, legal analysis. Baseline 2014 data are from WLL at the University of California, Hastings College of the Law, Work Life Law: State Law/Legislation Tracking from AARP Public Policy Institute.


19 Person- and Family-Centered Care (maximum possible score 5.5):
This indicator is constructed along three policies:

State Policies on Financial Protection for Spouses of Medicaid Beneficiaries who Receive HCBS:
This policy 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 $3,160.50 is the state minimum income allowance protection, 0.5 points for states that permit the full range between the federal minimum $2,113.75 and federal maximum $3,160.50 income allowance protection. Midrange values have computed scores: (0.5*(X + X) -2113.75)/(3160.5-2113.75).
- 1.0 point for states where the MMNA federal maximum asset resource protection of $126,420 is the minimum standard, and a weighted computation score for states that use an amount above the federal minimum $25,284 asset resource protection: (X - $25,284)/ ($126,420 - $25,284).
Current-year 2019 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 Q1, 2019 through Q3, 2019 and AARP Public Policy Institute independent research on statutes for Medicaid HCBS waiver recipients receiving full income and asset protection. Baseline 2016 data are from the same source for Q4, 2015 through Q2, 2016.


State Assessment of Family Caregiver Needs. This policy addresses the extent to which a state conducts an 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: (1) 1915(c); (2) 1115 demonstration; (3) Medicaid state plan personal care services; (4) 1915(i); (5) 1915(j); (6) Medicaid state plan (k)—Community First Choice; (7) National Family Caregiver Support Program (OAA); (8) state-funded family caregiver support program; (9) state-funded HCBS; and (10) other.

Scoring: 1.0 point if a caregiver assessment is used in at least 1 of the 10 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 an assessment for a maximum of 1.5 points. Total allowable points states can be awarded for this component is 2.5 points.


CARE Act. States that passed Caregiver Advise, Record, Enable (CARE) Act legislation and Bill 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: (1) Record the name of the family caregiver on the medical record of a loved one; (2) Inform the family caregivers when the patient is to be discharged; and (3) 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 2019 data obtained from AARP State Advocacy & Strategy Integration internal communications. Baseline 2016 data are from the same source.


20 Nurse Delegation and Scope of Practice: (maximum possible score 5.0):

This indicator is constructed with two policies:

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:

<table>
<thead>
<tr>
<th>Medication Administration</th>
<th>Tube Feeding and Gastric Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Oral medication</td>
<td>10. Gastrostomy tube feeding</td>
</tr>
<tr>
<td>2. PRN medication</td>
<td>11. Administer enema</td>
</tr>
<tr>
<td>3. Pre-filled insulin/insulin pen</td>
<td><strong>Bladder Regimen and Skin/Appliance Care</strong></td>
</tr>
<tr>
<td>4. Draw up insulin</td>
<td>12. Perform intermittent catheterization</td>
</tr>
<tr>
<td>5. Other injectable medication</td>
<td>13. Perform ostomy care including skin care and changing appliance</td>
</tr>
<tr>
<td>6. Glucometer testing</td>
<td><strong>Respiratory Care</strong></td>
</tr>
<tr>
<td>7. Medication through tubes</td>
<td>14. Perform nebulizer treatment</td>
</tr>
<tr>
<td>8. Insertion of suppositories</td>
<td>15. Administer oxygen therapy</td>
</tr>
</tbody>
</table>

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 2019 data collected from AARP Public Policy Institute survey on nurse delegation in home settings. 2016 data was repeated for three states (Hawaii, Indiana, and Nevada) that did not respond to the 2019 survey on nurse
delegation. Baseline 2016 data from the AARP Public Policy Institute 2016 survey on nurse delegation in home settings. AARP interpreted 2016 state Board of Nursing regulations for twelve 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 was repeated in 2016 for South Carolina.


Nurse Practitioner Scope of Practice: This policy addresses 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; and (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 points, and states that have restricted practice received 0 points.


21 Transportation Policies (maximum possible score 1.0):

Transportation policies that support family caregivers include volunteer driver policies.

Volunteer driver polices (current year 2019, baseline 2015-2016): Protection from insurance cancelation, or unreasonable or unfair if the state had a policy.

Scoring: States with volunteer driver policies received 1.0 point, and states that did not have a policy received 0 points.

Jana Lynott (AARP, Public Policy Institute), Johanna Zmud, Gretchen Stoeltje, Todd Hansen, Tina Geiselbrecht, Chris Simek, Ben Ettelman (Texas A&M Transportation Institute), and Wendy Fox-Grage, Volunteer Driver Insurance in the Age of Ridehailing (Washington, DC: AARP Public Policy Institute, publication forthcoming).


22 Percentage of Nursing Home Residents with Low Care Needs:

This is the percentage of nursing home residents ages 65+ 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 2017 MDS 3.0 state-level care data as reported in LTCFocus.org, by V. Mor at Brown University.

As of February 2020, data for 2016 and 2017 for this measure on LTCFocus.org are not consistent with previous years, mostly likely due to a change in the details of the calculation.


23 Percentage of Home Health Patients with a Hospital Admission:

This is the percentage of home health stays for patients who have a Medicare claim for an unplanned admission to an acute care hospital during the 60 days following the start of the home health stay.

Current year 2017 national and state-level data for how often home health patients had to be admitted to the hospital are from CMS, Home Health Compare, Data Archive, 2018 Annual Files, for January – December 2017. Baseline 2015 data are from 2015 Annual Files from the same source for January – December 2014.

Prior Scorecards used a different measure of home health hospital admissions that is no longer being calculated or reported.
24 Percentage 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. Residents were excluded if they did not have continuous Medicare fee-for-service coverage for the six month evaluation period.

The study population was identified using data from MDS 3.0, which captures data on nursing home resident assessments, and Master Beneficiary Summary File, Part A-Medicare Inpatient Claims data between January 1, 2016 and December 31, 2016 (current year); and January 1, 2014 and December 31, 2014 (baseline year.)

The national percentage was not provided in the source data. The US rate was estimated by the average of state rates, weighted by the total nursing home population in each state.


25 Percentage 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:

- Any transfer in the last 3 days of life;
- 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);
- Three or more hospitalizations in the last 90 days of life;
- Two or more hospitalizations for dehydration in the last 120 days of life;
- Two or more hospitalizations for pneumonia in 120 days; and
- Two or more hospitalizations for septicemia in the last 120 days of life.

This definition and the details of the data analysis differ slightly from the definition used in previous Scorecards. The study population was identified using data from MDS 3.0, Medicare Beneficiary Summary File, Medicare Medpar records, which captures data on nursing home resident assessments, and Medicare claims data between January 1, 2016 to December 31, 2016 (current year) and January 1, 2013 to December 31, 2013 (baseline year). Subject eligibility criteria included the following: (1) insured by Medicare fee-for-service; (2) a resident of a nursing home within 120 days prior to death; and (3) ages 66+.


26 Percentage of Short-Stay Residents Who Were Successfully Discharged to the Community:
This is a claims-based outcome measure of the proportion of Medicare beneficiaries, ages 18+, who successfully discharged to the community from a post-acute care (PAC) skilled nursing facility (SNF) and had no unplanned rehospitalizations and no death in the 31 days following discharge. Community is defined as home or self-care, with or without home health services, based on Patient Discharge Status Codes 01, 06, 81, and 86 on the Medicare FFS claim.

Only PAC stays that are preceded by a short-term acute care stay in the 30 days prior to the PAC admission date are included in the measure. Stays ending in transfers to the same level of care are excluded.

Previous Scorecards used two measures of transition to and from a nursing home, designed by AARP and Mathematica, and calculated by Mathematica. We are replacing these with a single publicly reported measure in order to align with data that are more readily available and enable comparison to other time periods and levels of analysis (facilities, counties, etc).

Data are from Skilled Nursing Facility Quality Reporting Program, Medicare Fee-for-Service Claims data, 4/1/2017 – 3/31/2018, file date 2/1/2019.