2017 ACT Index: Arizona Update

Performance Data and Supplementary Materials

This document showcases the 2017 update of Coalition to Transform Advanced Care (C-TAC)'s Advanced Care Transformation Index℠ (ACT Index), offers background on the ACT Index and included measures, highlights changes to Index performance from 2016 to 2017, and notes several methodology changes.

Contents

About the Advanced Care Transformation Index℠

The ACT Index offers a single composite measure that allows policymakers, regulators, healthcare providers, communities, and consumers to assess the overall performance of the serious illness care movement through measured change over time. While the Index initially captured performance at the national level, C-TAC adapted the composite for state-level use in 2018 to allow for state-to-state comparisons and highlight opportunities for improvement.

Each ACT Index measure was carefully selected by C-TAC, invited stakeholders, and serious illness experts to capture key facets of serious illness care. Selected measures are reviewed and approved by an independent steering committee. Some of these measures are fully specified and in use in accountability programs for various entities (such as the Hospice Quality Reporting Program), while others are measures of population health that have not been tested and validated for use in payment or other accountability programs for specific populations.

As of 2020, the ACT Index includes 37 measures that address five domains relevant to serious illness and end-of-life care: care, caregiving, communication, community, and cost. Index measure data are gathered from many sources including the U.S. Census and related surveys, patient and family surveys, payer claims, records on provider characteristics and performance (from the Centers for Medicare and Medicaid Services, the Center to Advance Palliative Care, and others), Centers for Disease Control statistics, and records of state policies (from AARP and others). Most measures are updated on an annual basis.

In its current published state, the ACT Index provides state- and national-level data on each of the measures. The scores for individual measures are rolled into the **ACT Achievement Index** and trended over time using the **ACT Change Index**. The ACT Achievement Index assesses each state's average performance relative to the U.S. average for a given year. The ACT Change Index assesses each state's change in performance (improvement or decline) between two years: a start year and an end year. C-TAC also calculates the Compound Annual Growth Rate to assess the change per year if all years changed the same amount.

Beyond just keeping score, C-TAC is leveraging the index measures to develop resources to help stakeholders improve performance. Beginning with high-priority measures, C-TAC will publish:

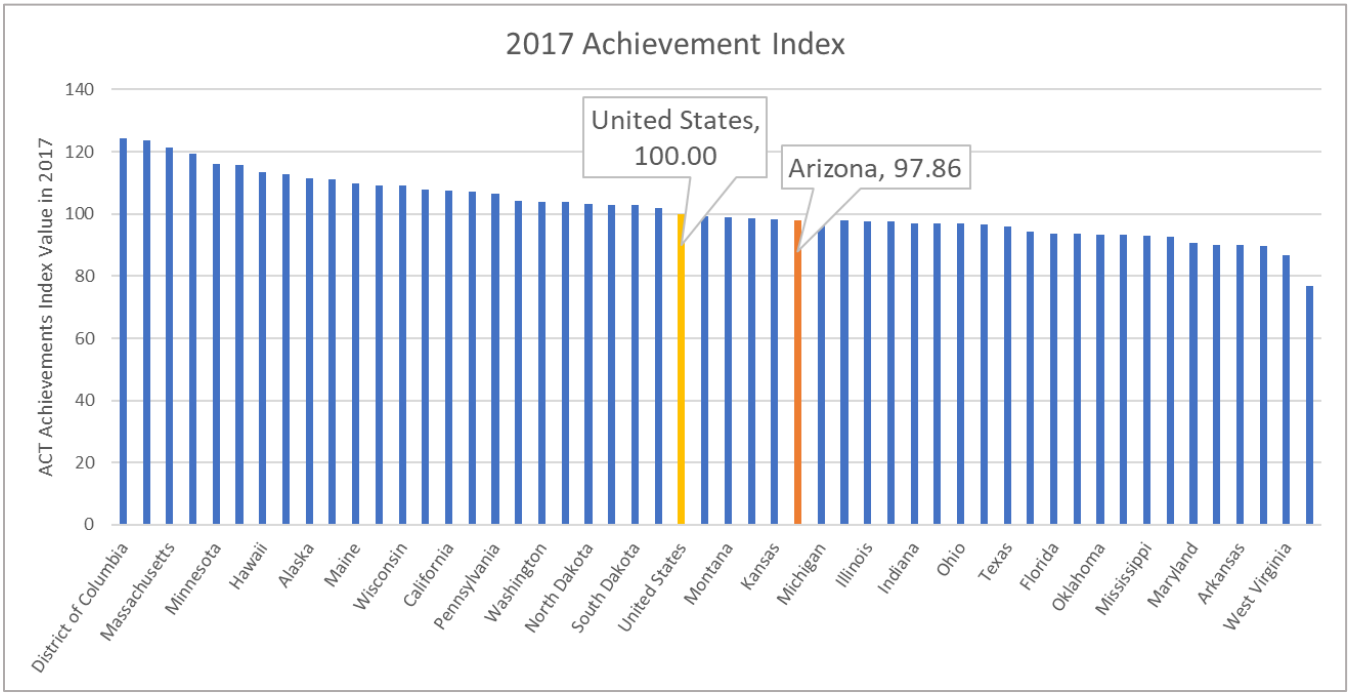
- Literature reviews to describe evidence for performance "drivers" (e.g., laws, regulations, policies, care processes, and other interventions) that states and other organizations can promote to improve ACT Index measures
- Results of data analyses that identify specific drivers that have a statistical relationship with ACT Index measures
- Findings from interviews with serious illness professionals who have shared their experiences of barriers to success and how to improve performance
- A list of ACT Index Coaches, professionals with demonstrated success available to help others overcome challenges and implement the interventions they have found most effective

Continued use of the index and its component measures provides the public, providers, and policymakers data to inform evidence-based decision-making and track progress over time. C-TAC strives to ensure that all Americans with advanced illness receive comprehensive, high-quality, person- and family- centered care that is consistent with their goals and values and honors their dignity. What cannot be measured cannot be improved. The ACT Index supports C-TAC's mission through measurement and performance improvement at the state- and national-level across the serious illness community.

Arizona 2017 Index Performance

Figure 1 below shows Arizona's performance on the overall Achievement Index as compared to other states. Based on the 2017 Index methodology, Arizona ranks 29th out of 51 states in the 37-measure composite. Arizona's average Achievement Index is 97.86, 2% lower than the National Average, which is always set to 100.

Figure 1: Arizona Performance on ACT Achievement Index



Arizona 2017 Measure Data

Arizona's 2017 ACT Index data are displayed in **Table 1 (next page)**, which shows Arizona's performance on each of the 37 measures compared to the performance of the United States as a whole and how Arizona ranks compared to the other 49 states and the District of Columbia. For many measures, higher values indicate better performance, but for some of the measures (indicated in orange), lower values are better.

Several measures have excellent performance compared to the other states, principally in the **Care** domain. For example, Arizona ranks better than most other states in *Hospice days per decedent* and *Licensed staffing hours per SNF resident per day*. On the other hand, Arizona ranks worse than many other states in the **Community** domain and other measures like *Co-payments per decedent, Intensive care days per decedent*, *Patients who would definitely recommend the home health agency.*

For some measures, performance does not seem vastly different from the US data values, yet Arizona's rank is not favorable. This often occurs when many states have similar scores on a measure, so very small differences can have a large impact on rank. This is the case for several of the measures originating from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospice Survey (measures 4, 5, 17, 24, and 27).

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Table 1: Arizona 2017 Performance on ACT Index Measures

Domain	37 Measures	US Data	AZ	AZ Rank
Care	Measure 1: 30-day hospital readmissions (per 1,000 Medicare beneficiaries 65+)	41.0	29.7	11
Care	Measure 2: Home healthcare workers (per 1,000 adults aged 75+)	110.6	108.4	21
Care	Measure 3: Hospice days per decedent (last six months of life)	25.0	32.6	3
Care	Measure 4: Hospice emotional and spiritual support	90%	89%	37
Care	Measure 5: Hospice help for pain and symptoms	75%	74%	31
Care	Measure 6: Hospital days per decedent (last two years of life)	14.0	11.8	17
Care	Measure 7: Hospital patients discharged without instructions for home recovery	13%	14%	37
Care	Measure 8: Hospital patients who did not receive patient-centered care	32%	34%	43
Care	Measure 9: Intensive care days per decedent (last six months of life)	3.59	4.36	47
Care	Measure 10: Medicare Advantage quality	69.3%	56.0%	32
Care	Measure 11: Medicare Advantage penetration	33.1%	38.6%	8
Care	Measure 12: Nursing home quality (percent beds rated four- or five- stars)	42.4%	52.2%	11
Care	Measure 13: Deaths at home	29.7%	33.9%	11
Care	Measure 14: Hospitals with a palliative care program	66.5%	68.4%	27
Care	Measure 15: Long-stay SNF residents with moderate to severe pain	6.6%	8.5%	34
Care	Measure 16: Patients who would definitely recommend the home health agency to friends and family	78.0%	74.5%	47
Care	Measure 17: Family willing to recommend this hospice	84%	83%	41
Care	Measure 18: Potentially avoidable emergency department visits (per 1,000 Medicare beneficiaries 65+)	196.9	191.0	23
Care	Measure 19: Preventable hospitalization (discharges per 1000 Medicare beneficiaries 65+)	49.9	37.0	9
Care	Measure 20: Licensed staffing hours per SNF resident per day	1.69	2.08	3
Care	Measure 21: Seniors with a dedicated healthcare provider (65+)	94.8%	92.1%	44
Care	Measure 22: SNF fine amount	$11,096	$4,766	12
Caregivers	Measure 23: Caregivers (non-professional per Medicare beneficiary)	0.81	0.51	42
Caregivers	Measure 24: Hospice training family to care for patient	75%	73%	40
Caregivers	Measure 25: Person- and family-centered care policies (composite indicator, scale 0-5.0)	2.33	2.10	29
Caregivers	Measure 26: Policies supporting working caregivers (composite indicator, scale 0-9.0)	1.22	1.00	20
Communications	Measure 27: Hospice communication with family	81%	80%	28
Communications	Measure 28: Adults getting the help or advice they needed when they contacted their home health provider (last 2 months of care)	24.9%	21.8%	42
Communications	Measure 29: Medicare fee-for-service beneficiaries with advance care planning	2.54%	3.17%	12
Community	Measure 30: Community support (dollars per adult in poverty 60+)	$565	$245	45
Community	Measure 31: Adults with food insecurity (60+)	15.8%	15.9%	34
Community	Measure 32: Home health agency visits per decedent (last six months of life)	8.12	6.44	34
Community	Measure 33: Home-delivered meals (per 100 adults 60+ with independent living difficulty)	9.10	5.60	42
Community	Measure 34: Volunteerism among adults (65+)	26.0%	22.1%	34
Cost	Measure 35: Adults who went without care because of cost in past year (65+)	5.08%	5.60%	34
Cost	Measure 36: Co-payments per decedent (last two years of life)	$4,145	$5,140	48
Cost	Measure 37: Total Medicare spending per decedent (last two years of life)	$73,042	$73,356	38

Orange text: lower values are better, Green: 5+ highest-ranked, Red: 5+ lowest-ranked

Arizona 2017 vs. 2016 Performance

Arizona has improved several measures from 2016-2017, as shown in **Table 2 (next page)**. The rate of *Medicare FFS beneficiaries with advance care planning* has increased 119% from 1.45% in 2016 to 3.17% in 2017. *SNF Fine Amount* has dropped 22% from $6,142 in 2016 to $4,766 in 2017. Other measures have shown declines. For example, the number of *Caregivers (non-professional per Medicare Beneficiary)* dropped from 0.96 to 0.51 (-47%), while the percent *Adults who went without care because of cost* increased by 10% from 5.1% to 5.6%.

For several measures, such as *Hospice help for pain and symptoms*, *Hospital patients discharged without instructions for home recovery*, and *Family willing to recommend this hospice*, Arizona's raw value for the measure only changed slightly, but the state's rank changed dramatically. This is because when multiple states have the same value, they receive the same rank, and they are all ranked higher than states with a worse value. In the example of *Family willing to recommend this hospice*, 10 states with a value of 84%, including Arizona, were all ranked 32 in 2016. When Arizona dropped to 83%, the 9 remaining states with 84% were all ranked higher than Arizona, so Arizona dropped in rank to 41. See **Figure 2**.

Figure 2: Change in Rank Illustration

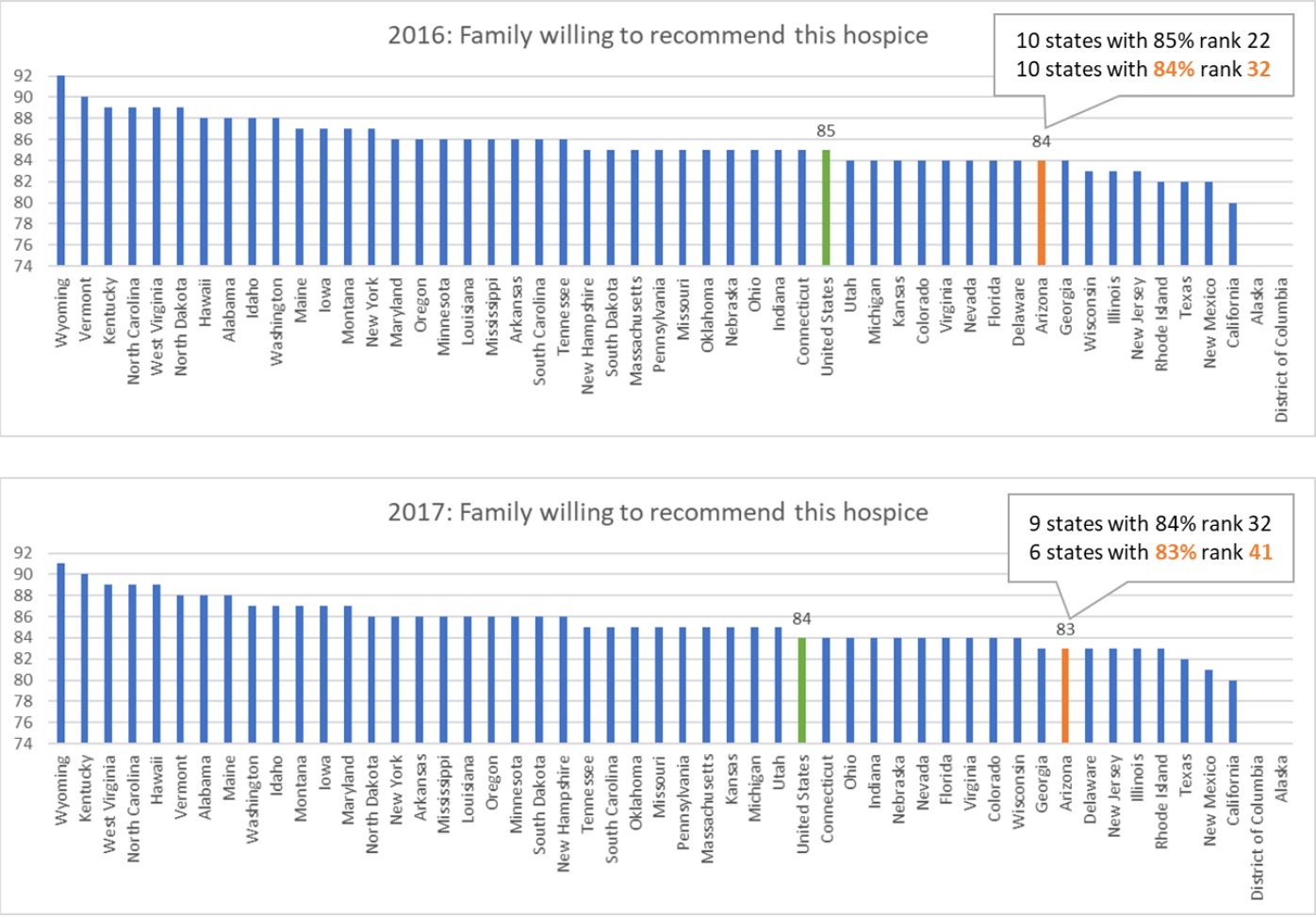

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Table 2: AZ ACT Index Change from 2016 to 2017

Domain	37 Measures	2016 (old methodology)			2016: new methodology			2017			AZ Raw Change (2017-2016)	AZ Percent Change (2017/2016)
		US Data	AZ	AZ Rank	US Data	AZ	AZ Rank	US Data	AZ	AZ Rank		
Care	30-day hospital readmissions (per 1,000 Medicare beneficiaries 65+)	0.03	0.02	11	40.4	28.9	11	41	29.7	11	0.8	3%
Care	Home healthcare workers (per 1,000 adults aged 75+)	108.4	108.4	22	110.6	108.4	21	110.6	108.4	21	0	0%
Care	Hospice days per decedent (last six months of life)	24.5	31.6	5	24.5	31.6	5	25	32.6	3	1.0	3%
Care	Hospice emotional and spiritual support	90%	89%	5	90%	89%	38	90%	89%	37	0%	0%
Care	Hospice help for pain and symptoms	78%	74%	8	75%	75%	18	75%	74%	31	-1%	-1%
Care	Hospital days per decedent (last two years of life)	14	11.9	16	14.0	11.9	16	14	11.8	17	-0.1	-1%
Care	Hospital patients discharged without instructions for home recovery	15%	14%	6	13%	13%	27	13%	14%	37	1%	8%
Care	Hospital patients who did not receive patient-centered care	33%	34%	6	32%	34%	39	32%	34%	43	0%	0%
Care	Intensive care days per decedent (last six months of life)	5.4	6.6	49	3.5	4.3	47	3.59	4.36	47	0.1	2%
Care	Medicare Advantage quality	52.2%	51.3%	25	-	-	-	69.3%	56%	32	N/A	N/A
Care	Medicare Advantage penetration	31%	38%	8	32%	38.3%	8	33%	38.6%	8	0.3%	1%
Care	Nursing home quality (percent beds rated four- or five- stars)	42.2%	46.2%	23	42.4%	46.6%	21	42.4%	52.2%	11	5.6%	12%
Care	Deaths at home	29.4%	33.9%	10	29.4%	33.9%	10	29.7%	33.9%	11	0.0%	0%
Care	Hospitals with a palliative care program	66.5%	68.4%	27	66.5%	68.4%	27	66.5%	68.4%	27	0.0%	0%
Care	Long-stay SNF residents with moderate to severe pain	16.9%	19%	33	8.2%	10.2%	34	6.6%	8.5%	34	-1.7%	-17%
Care	Patients who would definitely recommend the home health agency to friends and family	70.7%	70.2%	24	78.5%	75.5%	44	78.0%	74.5%	47	-1.0%	-1%
Care	Family willing to recommend this hospice	84%	84%	8	85%	84%	33	84%	83%	41	-1%	-1%
Care	Potentially avoidable emergency department visits (per 1,000 Medicare beneficiaries 65+)	0.18	0.17	5	196.9	191.0	23	196.9	191.0	23	0.0	0%
Care	Preventable hospitalization (discharges per 1000 Medicare beneficiaries 65+)	53.8	40.1	7	53.8	40.1	7	49.9	37	9	-3.1	-8%
Care	Licensed staffing hours per SNF resident per day	2.46	2.59	16	1.7	2.0	4	1.69	2.08	3	0.1	5%
Care	Seniors with a dedicated healthcare provider (65+)	94.3%	93.0%	38	94.3%	93.0%	37	94.8%	92.1%	44	-0.9%	-1%
Care	SNF fine amount	$8,016	$6,142	25	$8,016	$6,142	25	$11,096	$4,766	12	-$1,376	-22%
Caregivers	Caregivers (non-professional per Medicare beneficiary)	84.6%	95.5%	15	0.85	0.96	15	0.81	0.51	42	-0.45	-47%
Caregivers	Hospice training family to care for patient	75%	72%	9	75%	72%	43	75%	73%	40	1%	1%
Caregivers	Person- and family-centered care policies (composite indicator, scale 0-5.0)	2.42	2.1	20	2.3	2.1	29	2.33	2.1	29	0.0	0%
Caregivers	Policies supporting working caregivers (composite indicator, scale 0-9.0)	1.33	1	17	1.2	1.0	20	1.22	1	20	0.0	0%
Communications	Hospice communication with family	80%	80%	6	80%	79%	39	81%	80%	28	1%	1%
Communications	Adults getting the help or advice they needed when they contacted their home health provider (last 2 months of care)	25.6%	23.1%	34	25.6%	23.1%	41	24.9%	21.8%	42	-1.3%	-5%
Communications	Medicare fee-for-service beneficiaries with advance care planning	1%	0.90%	11	1.50%	1.45%	16	2.54%	3.17%	12	1.72%	119%
Community	Community support (dollars per adult in poverty 60+)	$572	$281	47	$536	$241	45	$565	$245	45	$4	2%
Community	Adults with food insecurity (60+)	15.5%	15.4%	32	15.5%	15.4%	31	15.8%	15.9%	34	0.5%	3%
Community	Home health agency visits per decedent (last six months of life)	26	18.3	35	8.2	6.4	32	8.12	6.44	34	0.0	0%
Community	Home-delivered meals (per 100 adults 60+ with independent living difficulty)	19.1	11.1	47	8.9	5.3	45	9.1	5.6	42	0.3	6%
Community	Volunteerism among adults (65+)	26.4%	20.4%	43	26.4%	20.4%	42	26.4%	20.4%	43	0.0%	0%
Cost	Adults who went without care because of cost in past year (65+)	10.7%	9.4%	23	4.8%	5.1%	33	5.08%	5.6%	34	0.5%	10%
Cost	Co-payments per decedent (last two years of life)	$4,075	$4,992	49	$4,075	$4,992	48	$4,145	$5,140	48	$148	3%
Cost	Total Medicare spending per decedent (last two years of life)	$71,543	$71,798	39	$71,544	$71,799	38	$73,042	$73,356	38	$1,557	2%

Orange text: lower values are better, Green: 3+ highest-ranked/most improved, Red: 3+ lowest-ranked/most declined

2017 Updates to ACT Index Methodology

The 2017 ACT Index features updates to Index methodology. Thus, **Table 2 (previous page)** includes the 2016 rates and rankings shared with the Arizona coalition last year using the previous methodology. Table 2 also shows the recalculation of the 2016 rates and ranking using the updated methodology. Key changes include:

Overall Changes

- Updated data throughout
- Updated measure titles to better reflect the concept each measure captures
- Updated ranking methodology and excluded United States value
- Changed several measures reported as a % in the 2016 Index to report as # per 1,000 in the 2017 Index
    - Ex. Changed *30-day hospital readmissions* from 0.41 to 41
- Calculated United States weighted average for measures with no reported national value when data were available to do so

Measure-Specific Changes

- Changed data sources:
    - Commonwealth Scorecard → Interactive Commonwealth Map
        - Measure 1: *30-day hospital readmissions (per 1,000 Medicare beneficiaries 65+)*
        - Measure 7: *Hospital patients discharged without instructions for home recovery*
        - Measure 18: *Potentially avoidable emergency department visits (per 1,000 Medicare beneficiaries 65+)*
    - New data source for Measure 10: *Medicare Advantage Quality* (U.S. News & World Report)
- More appropriate fields selected from download files
    - Measure 15: *Long-stay SNF residents with moderate to severe pain* (short stay → long stay residents)
    - Measure 20: *Licensed staffing hours per SNF resident per day* ('CNA' staffing → licensed staffing)
    - Measure 35: *Adults who went without care because of cost in past year (65+)*
        - C-TAC-constructed measure from Behavioral Risk Factor Surveillance System and US Census data → online CDC Behavioral Risk Factor Surveillance System tool
- Changed timeframe reported:
    - Q2 2016 - Q3 2018 → 2016: Q1 2016 - Q4 2017 and 2017: Q1 2017 - Q4 2018
        - Measure 4: *Hospice emotional and spiritual support*
        - Measure 5: *Hospice help for pain and symptoms*
        - Measure 16: *Patients who would definitely recommend the home health agency to friends and family*
        - Measure 24: *Hospice training family to care for patient*
        - Measure 27: *Hospice communication with family*
    - Last 2 years of life → last 6 months of life
        - Measure 9: *Intensive care days per decedent*
        - Measure 32: *Home health agency visits per decedent (last six months of life*)

ACT Index Measure Rationale

Each ACT Index measure was carefully selected by C-TAC, after review by the C-TAC Act Index Steering Committee, comprised of experts in clinical care, care giving, patient safety, performance improvement, community engagement and related disciplines, to capture their views on the key facets of serious illness care (e.g., symptom control, patient and caregiver experience, advance care planning, etc.). Together, these measures are intended to drive value for patients and families (i.e., the highest quality care at the best cost).

Sixteen (16) of the 37 measures are also included in four other published state healthcare rankings: U.S. News and World Report's Health Care Quality Rankings, the AARP Long Term Services and Supports Scorecard, America's Health Rankings, and the Commonwealth Fund Scorecard on State Health System Performance.

Table 3 lists each measure, its interpretation, and the rationale for including the measure in the ACT Index. Measures are organized by domain.

Table 3: Measure Rationale by Domain

Measure Name	Interpretation	Importance to the ACT Index
CARE DOMAIN		
30-day hospital readmissions (per 1,000 Medicare beneficiaries 65+)	Lower values are better	Hospital readmissions can result from many reasons, such as poor communication and inadequate post-acute or follow-up care, particularly for high risk patients and those with serious illness. Hospital readmissions within a short timeframe (e.g., 30 days) are often avoidable.[i]
Home healthcare workers (per 1000 adults 75+)	Higher values are better	Many older adults and those with chronic conditions prefer to stay in their own homes but may need assistance with daily tasks. Home healthcare workers enable people to remain at home by providing skilled nursing services. Home- and community-based services are also linked to cost savings, as they are less expensive options than institutional care.[ii]
Hospice days per decedent (last six months of life)	Higher values are better	Research indicates that hospice care in the last six months of life improves overall experience for patients with serious illness.[iii] It is also associated with lower crisis-care utilization and healthcare costs.[iv]
Hospice emotional and spiritual support	Higher values are better	This item is intended to assess the patient- and family-centeredness of hospice care and whether it meets the holistic needs of hospice patients, and their family caregivers. More patient- and family-centered hospice care can lead to better care and quality of life for people with serious illness.[v]
Hospice help for pain and symptoms	Higher values are better	Patients may experience high levels of pain and other unpleasant symptoms, such as trouble breathing or nausea, at the end of their lives. This item is intended to assess whether a hospice care team helped patients manage these symptoms for a better quality of life.[vi]
Hospital days per decedent (last two years of life)	Lower values are better	Research suggests that people with serious illness prefer to spend more time at home, so preventing hospitalization can help align their experiences with their preferences.[vii] Researchers have also found that more aggressive treatment for patients with chronic illness is linked to shorter life expectancy and does not necessarily improve quality of life.[viii]
Hospital patients discharged without instructions for home recovery	Lower values are better	Hospital patients who do not receive discharge instructions for home recovery are more likely to be readmitted to the hospital within a short timeframe and have a worse care experience.[ix]

Measure Name	Interpretation	Importance to the ACT Index
Hospital patients who did not receive patient-centered care	Lower values are better	This measure assesses the percent of patients who reported hospital staff did not always manage pain well, did not always respond when they needed help to get to the bathroom or pressed a call button, and did not always explain medications and side effects.[x] This patient experience measure is an indicator of the patient-centeredness of care delivery,[xi] (Note: pain items have now been removed from the HCAHPS survey per the CY 2019 OPPS rule.)
Intensive care days per decedent (last six months of life)	Lower values are better	The hospital Intensive Care Unit (ICU) provides specialist care intended to sustain life for patients who are critically ill, but ICU care may not be appropriate for those living with serious illness when such care is unlikely to restore health and may instead lead to a protracted angst for both the patient and loved ones. Some patients prefer to focus on symptom relief, interpersonal connection, and spiritual fulfillment.[xii] ICU admissions may also be avoided by advance care planning and preventative or palliative services. [xiii,xiv]
Medicare Advantage quality	Higher values are better	This measure assesses the percentage of a state's Medicare Advantage (MA) enrollees whose plans have at least a 4-star rating (out of a possible 5 stars) from CMS. Higher star ratings mean the plan performed better on measures of quality of care for the Medicare population. Results from C-TAC's 2019 Advance Care Planning Best Practices study suggest that states with high quality MA plans also have greater advance care planning rates.
Medicare Advantage penetration	Higher values are better	This measure assesses a state's Medicare Advantage (MA) enrollees as a percentage of the total number of Medicare beneficiaries. MA plans have some flexibility in the services they offer to their members, enabling them to support innovative models for serious illness care delivery. Research has documented that MA "beneficiaries with chronic conditions experience lower utilization of high-cost services, comparable average costs, and better outcomes."[xv] Results from C-TAC's 2019 Advance Care Planning Best Practices study suggests that states with a higher percent of Medicare beneficiaries enrolled in MA (versus traditional Medicare) also have higher rates of advance care planning.
Nursing home quality (percent beds rated four- or five- stars)	Higher values are better	CMS Nursing Home Compare five-star quality ratings are intended to assess the quality of nursing home resident care, health inspections, and overall staffing. Seniors in nursing homes may have functional or cognitive limitations or live with multiple chronic conditions. Poor nursing home quality contributes to poor health outcomes for these individuals. Further, high nursing home quality can generate cost savings.[xvi]
Deaths at home	Higher values are better	Surveys indicate that, whereas most Americans would prefer to die at home if possible, about 60% of Americans die in acute care hospitals, 20% die in nursing homes, and only 20% die at home. More deaths at home may indicate care aligned with patient preferences.[xvii]
Hospitals with a palliative care program	Higher values are better	Palliative care is associated with better quality of care and lower costs, but access to palliative care is sometimes limited. More hospitals having palliative care programs provides greater access to palliative care for patients who want and need it.[xviii]
Long-stay SNF residents with moderate to severe pain	Lower values are better	People with serious illness who experience less pain or are better able to manage their pain have better quality of life.[xix] This measure captures whether SNFs have successfully managed pain in their resident populations. (Note: this measure was removed from SNF Quality Reporting program October 2019 to support federal efforts to decrease opioid utilization.[xx] C-TAC is discussing whether to include this or a related measure in future versions of the Index.)
Patients who would definitely recommend home health agency to friends and family	Higher values are better	This measure offers an assessment of patients' experience with specific home health agencies. Better patient experience may indicate better care for people with serious illness who receive home health care services.[xxi]

Measure Name	Interpretation	Importance to the ACT Index
Family willing to recommend this hospice	Higher values are better	This measure offers a "global" assessment of family caregivers' experience with specific hospices.[xxii] Better experience may indicate better care for hospice patients and support for their families.
Potentially avoidable emergency department visits (per 1,000 Medicare beneficiaries 65+)	Lower values are better	Fewer avoidable emergency department (ED) visits (e.g., visits for conditions appropriate for primary care treatment) may also be an indicator of better access to care and better care management.[xxiii] Avoiding ED visits can result in improved outcomes and cost savings, particularly for older adults and those with serious illness.
Preventable hospitalization (discharges per 1000 Medicare beneficiaries 65+)	Lower values are better	Fewer hospitalizations for chronic conditions or illnesses that can be treated in outpatient settings may indicate better access to care and continuity of care, particularly for older adults or those with serious illness. This may lead to improved outcomes and cost savings.[xxiv]
Licensed staffing hours per SNF resident per day	Higher values are better	Nursing homes need to provide enough qualified staff to safely care for residents. This measure assesses the number of licensed staffing hours per SNF resident per day.[xxv]
Seniors with a dedicated healthcare provider (65+)	Higher values are better	Having a dedicated health care provider can help seniors, including those with serious illness, prevent and manage chronic and acute conditions.[xxvi]
SNF fine amount	Lower values are better	CMS may impose fines on SNFs if there is a serious health or safety citation, or if the nursing home does not correct a prior citation in a timely manner. Having lower SNF fine amounts may indicate better care for SNF residents.[xxvii]
CAREGIVERS DOMAIN		
Caregivers (non-professional per Medicare beneficiary)	Higher values are better	This measure assesses the number of non-professional caregivers who reported providing eldercare more than once during the past 3-4 months per Medicare beneficiary. More access to family caregivers may lead to better outcomes and greater satisfaction for those with serious illness.[xxviii]
Hospice training family to care for patient	Higher values are better	This measure assesses the percent of family caregivers who reported the hospice team always gave family members the training and information they needed to care for the patient. When family caregivers receive appropriate training on how to manage symptoms such as pain, trouble breathing, and agitation, they are more confident and better able to meet patient needs at home, even in emergency situations.[xxix]
Person- and family-centered care policies (composite indicator, scale 0-5.0)	Higher values are better	This measure considers state policies related to supporting family caregivers of individuals needing long-term services and supports.[xxx] These policies may enable people with serious illness to live in their homes longer because family caregivers have additional protections (e.g., financial protection for spouses of Medicaid beneficiaries who receive home and community-based services).
Policies supporting working caregivers (composite indicator, scale 0-9.0)	Higher values are better	This measure reflects state policies that may enable people with serious illness to live in their homes longer because caregivers have more employment and financial support.[xxxi]
COMMUNICATIONS DOMAIN		
Hospice communication with family	Higher values are better	The end of life can be a confusing and difficult time for family caregivers. This measure assesses whether hospice staff consistently listened and offered clear and consistent information.
Adults getting the help or advice they needed when they contacted their home health provider (last two months of care)	Higher values are better	Access to desired help or information from home health providers can improve care and outcomes for people with serious illness or chronic conditions.[xxxii]
Medicare fee-for-service beneficiaries with advance care planning	Higher values are better	This measure captures a process that has the potential to improve the experiences of individuals and families during periods of serious illness when decision-making capacity may be impaired, and near the end of life, while reducing out-of-pocket and system-wide healthcare costs that might otherwise be incurred from unwanted or unnecessary treatment.[xxxiii,xxxiv]

Measure Name	Interpretation	Importance to the ACT Index
COMMUNITY DOMAIN		
Community support (dollars per adult in poverty 60+)	Higher values are better	This measure assesses Older Americans Act (OAA) expenditures captured by the Administration on Aging per adult ages 60 and older living in poverty. OAA funding may cover programs such as transportation, personal care, adult day care, homemaker assistance, case management, delivered meals, congregate meals (i.e., meals provided in community settings), physical fitness, and nutrition education programs. These services can support seniors to live independently for longer, which can lead to improved experience and better outcomes.[xxxv]
Adults with food insecurity (60+)	Lower values are better	Food insecurity may limit activities of daily living and is associated with poorer health outcomes.[xxxvi]
Home health agency visits per decedent (last six months of life)	Higher values are better	More home health agency visits per decedent may indicate better care and outcomes for people with serious illness. Home- and community-based services allow people with serious illness to stay at home for longer. They are also linked to cost savings, as they are less expensive options than institutional care.[xxxvii]
Home-delivered meals (per 100 adults aged 60+ with independent living difficulty)	Higher values are better	Access to healthy food through home-delivered meals can improve health outcomes and quality of life, allowing people with functional limitations to live independently.[xxxviii]
Volunteerism among adults (65+)	Higher values are better	Older adults who volunteer have better self-reported health. Volunteering also provides opportunities for positive social interactions, which can improve overall quality of life.[xxxix]
COST DOMAIN		
Adults who went without care because of cost in past year (65+)	Lower values are better	Access to affordable care for people with serious illness is critical to improving outcomes and overall quality of life.[xl] Delaying needed or preventive care can lead to future crisis care, declines in condition, and higher system costs.
Co-payments per decedent during (last two years of life)	Lower values are better	This measure assesses the average co-payments per decedent during the last two years of life. High medical payments can create burdens for patients and families, causing them to forgo care, miss paying other bills, or go into debt.[xli]
Total Medicare spending per decedent (last two years of life)	Lower values are better	People with chronic illness in their last two years of life account for nearly one-third of total Medicare spending, which can be attributed to repeated hospitalizations and other crisis-driven care, such as emergency room visits. Lower total Medicare spending per decedent over the last two years of life may indicate better care and experience for people with serious illness.[xlii]

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