2021 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report

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CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR CLINICAL STANDARDS & QUALITY

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Prepared for CMS by Health Services Advisory Group, Inc. (HSAG)

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Executive Summary: Overall Results

This report summarizes the quality and efficiency impacts associated with measures used in CMS quality programs.

The Impact Assessment examines data-driven results that support progress toward CMS objectives for quality measurement that addresses high-impact measure areas that safeguard public health, is meaningful to patients and providers, minimizes burden for providers, is outcome-based whenever possible, identifies significant opportunities for improvement, and supports a transition to population-based payment informed by all-payer data.

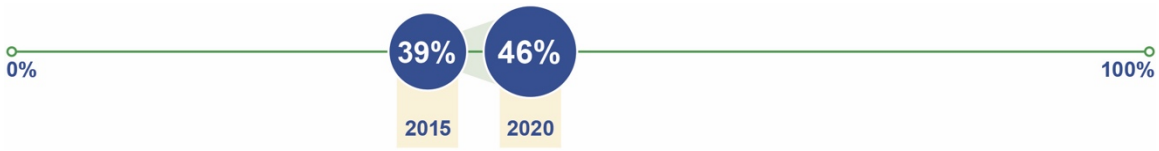
CMS Measure Portfolio

26	*316	*357	*13	*686
Quality Programs	Outcome or Cost	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure. An internal CMS study using a different methodology identified 515 unique measures.[1]

Focus on Outcomes

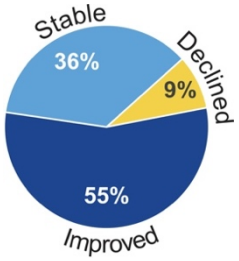
Percentage of total measures that address outcomes or cost:



Measure Performance Trends

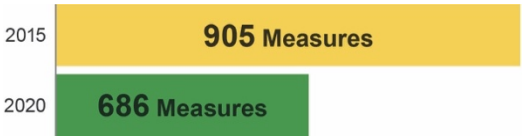
336 measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

91% of the analyzed measures had **improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.



Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

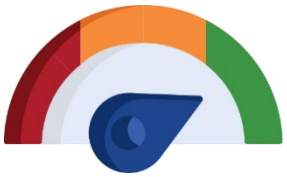
All-Payer Reach

50% of all measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Key Findings

High-impact measurement in areas that safeguard public health:

- Among 153 Key Indicator measures selected by national experts, 51% had improved performance between 2013 and 2018.
- Potential costs avoided, derived from the trending series, were feasible to calculate when beneficiary-level data and cost estimates were available; analysis of 15 Key Indicator measures resulted in a combined estimate of costs avoided between $29.6 billion and $51.9 billion in 2018 dollars.



- Among 59 Key Indicator measures with a disparity in the first year, 34% showed improvement in at least one measure performance comparison. Disparities between subgroups and reference groups improved in comparisons based on income (9 of 34), dual eligibility (4 of 18), urban/rural location (8 of 20), and race/ethnicity (24 of 120).

Meaningfulness to patients and caregivers: Qualitative interviews of 21 Medicare beneficiaries and 10 caregivers confirmed the relevance of CMS quality priorities and associated Key Indicator topics to their personal health care experiences.[3]

Meaningfulness to providers: In a nationally representative survey of 1,052 home health agencies (HHAs), 91% indicated that CMS measures are clinically important, and 86% indicated that better measure performance reflects improvements in care.

Focus on outcomes: Nearly half (46%) of all CMS measures in 2020 were outcome measures, and four of six health care quality priorities evaluated had an increase in the proportion of outcome or cost measures between 2015 and 2020 performance years.

Reducing reporting burden: The number of measures in quality programs decreased by 24% from 2015 to 2020. Digital measures, which employ less burdensome methods of data collection or submission, made up 80% of the overall CMS measure portfolio in 2020.

Identifying areas of opportunity for improvement:

Measure trends: 9% of all measures analyzed and 5% of Key Indicator measures had declining performance from 2013 to 2018.

Disparities: Disparities that were present at baseline and remained in the most recent year of the trending series were found in measure performance comparisons based on race/ethnicity (101 of 120), income (27 of 34), dual eligibility (15 of 18), and urban/rural location (11 of 20). New disparities arose in comparisons based on income (5 of 70), urban/rural location (5 of 240), and race/ethnicity (36 of 252).

Home health providers: Surveyed HHAs cited challenging patient mix, staff behavior, and staff turnover as barriers to quality improvement. A minority of HHAs (34%) reported that community providers could receive key patient data via their electronic health record (EHR) systems.

Summary: The results in this report suggest that the use of CMS quality measures likely contributed to improving quality and reducing health care costs while driving changes within the national health care system with respect to six health care quality priorities. Furthermore, CMS has taken steps to reduce reporting burden, increase the proportion of outcome measures, and better understand patient and provider perspectives. Measures with declining performance and indications of disparities represent key opportunities for improvement.

Introduction

For over 20 years, CMS has been the leader in establishing quality standards and programs for beneficiaries to improve health care for all Americans. As required under section 1890A(a)(6) of the Social Security Act, CMS assesses the quality and efficiency impact of endorsed measures.[i] Impact, for purposes of this report, means progress toward achieving CMS objectives related to health care quality priorities. Addressing topics of interest in a recent Government Accountability Office report,[4] this report systematically assesses measure performance at the national level, which informs decisions to develop, maintain, or remove measures; substantiates impact of measures on clinical care; and examines measures by priority to determine whether objectives are being addressed.

CMS seeks to maximize return on investment for beneficiaries through impactful quality initiatives and programs and ensure a modern, sustainable Medicare program for future generations. CMS employs quality measures to support a patient-centered health care delivery system, grounded in accountability and value, while reducing burden for providers. Through public reporting of measure results, CMS ensures transparency, drives improvement, and supports patients and caregivers in making informed health care decisions. The 2021 Impact Assessment Report comprehensively assembles and analyzes evidence to guide these efforts.

This report categorizes 686 CMS measures into six health care quality priorities: Patient Safety, Person and Family Engagement, Communication and Care Coordination, Effective Prevention and Treatment, Working With Communities, and Affordable Care. Of the 686 CMS measures, 153 were selected and grouped into Key Indicators to track progress in measurement areas critical to providing high-quality care and improving outcomes. This report retains 58 of the 62 Key Indicator measures included in the 2018 Impact Assessment Report (see Appendix B) and designates 59 Key Indicators to represent five of the six health care quality priorities.

Importantly, sections of this report highlight direct quotes from 31 patients and caregivers interviewed for the Impact Assessment to illustrate how consumers relate to aspects of CMS's measure portfolio and Key Indicators. Engaging patients aligns with the aim of CMS and its parent agency, the U.S. Department of Health and Human Services (HHS), to *put patients first.* CMS includes patient experience, engagement, and self-reported outcome measures in its programs and seeks the input of patients, caregivers, and families throughout measure development and implementation, as well as in the production of this report.

Meaningful to Patients

"Everything was in place for me to come home with support. … I'm sure that's not the case for many people. It must be terrifying to wonder what is going to happen next. Where do I go? Who is going to take care of me?"

The Impact Assessment aligns with Meaningful Measures, a 2017 initiative focusing CMS performance measurement and quality improvement initiatives on issues such as hospital- and nursing home-acquired infections, behavioral health, sepsis, maternal health, and complications of chronic disease.[5] Meaningful Measures also promotes electronic exchange of information to modernize and facilitate communication between providers and with patients. Through interoperability of health information systems, ready access to patient records, and transparency in public reporting of measure results, CMS supports the autonomy of patients and caregivers in making informed health care decisions.

[i] This report assesses the quality and efficiency impact of endorsed measures and includes a limited number of non-endorsed measures.

A Guide to the Report

The 2021 Impact Assessment Report organizes content by national health care quality priorities, examining measure performance and the following measure portfolio characteristics in an easy-to-read format:

Meaningful to Patients: Interviews of 21 Medicare beneficiaries and 10 caregivers were conducted in 2018 to highlight the voice of the patient.[3] Respondents are quoted throughout the report discussing their health care experiences, quality concerns, and priorities.

Measure Portfolios: Measures for the 2020 performance period (see Appendix B), counted[ii] by type (outcome, process, structure, cost) across CMS quality programs, are examined as follows:

- **Outcome measures** as an increasing percentage of the measure portfolio reflect CMS efforts to measure what is most meaningful to patients and clinicians.
- **Measure performance trends,** based on 2013–2018 data and measured on a relative scale, are deemed improving when the average annual percentage change (AAPC) in scores is greater than 1% in a favorable direction, declining when AAPC is greater than 1% in an unfavorable direction, and stable when AAPC is less than or equal to 1%.[6]
- **Reducing reporting burden,** a goal of the Patients Over Paperwork Initiative aimed at freeing providers to focus on patient care,[7] has two metrics of progress: overall reduction of measures in CMS programs from performance periods 2015 to 2020 and the percentage of measures with at least one digital option for collecting or submitting data.
- **All-payer reach** represents the percentage of measures for the 2020 performance period that can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries, as determined by examining measure specifications. Such measures advance a coordinated approach of population-based payment informed by all-payer data.

Key Indicators: Each measure or group of measures designated as a Key Indicator tracks progress critical to improving quality of care and individual outcomes across settings. Federal agency technical experts and nationally credentialed stakeholders serving on a technical expert panel (including four patient/caregiver representatives) provided essential input in prioritizing Key Indicators to represent each CMS quality priority. Each Key Indicator table displays trend results for that quality priority by setting. Table 1 identifies the programs associated with each setting and designates which programs use measures designated as Key Indicators. Results are summarized as improved ( ), declined ( ), stable ( ), or mixed ( ) when different results are found for component measures or for the same measure in different settings. Appendices C and D detail *Impact Assessment Methods* and results for Key Indicator measures.

Impact of Key Indicators: Each quality priority section highlights selected patient impact or cost-avoided results reflecting improvement in measure performance over the period of trend analysis. Selected improvement data are presented for measure trends reflecting the greatest magnitude of relative change, based on the AAPC statistic. Disparities for subgroups of interest that have improved since the first year of the data series are presented in measure performance comparisons based on race/ethnicity, urban/rural, income, and dual eligibility.

Opportunities for Improvement: Findings of declining performance for Key Indicator measures are presented along with disparities that worsened between 2013 and 2018 in comparisons for subgroups of interest.

[ii] Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

Addressing Gaps in Performance Measurement: CMS evaluates gaps in high-impact areas when considering future measure initiatives. A review of reports by national stakeholder groups (e.g., the National Quality Forum Measure Applications Partnership) and final rules in the *Federal Register* identified topics of concern to CMS that existing measures do not fully address. Other performance measurement gaps or measures in development could exist but were not identified using the sources documented for this report.

Measurement gaps identified from the key sources are omitted from the gap tables in this report when **emerging measures** (those finalized through federal rulemaking for implementation in a CMS program for performance year 2019 or later) or **measures in development** could address the gaps. (Appendix F lists the gaps, as well as measures or concepts in development that could fill measurement gaps.) Recently implemented measures targeting population health issues such as the opioid crisis are among those identified as important emerging measures.

Table 1. CMS Measurement Program Settings Included in the Impact Assessment Report

Acute Care
*Ambulatory Surgical Center Quality Reporting
*Hospital-Acquired Conditions Reduction Program
*Hospital Inpatient Quality Reporting
*Hospital Outpatient Quality Reporting
Hospital Readmissions Reduction Program
*Hospital Value-Based Purchasing
*Inpatient Psychiatric Facility Quality Reporting
Medicare and Medicaid Promoting Interoperability Program
*Prospective Payment System-Exempt Cancer Hospital Quality Reporting Program
Post-Acute and Long-Term Care
*Dialysis Facility Compare
*End-Stage Renal Disease Quality Incentive Program
*Home Health Quality Reporting Program
*Hospice Quality Reporting Program
*Inpatient Rehabilitation Facility Quality Reporting Program
*Long-Term Care Hospital Quality Reporting Program
Skilled Nursing Facility Quality Reporting Program
Skilled Nursing Facility Value-Based Purchasing Program
*Nursing Home Quality Initiative/Nursing Home Compare
Clinician and Accountable Care Organization (ACO)
*Medicare Shared Savings Program
*Merit-Based Incentive Payment System (MIPS)
Managed Care, Private Market, and Medicaid
Medicare Part C & D Display Measures
*Medicare Part C & D Star Ratings
Medicaid Adult Core Set
Medicaid Child Core Set
Quality Rating System for Qualified Health Plans
*Fee-for-Service Consumer Assessment of Healthcare Providers and Systems (CAHPS®)

*The program uses measures designated as Key Indicators in the 2021 Impact Assessment Report.
Notes: Fee-for-service (FFS) CAHPS fulfills a statutory requirement to facilitate comparisons of Medicare managed care with care in FFS Medicare; therefore, the survey is included under Managed Care.
Eleven specialized facilities in the nation are designated Prospective Payment System (PPS)-Exempt Cancer Hospitals.
"Nursing home" refers to both Medicare- and Medicaid-certified facilities.

For information on how this report differs from the previous Impact Assessment, please see *Impact Assessment Methods* (Appendix C).

Data for this Impact Assessment were reported before the global spread of coronavirus disease; thus, the findings represent an assessment of health care structure, process, and outcome measures pre-pandemic. CMS will revise methods for the 2024 Impact Assessment Report to assess the impact of measures in a post-pandemic health care system.

Attribution of the factors contributing to positive changes in measure performance rates is beyond the scope of these analyses, but given the central role of quality measures in CMS programs and initiatives, it is plausible that measurement has contributed to at least some of the improvements characterized in this report.

Analytic Terms and Methods

The Impact Assessment Report describes national measure scores, trends, disparities, and associated findings to present an overview of the impact of CMS quality and efficiency measures. Refer to *Impact Assessment Methods* (Appendix C) for details of the analyses discussed in this report and an explanation of their limitations.

Achievable results represent a national performance goal based on Achievable Benchmarks of Care (ABC)®,[8] calculated using the first data point of weighted mean scores among highest-ranking providers. CMS program methodologies may produce different results.

Average annual percentage change (AAPC) is a statistic derived from log-linear regression and used to determine trends in measure performance and disparities in relative terms.

Beneficiary-level data, whenever possible, were requested directly from CMS quality programs and their respective contractors.

Cost-avoided analysis interprets improvement in national measure scores in terms of potential costs avoided. Cost estimates were derived from the trending series. Per-event cost estimates from published research and grey literature[9-25] were converted into 2018 dollars[26] and multiplied by the number of additional favorable events estimated in the patient impact analysis. When multiple per-event cost estimates were gleaned from the literature, total costs avoided were expressed as a range of values.

Direct standardization, based on each age-sex stratum of the first year of trend data, was employed when beneficiary-level data or stratified outcome measure scores were available. No other adjustments were made. An exception is noted when measure scores were adjusted by the data owner and were not available in raw form.

Disparities analyses focused on comparisons of measure performance for population subgroups based on sex, age, race, ethnicity, region, urban/rural location, income, or dual-eligibility (Medicare and Medicaid) status.

National provider surveys: CMS conducts nationally representative surveys to assess how health care providers are responding to CMS quality measures and the impact of their use in well-established quality measurement programs. Prior surveys have evaluated the hospital and nursing home settings. For this report, CMS evaluated the home health setting.

Patient impact analysis was performed on Key Indicator measures with beneficiary-level trend data. For each year of data, the difference between the number of *observed* numerator events and the *expected* number if the rate had remained stable (based on the current denominator size) was calculated. Annual impacts were summed to approximate the total number of patients affected by a favorable change in measure scores. For rolling multi-year denominators, only the first and last years of a data series were included to avoid double-counting.

Trends in national performance were interpreted from an analysis of measure scores using at least three (2016–2018) and at most six (2013–2018) annual data points. The AAPC was combined with 90% confidence intervals to characterize the precision in measure trend estimates.

Report Organization

Chapters 1–6 present analyses of the Key Indicators and other data associated with each of the six health care quality priorities: Patient Safety (12 Key Indicators), Person and Family Engagement (13 Key Indicators), Communication and Care Coordination (seven Key Indicators), Effective Prevention and Treatment (20 Key Indicators), Working With Communities (no Key Indicators identified), and Affordable Care (seven Key Indicators). The report concludes with Chapter 7, a summary of findings from a national provider survey and interviews of quality leaders in the home health setting.

Appendix A acknowledges contributors to the report; Appendices B–F contain supporting material for Chapters 1–6; Appendix G and Appendix H describe the national provider survey and interviews highlighted in Chapter 7.

1. Patient Safety

Reducing infections and other harm associated with the delivery of health care is essential to ensure better outcomes for patients.

Meaningful to Patients

"We all have heard of these mega-infections that antibiotics can't seem to treat … People have died [when] they either waited too long or weren't treated properly."

"I wish that there were better monitoring … more of a presence."

"My dad loves it [in the nursing home]. He's so secure. …. I'm just happy for him that he's there with staff 24/7 in case he does fall."

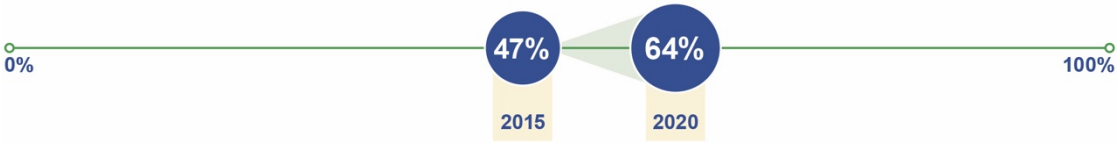
Patient Safety Measure Portfolio

18	*59	*33	*0	*92
Quality Programs	Outcome	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

Focus on Outcomes

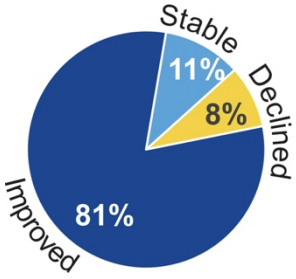
Percentage of total Patient Safety measures that address outcomes:



Measure Performance Trends

47 Patient Safety measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

92% of the analyzed Patient Safety measures had **improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.

As of 2020, **65%** of the Patient Safety measures were **digital quality measures.**

Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

All-Payer Reach

86% of all Patient Safety measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Patient Safety Key Indicators Trends by Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Healthcare Harm				
CT or MRI for Stroke	➕			
Fall Risk Screening			➕	
Falls With Major Injury		➖		
New or Worsened Pressure Ulcers		➕		
Restraints		➕		
THA/TKA Complications	➕			
Healthcare-Associated Infections				
CAUTI	➕	±/−		
CLABSI	➕	➕		
CDI	➕	➕		
MRSA Infection	➕			
Procedure-Specific Surgical Site Infection	➕			
Urinary Tract Infection		➕		

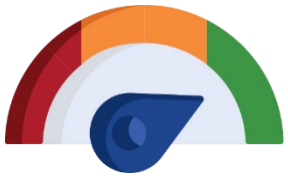
Note: For a listing of component measures for each Key Indicator, see Appendix B.

Legend: ➕ = Improving ⭕ = Stable ➖ = Declining ±/− = Mixed

Impact of Patient Safety Key Indicators

Corresponding to topics in the preceding table, the highlighted analytic results represent the greatest impacts associated with improvement in Key Indicator measure scores.

- 19,829 more patients received a head **computed tomography (CT) or magnetic resonance imaging (MRI) for stroke** within 45 minutes of arrival at the emergency department (from 59.0% in 2013 to 72.0% in 2018). Disparities for this measure detected in 2013 were no longer evident for residents of medium metro and micropolitan areas and for middle-income beneficiaries. Disparities for American Indians/Alaska Natives, those with low income, and residents of noncore (rural) areas narrowed.
- Long-stay nursing home residents (2013–2018) experienced declining use of physical **restraints** (from 1.5% to 0.3%) and fewer **urinary tract infections** (from 6.1% to 2.7%).



- **Total hip/knee arthroplasty complications** occurred in 6,863 fewer acute care hospital admissions than expected (from 3.3% in 2013 to 2.6% in 2018).
- Of the following **healthcare-associated infections**, 80,040 fewer than expected were reported; estimated costs avoided ranged from $173.3 million to $1.5 billion, including:
  - **Catheter-associated urinary tract infection (CAUTI)**: 8,876 fewer infections in acute care hospitals (2015–2018) and long-term care hospitals (2016–2018); $4.6 million–$66.4 million.
  - **Central line–associated bloodstream infection (CLABSI)**: 10,640 fewer infections in acute care hospitals (2015–2018) and long-term care hospitals (2016–2018); $47.5 million–$284.7 million.

- ***Clostridioides difficile* infection (CDI):** 60,524 fewer infections in acute care hospitals (2015–2018) as well as in inpatient rehabilitation facilities and long-term care hospitals (2016–2018); $121.2 million–$1.2 billion.

- 3,146 fewer **methicillin-resistant *Staphylococcus aureus* (MRSA)** infections than expected occurred in acute care hospitals, where standardized infection ratio (SIR) decreased from 1.0 in 2015 to 0.8 in 2018, and 3,175 fewer **procedure-specific surgical site infections** than expected occurred.

Opportunities for Improvement

Among Patient Safety Key Indicators, declining measure performance is noted.

- Long-stay nursing home patients experienced **falls with major injury** at rates increasing on average 1.1% per year (from 3.2% in 2013 to 3.4% in 2018).
- **CAUTI** increased by 3.1% per year on average in inpatient rehabilitation facilities as SIR increased from 1.1 in 2016 to 1.2 in 2018.
- No worsening disparities were identified for the two Patient Safety Key Indicator measures with available disparities data.

Addressing Gaps in Performance Measurement

CMS evaluates gaps in high-impact areas when considering future measure initiatives. CMS is addressing previously identified measurement gaps for this health care quality priority through measures in development focused on maternal morbidity/mortality, healthcare-associated infections, complications of total hip/knee arthroplasty (THA/TKA), excessive radiation for CTs, and long-term catheter rate. These measures, once developed, can be considered for use in CMS programs; one emerging measure addresses surgical complications for localized prostate cancer.

Table 2 summarizes newly identified measurement gaps from key sources published from January 1, 2018, to March 31, 2020; an X indicates a gap in one or more programs within a setting. Appendix F contains a comprehensive list of measurement gaps, emerging measures, and measures in development.

Table 2. Patient Safety Measurement Gaps by Clinical Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Diagnostic quality and safety	X		X	
HAC risk-adjusted outcomes; all-cause harm	X			
Harms occurring from care delivery; potentially harmful drug-drug interactions			X	
Hospice safety (e.g., falls, skin integrity)		X		
Maternal morbidity/mortality (e.g., poor birth outcomes, complications)				X
Medication side effects, infections in ESRD patients		X		
Preventable healthcare harm (e.g., falls, hypoglycemia, pressure injury)	X			
Procedures in ambulatory surgery centers formerly performed in hospitals	X			
Safety planning for suicidal ideation, assaults, and violence	X			
Sepsis care, surgical site infections, healthcare-associated infections	X	X		

2. Person and Family Engagement

CMS encourages patients and caregivers to engage with their providers and communicate their personal preferences and goals.

Meaningful to Patients

"I would like more one-on-one [time] with any doctor than I see now, but I do like the care I'm getting."

"I no longer take the medication because it was not giving the desired effect. I talked that over with my doctor, and we came to the consensus that I could stop."

"My daughter knows what our final wishes are, and she knows that we don't want … extravagant means to keep us alive."

Person and Family Engagement Measure Portfolio

20	*103	*27	*4	*134
Quality Programs	Outcome	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

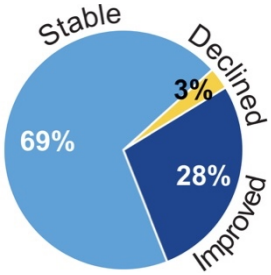
Focus on Outcomes

Percentage of total Person and Family Engagement measures that address outcomes:

Measure Performance Trends

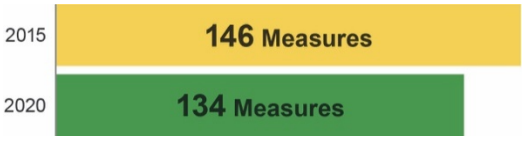
101 Person and Family Engagement measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

97% of the analyzed Person and Family Engagement measures **had improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.



As of 2020, **54%** of the Person and Family Engagement measures were **digital quality measures.**

Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

All-Payer Reach

45% of all Person and Family Engagement measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Person and Family Engagement Key Indicators Trends by Setting	Acute	Post-acute	Clinician/ ACO	Managed Care
End of Life Care				
Comprehensive Assessment at Admission		±		
Experience of Care				
Care Coordination				○
Care Transition	±			
Courtesy and Respect		○		
Getting Needed Care and Appointments Quickly		○	○	±
Getting Needed Drugs				○
Overall Rating	○	±	○	○
Provider Communication	○	○	○	
Responsiveness of Staff	±	○		
Shared Decision-Making		○	○	
Functional Status				
Functional Status Assessment				+
Patient-Reported Functional Outcome			○	○
Provider-Reported Functional Outcome		±		

Note: For a listing of component measures for each Key Indicator, see Appendix B.

Legend: + = Improving ○ = Stable − = Declining ± = Mixed

Impact of Person and Family Engagement Key Indicators

Corresponding to topics in the preceding table, the highlighted analytic results represent the greatest impacts associated with improvement in Key Indicator measure scores.

- Hospice patients increasingly received **comprehensive assessment at admission** from 2015 to 2018, including 118,139 more patient stays with pain screenings than expected (from 93.7% to 98.0%) and 302,394 more clinical pain assessments based on screening results (from 70.5% to 95.0%). An additional 36,491 hospice patients treated with an opioid were given a bowel regimen (from 93.5% to 97.6%). Also, 148,666 more than expected had their beliefs/values addressed (from 92.7% to 98.1%), and disparities in that assessment were no longer evident among multiracial patients.

- More patients treated in PPS-exempt cancer hospitals (2013–2018) gave positive ratings of care: 10,248 more for **care transitions**; 24,796 more for **responsiveness of staff.**
- Disparities in **overall rating** of care for dialysis facilities and staff narrowed for Asians and were no longer evident for Native Hawaiian/Pacific Islanders.
- Disparities in ratings of **provider communication** about medications narrowed for Asian beneficiaries treated at PPS-exempt cancer hospitals and were no longer evident in Native Hawaiian/Pacific Islanders' ratings of nephrologists' communication and caring within in-center hemodialysis.
- From 2013 to 2018, **provider-reported functional outcomes** for home health patients showed improvement in bed transferring in 2.7 million more episodes than expected; in

ambulation-locomotion in 2.4 million more episodes; and in bathing in 1.7 million more episodes.

- Short-stay nursing home patients also experienced improvements of 1.4% per year in **provider-reported functional outcomes** (from 63.1% in 2016 to 65.0% in 2018).

Opportunities for Improvement

Declining measure performance and worsening disparities are noted.

- Among hospice patients who received **comprehensive assessment at admission** from 2015 to 2018, disparities in getting pain assessments worsened for Asian and Native Hawaiian/Pacific Islander beneficiaries.
- 83.7% of traditional fee-for-service Medicare beneficiaries in 2018 reported they were able to **get needed care** including care from specialists, representing a decline from 86.2% in 2013. Disparities worsened for Asian beneficiaries.
- Among Medicare Advantage (MA) beneficiaries reporting whether they could **get needed care and appointments quickly,** disparities worsened for American Indian/Alaska Native and Asian beneficiaries.
- Positive ratings of care for **responsiveness of staff** in PPS-exempt cancer hospitals reflected worsening disparities for Black and Hispanic patients.

Addressing Gaps in Performance Measurement

CMS is addressing previously identified measurement gaps in high-impact areas through measures in development and emerging measures for this health care quality priority:

- 15 measures in development focus on functional status assessment, including patient goal-setting and achievement, patient experience for palliative care and behavioral health, and patient-reported outcome-based measures.
- Nine emerging measures for clinicians include patient experience surveys for ACOs and managed care, functional status assessment following surgical procedures, change in functional status, and symptom severity assessment.

Table 3 summarizes measurement gaps newly identified from key sources published from January 1, 2018, to March 31, 2020; an X indicates a gap in one or more programs within a setting. Appendix F contains a comprehensive list of gaps identified from key sources.

Table 3. Person and Family Engagement Measurement Gaps by Clinical Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Activities of daily living: maintenance, stabilization, or improvement		X		
Advance directives; patient goals aligned with care provided	X	X		
Caregiver engagement, patient empowerment	X			
Follow-up instruction adherence: support for patients			X	
Functional outcomes: patient-reported, functional outcomes, changes in functional status, quality of life	X	X		
Goal-setting and treatment planning, including reassessment			X	
Medication adherence capturing rational nonadherence and patient preference				X
Medication management at the end of life		X		
Symptom management outcomes		X		

3. Communication and Care Coordination

Access to personal health information *whenever* and *however* patients and clinicians need it can lead to better patient outcomes.

Meaningful to Patients

"I'm very impressed with the communication between the [general practitioner] and my cardiologists. Either via telephone or computer, all my information is available … instantly."

"She was taking 27 different medications. … Surely that could be a warning sign—hey, why is this individual on 27 medications in one day?"

"If he was in a car accident or something and I wasn't there, it would be extremely important [to know] he's on medication and he can't have this antibiotic."

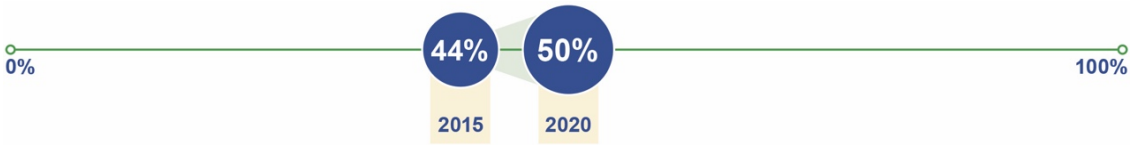
Communication and Care Coordination Measure Portfolio

22	*53	*54	*0	*107
Quality Programs	Outcome	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

Focus on Outcomes

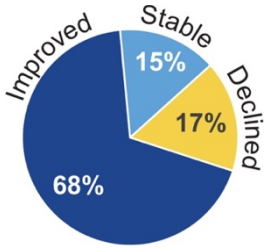
Percentage of total Communication and Care Coordination measures that address outcomes:



Measure Performance Trends

54 Communication and Care Coordination measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

83% of the analyzed Communication and Care Coordination measures had **improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.

As of 2020, **94%** of the Communication and Care Coordination measures were **digital quality measures.**

Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

All-Payer Reach

31% of all Communication and Care Coordination measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Communication and Care Coordination Key Indicators Trends by Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Hospitalizations				
All-Cause Readmission	○	−	○	+
Hospital Admissions			+	
Medication Management				
Medication Adherence				+
Medication Review				+
Medication Therapy Management				+
Psychotropic Medications		+		
Self-Management of Oral Medication		+		

Note: For a listing of component measures for each Key Indicator, see Appendix B.

Legend: + = Improving ○ = Stable − = Declining ± = Mixed

Impact of Communication and Care Coordination Key Indicators

Corresponding to topics in the preceding table, the highlighted analytic results represent the greatest impacts associated with improvement in Key Indicator measure scores.

- **All-cause readmission** rates among MA beneficiaries declined from 12.6% in 2013 to 11.3% in 2018, translating to 53,257 fewer readmissions than expected and an estimated $801.7 million–$859.9 million in costs avoided.

- Disparities in **all-cause readmissions** were no longer evident among Asian short-stay nursing home residents.
- Disparities in **medication adherence** narrowed for Black, Hispanic, and low-income MA beneficiaries. Adherence to specific drug classes improved (2013–2018) among MA and traditional fee-for-service Medicare beneficiaries with Part D:
  - Statins: 4.0 million more beneficiaries than expected; costs avoided of $5.4 billion–$13.7 billion.
  - Diabetes medications: 893,811 more beneficiaries than expected; costs avoided of $3.4 billion–$7.2 billion.
  - Renin-angiotensin system (RAS) antagonists, including angiotensin-converting enzyme inhibitors and angiotensin-receptor blockers: 3.0 million more beneficiaries than expected; costs avoided of $18.2 billion–$25.7 billion.
- 3.3 million more Part D beneficiaries with complex health needs than expected (2013–2018) received a comprehensive medication review as a part of **medication therapy management**, which has been shown to improve appropriateness of and adherence to medication.[27]
  - Disparities detected in 2013 were no longer evident for MA beneficiaries living in micropolitan, medium metro, small metro, and noncore (rural) areas and for those with middle income. Disparities narrowed for those with dual-eligibility status.
  - Among beneficiaries with traditional fee-for-service Medicare and Part D, disparities detected among those with dual-eligibility status were no longer evident. Disparities narrowed for Asian and Hispanic beneficiaries.

- Supporting a concurrent CMS initiative to reduce unnecessary use of antipsychotics in nursing homes,[28] **psychotropic medication** (antipsychotics) use decreased from 2013 to 2018 among short-stay (from 2.1% to 1.4%) and long-stay patients (from 20.3% to 14.2%). Use of antianxiety or hypnotic pharmacology decreased from 23.0% in 2016 to 20.4% in 2018.
- **Self-management of oral medication** by home health patients improved from 51.0% in 2013 to 69.4% in 2018, a positive effect of 2.2 million more episodes than expected.

Opportunities for Improvement

Among Communication and Care Coordination Key Indicators, declining measure performance and worsening disparities are noted.

- **All-cause readmissions** increased among short-stay nursing home patients by 6.9% per year (from 16.9% in 2015 to 20.4% in 2018) and among dialysis patients by 2.3% per year (from 26.3% in 2015 to 27.8% in 2018).
- Disparities in **all-cause readmissions** worsened for Black, dual-eligible, and low- or middle-income MA plan members and for American Indians/Alaska Natives in traditional fee-for-service Medicare.
- Disparities in receiving **medication therapy management** worsened for American Indians/Alaska Natives with traditional fee-for-service Medicare and Part D.

Addressing Gaps in Performance Measurement

CMS is addressing measurement gaps in high-impact areas through nine measures in development focused on hospital admission rates, medication safety, communication of laboratory results, and care coordination after emergency department visits. Thirteen emerging measures across care settings focus on medication management, admissions and readmissions, and transfer of health information between providers and with patients.

Table 4 summarizes newly identified measurement gaps from key sources published from January 1, 2018, to March 31, 2020; an "X" indicates a gap in one or more programs within a setting. Appendix F contains a comprehensive list of gaps identified from key sources.

Table 4. Communication and Care Coordination Measurement Gaps by Clinical Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Adverse drug events; polypharmacy	X	X		X
Care transitions and transfers: quality and safety across facilities and settings	X	X		
Care coordination and handoffs using eCQMs			X	
Communication and care coordination including rural populations	X		X	X
Dialysis: coordination for transient patients		X		
EHR safety: patient matching and correct identification	X			
Interoperability across settings; bidirectional exchange of clinical information	X	X	X	X
Medication review and reconciliation: discharge and transfers	X	X	X	X
Medication safety: opioid prescribing and stewardship	X			
Patient access to records; two-way sharing of patient-/caregiver-generated data			X	
Readmissions: condition-specific, 7-day time frame, interaction with mortality	X			
Telehealth: incorporate into existing measures				X
Timely exchange of clinical information		X	X	
Transitions of care for cancer patients across facilities and outpatient settings	X	X	X	X

4. Effective Prevention and Treatment

Best practices of clinical care and prevention contribute to better results and higher satisfaction for patients, caregivers, and providers.

Meaningful to Patients

"She wants to work toward lowering her [arthritis] pain. Say, from 1 to 10, maybe she's at a 5, and she wants to eventually end up at a 2."

"[My doctor] does the breast exam—that's very important, even though I get a mammogram."

"Mental health screening would be very good for each doctor to do when a person comes in for a physical."

Effective Prevention and Treatment Measure Portfolio

19	*45	*202	*0	*247
Quality Programs	Outcome	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

Focus on Outcomes

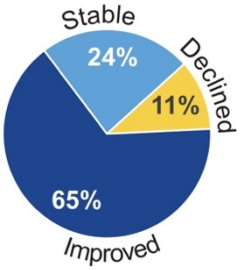
Percentage of total Effective Prevention and Treatment measures that address outcomes:

Note: Proportionally fewer outcome measures are feasible for this health care quality priority because long-term clinical outcomes (e.g., heart attacks) are difficult to attribute to providers.

Measure Performance Trends

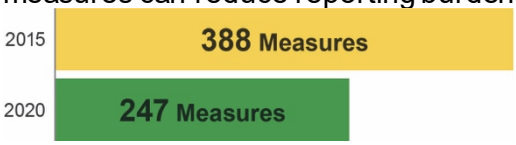
110 Effective Prevention and Treatment measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

89% of the analyzed Effective Prevention and Treatment measures had **improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.



of the Effective Prevention and Treatment measures were **digital quality measures.**

Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

All-Payer Reach

55% of all Effective Prevention and Treatment measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Effective Prevention and Treatment Key Indicators Trends by Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Behavioral Health and Substance Use				
Clinical Depression Screening and Follow-Up			➕	
Tobacco Use Screening			➕	
Chronic Conditions				
Blood Pressure Control			➕	
Cholesterol Control			➕	
Diabetes – Eye Exam				➕
Diabetes – Poor Hemoglobin A1c Control			±	➕
Diabetes – Kidney Disease				➕
End Stage Renal Disease – Hypercalcemia		➕		
Health Risk Assessment				➕
Osteoporosis				➕
Rheumatoid Arthritis				○
Mortality				
Acute Myocardial Infarction Mortality	➕			
Chronic Obstructive Pulmonary Disease Mortality	➖			
Coronary Artery Bypass Graft Mortality	➕			
Heart Failure Mortality	○			
Pneumonia Mortality	➕			
Prevention and Screening				
Breast Cancer Screening			➕	➕
Colorectal Cancer Screening			➕	➕
Healthcare Personnel Influenza Immunization	➕	±		
Influenza Immunization	➕	○	➕	○

Note: For a listing of component measures for each Key Indicator, see Appendix B.
Legend: ➕ = Improving ○ = Stable ➖ = Declining ± = Mixed

Impact of Effective Prevention and Treatment Key Indicators

Corresponding to topics in the preceding table, the highlighted analytic results represent the greatest impacts associated with improvement in Key Indicator measure scores.

- More beneficiaries whose MIPS clinician groups reported via the Web Interface received **clinical depression screening and follow-up**, from 28.9% in 2014 to 68.2% in 2018; screening increased for patients associated with ACOs, from 39.4% to 67.1%.
- Patients of MIPS clinician groups reporting via the Web Interface received increased **screening for tobacco use** and cessation intervention from 2014 to 2017 (86.1% to 93.1%), as did patients associated with ACOs (87.1% to 90.4%).
- More Medicare beneficiaries experienced **blood pressure control** from 2014 to 2018: Rates increased from 68.1% to 73.2% for patients associated with ACOs and from 67.0% to 70.7% for patients whose MIPS clinician groups reported via the Web Interface.

- From 2013 to 2018, MA beneficiaries receiving diabetes care had better than expected monitoring for potential complications, including:
  - 234,774 more annual **eye exams**.
  - 163,143 fewer cases of **poor hemoglobin A1c control** with estimated 10-year costs avoided of $1.7 billion–$2.9 billion.
  - 175,497 more annual tests for **kidney disease**.

- **Hypercalcemia**, an adverse condition associated with higher risk of cardiovascular events and death in individuals with ESRD, was reported as declining from 2.0% of patient-months in 2014 to 1.0% in 2018 (177,048 fewer patient-months than expected). Disparities detected in 2013 were no longer evident for low-income individuals with ESRD and narrowed for Black and multiracial patients.
- More MA beneficiaries in Special Needs Plans received an annual **health needs and risk assessments** as rates increased from 59.1% in 2013 to 70.7% in 2018.
- Women in MA plans (2013–2018) had higher rates of screening or treatment for **osteoporosis** within six months of breaking a bone, increasing 10.9% per year from 27.7% to 48.3%. Disparities detected in 2013 were no longer evident for residents of noncore (rural) areas and dual-eligible beneficiaries.
- Among discharged patients, 14,596 fewer deaths than expected occurred within 30 days after **acute myocardial infarction** (2013–2018), **coronary artery bypass graft** (2014–2018), and **pneumonia** (2015–2018).
- An additional 262,301 MA beneficiaries received **breast cancer screening** as rates increased from 70.6% in 2013 to 74.5% in 2018.
- Since 2013, 1.2 million more MA beneficiaries than expected received **colorectal cancer screening,** increasing from 64.6% in 2013 to 74.0% in 2018. Disparities narrowed for those with dual eligibility status and were no longer evident among low-income beneficiaries.
- 4.1 million more health care personnel received an **influenza immunization** as rates increased in acute care hospitals (from 75.0% in 2013 to 88.6% in 2018) and inpatient rehabilitation facilities (from 85.7% in 2016 to 88.1% in 2018).
- 103,131 more patients in psychiatric facilities (from 70.8% in 2016 to 81.7% in 2018) received an **influenza immunization** (annual increases of 8.0%).
- Disparities in reporting receiving an **influenza immunization** narrowed among Blacks with traditional fee-for-service Medicare and low-income beneficiaries in MA plans.

Opportunities for Improvement

Among Effective Prevention and Treatment Key Indicators, declining measure performance and worsening disparities are noted.

- Rates of **poor hemoglobin A1c control** increased from 16.7% to 17.1% among patients of MIPS clinician groups that reported via the Web Interface (2014–2016). Disparities worsened among MA plan members who were dually eligible, low- or middle-income, or living in noncore (rural) areas.
- **Chronic obstructive pulmonary disease (COPD) mortality** within 30 days of discharge from a hospital stay increased by 1.9% per year (2013–2018) from 7.8% to 8.5%.

- Disparities worsened in **coronary artery bypass graft mortality** for American Indians/ Alaska Natives and for low- or middle-income beneficiaries, in **heart failure mortality** for those living in micropolitan or noncore (rural) areas, and in reported rates of receiving an annual **influenza immunization** for American Indians/Alaska Natives with MA plans.

Addressing Gaps in Performance Measurement

CMS is addressing previously identified measurement gaps in high-impact areas for Effective Prevention and Treatment through 10 measures in development. Two are clinician behavioral health measures for psychosis; other topics include opioids (five measures for clinicians) and wellness screenings (three for clinicians). Eight emerging measures include four addressing safe opioid prescribing and pain management (acute care, clinician, managed care), two assessing aspects of waitlists for kidney transplants (post-acute), and one each for HIV screening (clinician) and metabolic monitoring for patients receiving antipsychotic medications (managed care).

Table 5 summarizes newly identified measurement gaps from key sources published from January 1, 2018, to March 31, 2020; an X indicates a gap in one or more programs within a setting. Appendix F contains a comprehensive list of gaps identified from key sources.

Table 5. Effective Prevention and Treatment Measurement Gaps by Clinical Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Cancer: personalized medicine and testing, pain management, survival	X		X	
Co-prescription of opioids and benzodiazepines				X
Dementia	X			
ESRD: management of comorbid conditions; dialysis – pediatric and palliative		X		
Psychiatric (inpatient) outcomes and comorbidities; treatment outcomes for SUD	X			X
Maternity care: interpregnancy interval, inter-conception care to address risk factors, experience of care and breastfeeding				X
Mental and behavioral health		X		
Mental health and substance use integration with primary care; substance use other than opioids	X	X		X
Nutrition / malnutrition: screening, assessment, plan, discharge		X	X	X
Opioids: appropriate clinical prescribing; new/chronic use and frequency		X		X
Screening children for abuse and neglect				X

5. Working With Communities

Equitable access to high-quality primary care helps people achieve healthier and longer lives.

Meaningful to Patients

"They speak English as well as our language. My parents speak an Indian dialect, so that is helping them to communicate."

"My goal would be to just be independent as long as I can be … and stay off a lot of medications."

"There's a lot that could be done to improve the quality of people's lives at home so that they don't wind up in an emergency room."

Working With Communities Measure Portfolio

7	*10	*4	*4	*18
Quality Programs	Outcome	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

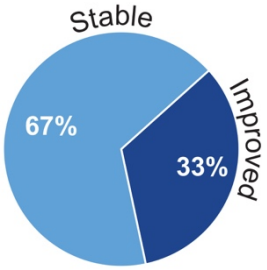
Focus on Outcomes

Percentage of total Working With Communities measures that address outcomes:

Measure Performance Trends

6 Working With Communities measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

100% of the analyzed Working With Communities measures had **improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.

As of 2020, **94%** of the Working With Communities measures were **digital quality measures.**

Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

All-Payer Reach

6% of all Working With Communities measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Working With Communities Key Indicators

No Key Indicators have been identified for this priority.

Addressing Gaps in Performance Measurement

CMS evaluates gaps in high-impact areas when considering future measure initiatives. No emerging measures or measures in development were identified for Working With Communities. Table 6 summarizes newly identified measurement gaps from key sources published from January 1, 2018, to March 31, 2020; an X indicates a gap in one or more programs within a setting. Appendix F contains a comprehensive list of gaps identified from key sources.

Table 6. Working With Communities Measurement Gaps by Clinical Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Access to care and provider networks (e.g., behavioral health professionals, rural communities)	X		X	X
Collaboration across health and non-health sectors to improve equity of care			X	
Cultural competence			X	
Equity-focused measures that stratify for disparities associated with social determinants of health		X	X	X
Health insurance: continuous coverage longer than 12 months				X
Health literacy			X	
Measures to assess disparities in rural health	X	X	X	
Referral to community supports and services			X	

6. Affordable Care

As the largest payer for U.S. health care, CMS is driving changes in the delivery system, seeking to manage costs by rewarding high-value, high-quality care.

Meaningful to Patients

"If the patient has good quality care to start with, chances of coming for additional care—excessive care—is probably reduced."

"I would like the costs of care to be commensurate with my ability to pay [so] that the cost will be kept in check."

"I don't know that much about diagnosing. If they say I need the test, I take it."

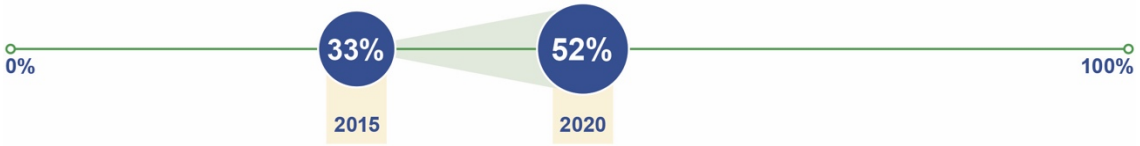
Affordable Care Measure Portfolio

16	*46	*37	*5	*88
Quality Programs	Outcome or Cost	Process	Structure	Total Measures

*Measures in use for the 2020 performance period are counted individually based on published rules or documentation for each CMS program; duplicate counts can occur when multiple programs use the same measure.

Focus on Outcomes

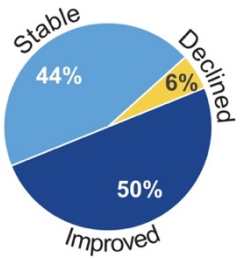
Percentage of total Affordable Care measures that address outcomes or cost:



Measure Performance Trends

18 Affordable Care measures with ≥ 3 years of data from 2013 to 2018 were analyzed. See Appendix E for analytic results for all measures.

94% of the analyzed Affordable Care measures had **improved or stable performance.**



Reducing Burden

Selective reductions in the number of measures can reduce reporting burden.

As of 2020, **95%** of the Affordable Care measures were **digital quality measures.**

Digital quality measures use data from electronic health records, health information exchanges, clinical registries, case management systems, electronic administrative claims systems, electronically submitted assessments, and wearable devices.[2(p. 84849)]

All-Payer Reach

38% of all Affordable Care measures can be calculated using data from patients covered by any payer, not just from Medicare beneficiaries.

Affordable Care Key Indicators Trends by Setting	Acute	Post-Acute	Clinician/ ACO	Managed Care
Appropriate Use				
Colonoscopy Follow-Up	➕			
Cost				
Medicare Spending Per Beneficiary	➕			
30-Day Episode of Care – Acute Myocardial Infarction	⭕			
30-Day Episode of Care – Heart Failure	⭕			
30-Day Episode of Care – Pneumonia	⭕			
30-Day Episode of Care – Total Hip/Knee Arthroplasty	➕			
Stewardship			±	

Note: For a listing of component measures for each Key Indicator, see Appendix B.
Legend: ➕ = Improving ⭕ = Stable ➖ = Declining ± = Mixed

Impact of Affordable Care Key Indicators

Corresponding to topics in the preceding table, the highlighted analytic results represent the greatest impacts associated with improvement in Key Indicator measure scores.

- Performance on measures focused on appropriate **colonoscopy follow-up** improved from 2014 to 2018 in hospital outpatient settings (from 74.0% to 88.8%, affecting an additional 132,197 patients) and ambulatory surgical centers (from 71.6% to 81.3%).
- Median hospital **Medicare Spending Per Beneficiary**—which includes services provided immediately prior to, during, and following a hospital stay—decreased from $22,202 to $21,628 between 2013 and 2018.
- 30-day cost per episode for **total hip/knee arthroplasty** decreased during the same period, averaging $25,613 in 2015 and $21,905 in 2018, while 6,863 fewer patients than expected experienced complications of these surgeries (2.6% versus 3.3%).
- No improving disparities were identified for the four Affordable Care Key Indicator measures with available disparities data.

Opportunities for Improvement

- For a measure of **stewardship**, a smaller proportion of patients associated with ACOs said their care team discussed the cost of prescription medicines; rates decreased from 27.5% to 26.9%, averaging 1.1% less each year from 2016 to 2018.
- No worsening disparities were identified for the four Affordable Care Key Indicator measures with available disparities data.

Addressing Gaps in Performance Measurement

CMS is addressing previously identified measurement gaps in high-impact areas through 19 emerging Affordable Care measures for clinicians:

- One measure addresses appropriate use of a dual-energy x-ray absorptiometry (DXA) scan for patients without risk factors for an osteoporotic fracture.

- 18 episode-based cost measures have been implemented in the MIPS cost performance category; 13 are focused on procedural episodes (e.g., knee arthroplasty, cataract removal, screening/surveillance colonoscopy) and five on acute inpatient medical conditions (e.g., intracranial hemorrhage or cerebral infarction, COPD exacerbation).

No measures in development were identified for this health care quality priority.

Table 7 summarizes newly identified measurement gaps from key sources published from January 1, 2018, to March 31, 2020; an X indicates a gap in one or more programs within a setting. Appendix F contains a comprehensive list of gaps identified from key sources.

Table 7. Affordable Care Measurement Gaps by Clinical Setting

	Acute	Post-Acute	Clinician/ ACO	Managed Care
Appropriate preoperative testing	X			
Appropriateness of transfers		X		
Diagnostic efficiency			X	
Inefficiencies in health care delivery, overuse of services, high prices, fraud			X	
Emergency department utilization				X
Low-value care minimization	X	X		X
Out-of-pocket costs and affordability discussions with beneficiaries			X	X
Over/underutilization of chemotherapy, radiation therapy, imaging in cancer	X			
Use of optimal course of therapy to reduce patient harm and cost			X	

7. National Provider Survey of Home Health Agencies

CMS conducts nationally representative surveys to assess how health care providers respond to quality measures and the impact of their use in well-established measurement programs. For this report, a survey of 1,052 home health agencies (HHAs) and interviews representing 39 home health providers in 2020 provided insights on CMS quality measures and improvement efforts.

Overall Assessment of CMS Measures

91% of HHAs agree CMS measures are clinically important.

86% of HHAs agree improvements in measure performance reflect improvements in care.

Changes Reported to be Helpful

Surveyed HHAs averaged **16 quality improvement (QI) changes** to raise performance on CMS quality measures.

5 Most Helpful QI Changes	% of HHAs
QI initiatives directed at specific measures	92%
Training on QI strategies	92%
Technical assistance from private organizations	90%
QI champions identified for projects	90%
Increased QI staff	90%

Barriers

81% of HHAs reported barriers to improving performance on quality measures.

58%	40%	36%
Challenging Patient Mix	Changing Staff Behavior	Staff Turnover

Interviews indicated that inadequate staffing affected quality of care, leading to lower patient satisfaction scores.

Efforts to Improve Performance on Quality Measures

See Appendix G for more survey findings and improvements that HHAs reported as a result of QI efforts.

Provider Education/ Training	• In-service training • Side-by-side charting • OASIS demonstrations	*"[Staff] do succeed with the outcome measures … due in part to consistency in education and supervision of the clinicians. We do side-by-side assessments with them. … I think that has made a difference."*
Care Process Redesign	• Telehealth strategies • Shifting visit patterns • Interdisciplinary teaming	*"We developed … a wellness call system, and that has helped for our acute care hospitalization [rate]. [We tell the patient], 'Call us if there's a problem.' "*

EHRs and Interoperability

While 90% of HHAs reported using EHRs, the capabilities available to them differed.

Most Common Capabilities

- Software prompts/validation—80%
- Collection of measures—77%
- Medication reconciliation—74%
- Reporting of measures—74%
- Tracking patient outcomes—73%
- Medication administration—60%
- Clinical decision support—55%

Improvement Opportunities

A minority of HHAs reported that community providers can electronically receive key patient data, including:

Discharge instructions	29%
Diagnostic and treatment summaries	28%
Prescribed medications	26%
Lab test results	24%

Interviews indicated that communication barriers between HHAs and providers hinder efficient patient care.

References

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