

Creating an Optimal Environment for Quality Healthcare for Individuals, Families, and Communities

The 2024 National Impact Assessment Report

Collecting and Using Quality Data Across 26 CMS Programs





Creating an Optimal Environment for Quality Healthcare for Individuals, Families, and Communities



Kyle Campbell, PharmD

Impact Assessment
Project Director,
Health Services
Advisory Group
(HSAG)



Kendra Hanley, MS, BA

Impact Assessment
Project Lead,
HSAG



Robert Ziemba, PhD

Director, Statistics, HSAG



Learning Objectives

- Understand the background and scope of the 2024 National Impact Assessment Report and progress CMS has made to reduce burden related to quality measurement
- Understand how the COVID-19 public health emergency (PHE) affected quality measure scores and discover how lessons learned could translate to best practices to prepare for future emergencies
- Highlight key findings related to health equity and gain insight into underlying drivers of disparities
- Learn about highlights from the 2024 National Impact Assessment Report related to national performance trends, patient impact, and costs avoided

AGENDA

- 2024 Impact Assessment Report Background and Burden Reduction
- COVID-19 PHE Measure Score
 Differences and Lessons Learned
- Health Equity Key Findings
- High-Impact Measurement for CMS Health Care Quality Priorities
- Questions and Discussion





Healthcare for Individuals, Families, and Communities

2024 Impact Assessment Background

Kyle Campbell, PharmD

Project Director

Health Services Advisory Group (HSAG)



2024 Impact Assessment Report Background

- Required by section 1890A(a)(6) of the Social Security Act
- Assesses the quality and efficiency impact of the use of endorsed measures in CMS quality programs; also includes unendorsed measures
- 5th report in the series that began in 2012
- Analysis of measure trends, disparities, patient impact, costs avoided
- Data time frame for this report: 2016–2021
- Guided by a Technical Expert Panel (TEP) and Federal Assessment Steering Committee (FASC)



Included CMS Programs by Level of Accountability

Accountable Care Organization

Medicare Shared Savings

Acute Care Facility

Ambulatory Surgical Center Quality Reporting Program (QRP)

Hospital-Acquired Condition Reduction

Hospital Inpatient QRP

Hospital Outpatient QRP

Hospital Readmissions Reduction

Hospital Value-Based Purchasing

Inpatient Psychiatric Facility QRP

Promoting Interoperability

Prospective Payment System-Exempt Cancer Hospital QRP

Clinician

Merit-based Incentive Payment System (MIPS)

Health Plan

Part C & D Star Ratings

Part C & D Display Measures

Marketplace Quality Rating System

Fee-for-Service (FFS) Consumer Assessment of Healthcare Providers and Systems® (CAHPS®)

Medicaid/State

Medicaid Adult Core Set

Medicaid Child Core Set

CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ)

Post-Acute Care/Dialysis Organization

Dialysis Facility Compare

End-Stage Renal Disease Quality Incentive Program

Home Health QRP

Hospice QRP

Inpatient Rehabilitation Facilities QRP

Long-Term Care Hospital QRP

Skilled Nursing Facility QRP

Skilled Nursing Facility Value-Based Purchasing

Nursing Home Quality Initiative/ Nursing Home Compare



Key Features of the 2024 Impact Assessment Report



- Chapters for each of the 8 CMS Meaningful Measures priorities
- Effects of COVID-19 on quality measurement
- Enhanced analysis of health equity
- Period-of-record results in appendices

CMS Measure Portfolio (1 of 4)

26
Quality
Programs

Ap2
Unique
Measures

204
Outcome
Process
Structure

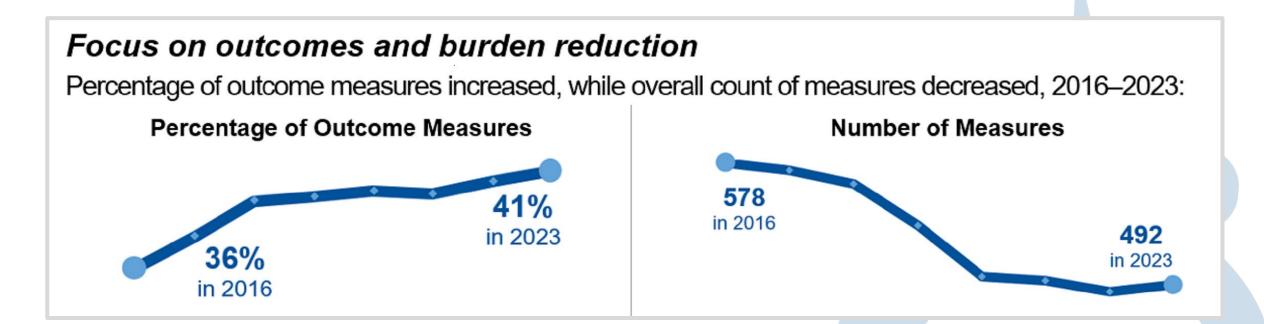
Structure

Cost

- This portfolio analysis identifies all measures from published rules or program documentation, then removes duplicate measures used in multiple programs to achieve a count of unique measures
- Count is current as of March 31, 2023
- Methods align with CMS Measures Inventory Tool (CMIT), but counts may vary due to differences in program/measure inclusion

CMS Measure Portfolio (2 of 4)

Is CMS making progress on increasing outcome measures while reducing burden?



CMS Measure Portfolio (3 of 4)

What proportion of measures in the portfolio use digital data sources?

Digital data sources

At least one reporting option for a measure uses data from electronic health records; case management, administrative, or laboratory systems; health information exchanges; prescription drug monitoring programs; clinical registries; electronically submitted assessments; or patient portals, applications, or wearable devices.¹



CMS Measure Portfolio (4 of 4)

What is the status of alignment in the CMS measure portfolio?

- 20% of unique measures are used in more than 1 CMS quality program
- Efforts to further align measures include:
 - Universal Foundation of Measures²
 - Alliances with federal partners
 - Public-private Core Quality Measures Collaborative³



Creating an Optimal Environment for Quality Healthcare for Individuals, Families, and Communities

COVID-19 Public Health Emergency Measure Score Differences

Rob Ziemba, PhD, MPH

Director, Statistics

Health Services Advisory Group (HSAG)



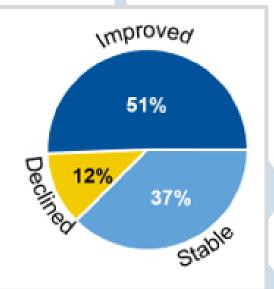
Measure Trend Analysis

What were trends in measure performance prior to the COVID-19 PHE?

Pre-COVID-19 PHE Measure Performance Trends

371 measures with ≥3 years of reliable data from **2016 to 2019** were analyzed

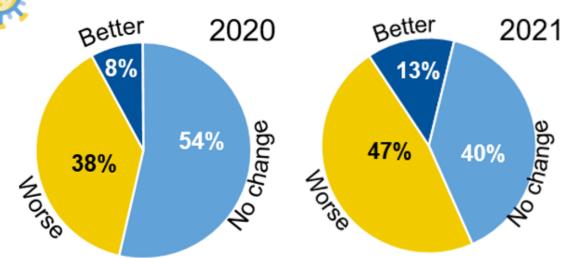
88% of the analyzed measures had improved or stable performance prior to the COVID-19 PHE



COVID-19 PHE Analysis – Overall Results

Did measure scores differ from expectations during the COVID-19 PHE (2020–2021)?

Measure Performance Differences During the COVID-19 PHE



A substantial percentage of measures had worse than expected scores during the COVID-19 PHE

A greater percentage of measures had worse than expected scores in 2021 compared with 2020

Of 371 measures with pre-COVID-19 trend data, 57% in 2020 and 80% in 2021 had sufficient data for this analysis

COVID-19 PHE Analysis – Largest Effects in 2021 (1 of 7)

Wellness and Prevention (69% of measures had worse-than-expected scores)

Measure Topic	% Worse Than Expected (Absolute Difference)	Accountable Entity
Breast cancer screenings	7.4%	Clinicians – MIPS Web Interface
	5.6%	Medicare Advantage plans
	3.3%	Marketplace plans
	2.8%	Accountable care organizations (ACOs)
Colorectal cancer screenings	8.3%	Medicare Advantage plans
	7.4%	Clinicians – MIPS Web Interface
	3.2%	ACOs
	2.7%	Marketplace plans Conference

COVID-19 PHE Analysis – Largest Effects in 2021 (2 of 7)

Behavioral Health (55% of measures had worse-than-expected scores)

Measure Topic	% Worse Than Expected (Absolute Difference)	Accountable Entity				
Tobacco use – treatment provided or offered (multiple measures)	8.1%-13.7%	Inpatient psychiatric facilities (IPFs)				
Depression screening and follow-up plan	7.4%-22.4%	ACOs Clinicians – MIPS Web Interface				

COVID-19 PHE Analysis – Largest Effects in 2021 (4 of 7)

Safety (54% of measures had worse-than-expected scores)

Measure Topic	% Worse Than Expected Standardized Infection Ratio (Relative Difference)	Accountable Entity		
Central line-associated bloodstream infection (CLABSI)	94.1%	Acute care hospitals		
Methicillin-resistant Staphylococcus aureus (MRSA)	54.6%	Acute care hospitals		
Catheter-associated urinary tract infection (CAUTI)	33.8%	Acute care hospitals		



COVID-19 PHE Analysis – Largest Effects in 2021 (3 of 7)

Chronic Conditions (52% of measures had worse-than-expected scores)

Measure Topic	% Worse Than Expected (Absolute Difference)	Accountable Entity
Blood pressure control	2.8%	ACOs
Hemoglobin A1c control	7.5%	Medicare Advantage plans
	5.0%	Marketplace plans
	1.5%	ACOs



COVID-19 PHE Analysis – Largest Effects in 2021 (5 of 7)

Seamless Care Coordination (50% of measures had worse-than-expected scores)

Measure Topic

Provider-to-provider/Provider-to-patient communication

% Worse Than Expected (Absolute Difference)

16.0%/20.9%

Accountable Entity

IPFs



COVID-19 PHE Analysis – Largest Effects in 2021 (6 of 7)

Seamless Care Coordination (50% of measures had better-than-expected scores)

Measure Topic	% Better Than Expected (Absolute Difference)	Accountable Entity
Follow-up after hospital stay for mental illness (30-day)	9.8%	Medicare Advantage plans
	5.9%	IPFs



COVID-19 PHE Analysis – Largest Effects in 2021 (7 of 7)

Affordability and Efficiency (38% of measures had better-than-expected scores)

Measure Topic	% Better Than Expected (Absolute Difference)	Accountable Entity
Emergency department use	1.4%	Home health agencies
Hospitalizations	1.5%	Home health agencies
	0.7%	Nursing homes
Potentially preventable readmissions	2.7%	Long-term care hospitals
	0.7%	Inpatient rehabilitation facilities
	0.5%	Skilled nursing facilities



Lessons Learned and Proposed Actions (1 of 2)

- Despite improving or stable trends prior to the COVID-19 PHE (2016–2019), key metrics for many CMS priorities worsened (e.g., Safety) worsened during the COVID-19 PHE
 - Implement National Quality Strategy actions to return safety metrics to pre-pandemic levels by 2025⁴
 - Develop safety-enhancing technologies leveraging electronic health records⁵
 - Increase use of self-monitoring technologies for chronic conditions,^{6,7} and ensure access to telehealth services to maintain contact with care providers during interruptions of care⁸

Lessons Learned and Proposed Actions (2 of 2)

- Effects of COVID PHE-19 and other emergencies are integral to equity of care issues
 - Focus interventions for women in minority racial or ethnic groups who were more likely to have missed or delayed breast cancer screening during the pandemic^{9,10}
 - Ensure that all enrollees have equitable access for behavioral health services via telehealth¹¹
- Waivers and flexibilities enacted by CMS reduced burden while maintaining reasonable continuity of quality measurement
 - Assess for alignment of future waivers and flexibilities across quality programs and accelerate the transition to digital quality measures



Healthcare for Individuals, Families, and Communities

Health Equity Key Findings

Health equity: Attainment of the highest level of health for all people, where everyone has a fair and just opportunity to attain their optimal health regardless of race, ethnicity, disability, sexual orientation, gender identity, socioeconomic status, geography, preferred language, or other factors that affect access to care and health outcomes

-CMS Framework for Health Equity 2022–2032



Measures Analyzed for Disparities

265 measures analyzed, representing 22 programs Affordability and Efficiency 108 Person-Centered Care	12 Behavioral Health		41 Chronic Conditions	
	Person-Centered	38 Safety	10 Seamless (Coordinat	

- 85% of CMS programs and 45% of all measures with any data had results stratified by at least 1 of these variables:
 - race/ethnicity
 - urban/rural location
 - Area Deprivation Index (ADI)
 - dual eligibility

Patterns of Disparities

Where were disparities most prevalent?

- Across priorities, disparities were most prevalent among racial and ethnic groups and dual-eligible enrollees
- Across stratifying variables, disparities were most prevalent in Wellness and Prevention

Percentage of measures analyzed within each priority for which at least one comparison (e.g., White compared with Black/African American) shows evidence of a disparity in the latest year of available data.

Measure Disparities by Health Care Quality Priority Stratum	Race Ethnicity	Dual-Eligible	Urban/Rural	ADI	
Affordability and Efficiency					
Behavioral Health					81%-100%
Chronic Conditions					61%-80%
Person-Centered Care					41%-60%
Safety					21%-40%
Seamless Care Coordination					0%-20%
Wellness and Prevention					No data

Disparities Results

How did disparities change over time?

- Persistent disparities were found in 85% of measures
 - Most prevalent in race/ethnicity comparisons
- Progress in eliminating disparities (39%) was balanced by emerging disparities (46%)
 - Most prevalent in race/ethnicity and urban/rural comparisons

Community Perspectives on Drivers of Disparities (1 of 2)

Focus groups

- Black or African American (2 groups)
- American Indian/Alaska Native
- Asian/Native Hawaiian or Other Pacific Islander (2 groups)
- Hispanic or Latino (2 groups)
- Low-income
- Rural



Community Perspectives on Drivers of Disparities (2 of 2)



Social Drivers of Health

- Poverty; poor housing and nutrition
- Lack of access to safety net services
- · Poor access to health care
- Low health literacy

Barriers in the Health System

- Health system complexity
- Underfunded and understaffed health care facilities in low-income communities
- Brief/rushed clinical encounters

Barriers in the Clinical Encounter

- Lack of cultural and linguistic competency
- Bias in care delivery

"Quality of health ... is a very wide field, starting from accessibility of resources, health care being equitable to all communities, affordability of health care."

Black or African Americanfocus group | member oflow-income urban community

Insights for Measurement

- Focus group findings support the critical need to develop equity measures focused on:
 - Unmet health-related social needs
 - Multiple barriers to access
 - Bias in care delivery
 - Cultural competency
 - Patient health literacy





Creating an Optimal Environment for Quality Healthcare for Individuals, Families, and Communities

High-Impact Measurement for CMS Health Care Quality Priorities

Kendra Hanley, MS, BA
Impact Assessment Project Lead
Health Services Advisory Group (HSAG)



Notable Examples of High-Impact Measures (1 of 5)

Person-Centered Care

- 1.1 million more comprehensive assessments at admission to hospice and palliative care as measure scores improved from 78.5% to 94.8% (2016–2021)
- 3.2 million more home health episodes specific to improved outcomes in **bathing**, **bed transferring**, and **dyspnea** (2016–2019); outcome scores were worse than expected in 2020 and 2021

Notable Examples of High-Impact Measures (2 of 5)

Safety

- 34,455 fewer CAUTIs, CLABSIs, and MRSA infections in acute care facilities (2015–2019)
 - Costs avoided (pre-COVID-19 PHE) from \$93.8 million to \$1.3 billion
 - Scores worse than expected in 2020 and 2021
- Healthcare-associated infections (HAIs) in long-term care hospitals improved from 2016 to 2021 (no data for 2020), resulting in 1,588 fewer CAUTIs and 1,751 fewer CLABSIs

Notable Examples of High-Impact Measures (3 of 5)

Chronic Conditions

- 11,417 fewer deaths of Medicare FFS patients occurred within 30 days of admission for:
 - Acute myocardial infarction, stroke, and heart failure (2016–2020)
 - Coronary artery bypass graft (2016–2021)
- ~3.9 million more enrollees were adherent to statin medications, translating to estimated costs avoided:
 - \$11.6 billion (Medicare FFS and Medicare Advantage, 2016–2020)
 - \$732.5 million (Marketplace, 2016–2021)

Notable Examples of High-Impact Measures (4 of 5)

Wellness and Prevention

- Preventive screenings for patients assigned to an ACO:
 - 1.1 million more **colorectal cancer** screenings were completed (2016–2019)
 - 194,000 more breast cancer screenings were provided (2016–2019)
 - Measure scores for both screenings were worse than expected in 2020–2021



Notable Examples of High-Impact Measures (5 of 5)

Behavioral Health

- Depression screenings:
 - 3.6 million more patients associated with an ACO received depression screening and follow-up (2016–2019); rates improved from 54.3% to 70.2%
 - Similarly, rates for MIPS clinicians reporting via Web Interface for the same period improved from 45.8% to 73.4%
 - Rates for both programs were worse than expected in 2020–2021

Key Takeaways

- CMS continued progress in reducing burden associated with measurement
- Improvements in measure performance were associated with positive patient impacts and costs avoided in select healthcare quality priorities and quality programs, particularly prior to the COVID-19 PHE
- A large proportion of measures, including key patient safety measures, had worse-than-expected performance in 2020–2021 and will require strategic action to return to prepandemic levels
- Conversely, not all measure scores worsened, and some measure trends indicate improvement across the period for the report (2016–2021)
- Persistent health equity gaps exist across health care quality priorities



Creating an Optimal Environment for Quality Healthcare for Individuals, Families, and Communities

Q & A



Thank you!

Michelle King, MASS, BS, COR III

Contracting Officer's Representative

Center for Clinical Standards and Quality, CMS

Michelle.King@cms.hhs.gov

Kyle Campbell, PharmD

Project Director, HSAG

KCampbell@hsag.com

Kendra Hanley, MS, BA

Project Lead, HSAG

KHanley@hsag.com

Robert Ziemba, PhD

Director, Statistics, HSAG

RZiemba@hsag.com

References (1 of 2)

- ¹ Centers for Medicare & Medicaid Services. Digital quality measures about dQMs. Baltimore, MD: US Department of Health and Human Services; 2023. https://ecqi.healthit.gov/dqm?qt-tabs_dqm=1. Accessed January 27, 2024.
- ²Centers for Medicare & Medicaid Services. Aligning Quality Measures Across CMS The Universal Foundation. Baltimore, MD: US Department of Health & Human Services; 2023. https://www.cms.gov/aligning-quality-measures-across-cms-universal-foundation. Accessed January 11, 2024.
- ³ Partnership for Quality Measurement. About Core Quality Measures Collaborative (CQMC). Columbus, OH: Battelle; nd. https://p4qm.org/CQMC. Accessed January 11, 2024.
- ⁴ Centers for Medicare & Medicaid Services. CMS National Quality Strategy. Baltimore, MD: US Department of Health and Human Services; nd. https://www.cms.gov/medicare/quality/meaningful-measures-initiative/cms-quality-strategy. Accessed January 11, 2024.
- ⁵ President's Council of Advisors on Science and Technology. Report to the President: A Transformational Effort on Patient Safety. Washington, DC: Executive Office of the President; 2023.
- ⁶ Citoni B, Figliuzzi I, Presta V, Volpe M, Tocci G. Home blood pressure and telemedicine: A modern approach for managing hypertension during and after COVID-19 pandemic. High Blood Press Cardiovasc Prev. 2022;29(1):1-14. doi: 10.1007/s40292-021-00492-4.

References (2 of 2)

- ⁷ Lee SG, Blood AJ, Cannon CP, et al. Remote cardiovascular hypertension program enhanced blood pressure control during the COVID-19 pandemic. J Am Heart Assoc. 2023;12(6):e027296. doi: 10.1161/JAHA.122.027296.
- ⁸ US Department of Health and Human Services, Office of Inspector General. *Telehealth Was Critical for Providing Services to Medicare Beneficiaries During the First Year of the COVID-19 Pandemic.* Washington, DC: US Department of Health and Human Services; 2022.
- ⁹ Tai DBG, Shah A, Doubeni CA, Sia IG, Wieland ML. The disproportionate impact of COVID-19 on racial and ethnic minorities in the United States. Clin Infect Dis. 2021;72(4):703-706. doi: 10.1093/cid/ciaa815.
- ¹⁰ Li T, Nickel B, Ngo P, et al. A systematic review of the impact of the COVID-19 pandemic on breast cancer screening and diagnosis. Breast. 2023;67:78-88. doi: 10.1016/j.breast.2023.01.001.
- ¹¹ Centers for Medicare & Medicaid Services. CMS Behavioral Health Strategy. Baltimore, MD: US Department of Health and Human Services; 2023. https://www.cms.gov/cms-behavioral-health-strategy. Accessed January 11, 2024.