

Child and Adult Core Set Stakeholder Workgroup: Measures Suggested for Addition to the 2022 Core Sets

Measure Information Sheets May 2021



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PRIMARY CARE ACCESS AND PREVENTIVE CARE	



Measure Information	
Measure name	Preventive Care and Screening: Influenza Immunization
Description	Percentage of patients aged six months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization.
Measure steward	National Committee for Quality Assurance (NCQA), formerly Physician Consortium for Performance Improvement (PCPI) Foundation
NQF number (if endorsed)	0041/0041e
Core Set domain	Primary Care Access and Preventive Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	Flu Vaccinations for Adults Ages 18 to 64 (FVA-AD)

Technical Specifications	
Ages	Age six months and older as of the encounter date.
Data collection method	Electronic health records (EHR) or clinical registry.
Denominator	All patients aged six months and older seen for a visit between October 1 and March 31.
Numerator	Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization during the flu season (between August and March).
	Previous receipt is defined as receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st).
Exclusions	 Exclude patients with any of the following: Documentation of medical reason(s) for not receiving influenza immunization (e.g., patient allergy, other medical reasons). Documentation of patient reason(s) for not receiving influenza immunization (e.g., patient declined, other patient reasons). Documentation of system reason(s) for not receiving influenza immunization (e.g., vaccine not available, other system reasons).



Continuous enrollment period	Not specified.
Level of reporting for which specifications were developed	Provider-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	Specifications for the MIPS version of the measure are available at https://qpp.cms.gov/docs/QPP quality measure specifications/CQM-Measure 110 MIPSCQM.pdf.
Information on testing or use at state Medicaid/CHIP level	The EHR and clinical registry specifications for this measure have been tested at the provider level using Medicare data from the Physician Quality Reporting System program. As this measure is an Electronic Clinical Quality Measure, it has undergone testing for a CMS measure to be e-specified. The current measure steward was not aware of any testing or use of the measure by state Medicaid or CHIP agencies.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	According to the measure steward, this measure is specified for data collected from electronic clinical data or registries. The Workgroup member (WGM) submitting this measure noted that use of immunization registry data for calculating this measure is ideal; however, claims data can also be used if the required G-codes are available in claims data.

Actionability and Strategic Priority	
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The WGM stated that if the measure is collected with claims data, the data can then be stratified with eligibility data to perform comparative analyses.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM asserted that the flu vaccine is an important and proven measure to reduce morbidity and mortality in Medicaid and CHIP.



Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM shared a link showing the recommended immunization schedule for adults: https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html . https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html .
How measure can be used to monitor improvement	According to the WGM, there is room for improvement.

Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The WGM noted that prevalence of influenza varies from year to year. Estimates from the past decade of prevalence vary from 9.3 million symptomatic cases during the 2011-2012 flu season to 45 million during the 2017-2018 flu season. All Medicaid and CHIP beneficiaries age six months and older are recommended for annual influenza vaccination, with rare exceptions.
Use of measure in other CMS programs	 Merit-Based Incentive Payment System (MIPS) Program Medicare Shared Savings Program (MSSP)
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM noted that states could use assistance in linking to immunization registries. They stated that this is already a need for child immunizations and efforts could be synergistic with reporting of this measure.

 $^{1}https://www.cdc.gov/flu/about/burden/index.html\#:\sim:text=While\%20the\%20impact\%20of\%20flu,61\%2C000\%20deaths\%20annually\%20since\%202010.$

² https://www.cdc.gov/flu/prevent/vaccinations.htm.



Measure Information	
Measure name	Colorectal Cancer Screening
Description	Percentage of patients 50–75 years of age who had appropriate screening for colorectal cancer.
Measure steward	National Committee for Quality Assurance (NCQA)
NQF number (if endorsed)	0034
Core Set domain	Primary Care Access and Preventive Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	No

Technical Specificat	tions
Ages	Ages 51–75 as of December 31 of the measurement year.
Data collection method	Administrative, hybrid, and HEDIS® Electronic Clinical Data Systems (ECDS).
	(Note: ECDS includes data from administrative claims, electronic health records, case management systems, and health information exchanges/clinical registries. NCQA has proposed transitioning this measure to ECDS only reporting starting in measurement year [MY] 2024 and is currently assessing public comment regarding this proposal.)
Denominator	Members 51–75 years of age as of December 31 of the measurement year.
Numerator	 Members with one or more screenings for colorectal cancer. Any of the following meet criteria: Fecal occult blood test (FOBT) during the measurement year. For administrative data, assume the required number of samples were returned, regardless of FOBT type. Flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year. Colonoscopy during the measurement year or the nine years prior to the measurement year. Computed tomography (CT) colonography during the measurement year or the four years prior to the measurement year. Fecal immunochemical DNA (FIT-DNA) test during the measurement year or the two years prior to the measurement year.



Exclusions	 Exclude members who meet any of the following: In hospice. Receiving palliative care. Age 66 and older with frailty and advanced illness. Medicare member age 66 and older enrolled in an Institutional Special Needs Plan (I-SNP) any time during the measurement year. Medicare member age 66 and older living long-term in an institution any time during the measurement year. Colorectal cancer at any time during the member's history (optional). Total colectomy at any time during the member's history (optional).
Continuous enrollment period	The measurement year and the year prior to the measurement year. No more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment.
Level of reporting for which specifications were developed	Plan-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	See HEDIS MY 2020 and MY 2021 Vol. 2 for current measure specifications.
Information on testing or use at state Medicaid/CHIP level	 The measure steward, NCQA, has only specified and tested the measure for use with Medicare and commercial insurance plans. The measure is not currently specified for use in Medicaid. NCQA indicated they plan to specify and test the measure for the Medicaid population in the coming year. However, several states are already using the measure in their Medicaid program. For example: The measure is being used in California under the Public Hospital Redesign and Incentives in Medi-Cal (PRIME) program as part of the state's Section 1115 Medicaid waiver. New York has required Medicaid plans to report colorectal cancer (CRC) screening rates using the NCQA HEDIS measure since 2012. New York has developed CRC screening benchmarks for the 50th, 75th, and 90th percentile. Oregon requires Medicaid Coordinated Care Organizations (CCOs) to report HEDIS CRC screening rates. Oregon saw a 10-percentage point increase in CRC screening rates among its CCOs after requiring reporting (from 2014 to 2019). Minnesota uses the HEDIS CRC screening measure; the Medicaid screening rate increased from 47.4 percent in 2011 to 56.2 percent in 2017. The Maryland Department of Health created a "homegrown" measure based on the HEDIS measure for the 50 to 64 age group.



According to Workgroup members (WGMs) who suggested the measure for addition, several other states track state Medicaid CRC rates using Behavioral Risk Factor Surveillance System interviewee self-report or all-payer claims databases but do not require Medicaid plan reporting. Additionally, HRSA requires Federally Qualified Health Centers (FQHCs) to report Uniform Data Set (UDC) CRC screening rates. According to WGMs who suggested the measure, Medicaid health plans serving Medicare-Medicaid dual are also required to collect CRC screening rates for dually eligible beneficiaries using claims-based data.

Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations

The WGMs indicated that the HEDIS and UDS CRC screening measures use almost identical data specifications and sources and are readily available in Medicaid claims databases. Hybrid methodologies with chart audits are also an option but are not required. The WGMs suggested that standardized use of claims data alone may result in consistent CRC screening calculations across plans and states.

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

Three WGMs suggested this measure for addition, noting that colorectal cancer represents the fourth leading cause of cancer cases and is the second leading cause of cancer deaths in the United States. ^{1,2} In 2021, it is estimated that there will be 149,500 new cases of CRC and an estimated 52,980 deaths attributed to it. ³ According to the National Cancer Institute, about 4.3 percent of men and 4.0 percent women will be diagnosed with CRC at some point during their lifetimes. ⁴

WGMs indicated that screening is effective because it finds precancerous lesions (polyps) before they become malignant, and by detecting early cancers when they are easily and effectively removed. Precancerous polyps usually take about 10 to 15 years to develop into CRC, and most can be found and removed before turning into cancer. The five-year relative survival rate for people whose CRC is found in the early stage before it has spread is about 90 percent, but survival drops to 15 percent when it is diagnosed at a late stage. ⁵ Numerous randomized controlled trials and meta-analyses have shown that screening decreases CRC mortality and incidence. Over 75 percent of CRC deaths occur in adults who are not up-to-date for CRC screening.⁷ CRC incidence rates have increased by 1 percent annually in those ages 50-64 years, a sharp contrast to declines of 3.3 per year in adults ages 65 and older. According to WGMs, these differences are most likely due to inequities in screening rates. In 2018, CRC screening rates among Medicare and commercial, commercial only, and Medicaid only insured were 80 percent, 65 percent, and 54 percent respectively.⁹



	One WGM cited information provided by the California Cancer Registry (CCR) about significant differences in CRC late-stage diagnosis by insurance status from 2012 to 2016. California's Medicaid insured population had a late-stage diagnosis rate of 71 percent, which was identical to the rate for California's uninsured population. California's Medicare-insured population had a late-stage diagnosis rate of 64 percent. There were minor differences between 2012 to 2016 in late-stage diagnosis by race or ethnicity in California, suggesting that disparities were specific to Medicaid-insured individuals. WGMs indicated that if the measure is collected with claims data, the data can then be linked with eligibility data and stratified to perform comparative analyses of screening rates in the Medicaid population, especially around racial, ethnic, and socioeconomic disparities.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	WGMs noted that presently there are no Adult Core Set measures that address cancer screening and prevention in the Medicaid-insured male population. However, males make up 46 percent of Medicaid beneficiaries of all ages. ¹⁰ As noted above, disparities in screening rates and survival exist. One WGM indicated that they believed these disparities would lessen if Medicaid plans were required to report CRC screening rates.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	One WGM noted that quality improvement efforts have resulted in improvements in Medicare CRC screening rates over the years. In Medicare HMOs, screening rates have increased from 50 percent in 2007 to 71 percent in 2018. WGMs also indicated that evidence-based, research-tested strategies for increasing CRC screening rates exist. Direct mailing of fecal immunochemical tests (FITs) is an effective evidence-based strategy for increasing CRC screening, with meta-analyses demonstrating 22 percent increases in screening rates. According to WGMs, Kaiser Permanente Northern California mails over 700,000 FIT kits annually to adult patients overdue for CRC screening to achieve screening rates of over 83 percent. CRC mortality rates have dropped by 52 percent since the program began in 2006. WGMs also noted that multicomponent interventions (e.g., phone reminders, nurse navigation) with or without mailed FIT have also been effective in increasing screening rates. Evidence-based programs have been successfully adapted and implemented for delivery to diverse groups, including Medicaid insured, low-income, multilingual, and multiethnic populations, with similar and sometimes greater effectiveness. However, according to WGMs, there are important policy barriers to scaling up and spreading these effective strategies, in part due to Medicaid insurance plans not being required to report CRC screening rates.
How measure can be used to monitor improvement	One WGM indicated that CRC screening is currently estimated at 70 percent for Medicaid in California, which leaves room for improvement. ¹⁴



WGMs noted that several states monitoring and reporting CRC screening have seen increases in Medicaid CRC screening rates. Two WGMs specifically cited evidence from the BeneFIT study. 15 The study took place in two Medicaid managed care plans (one in Oregon and one in Washington state). The two plans used claims data to identify enrollees overdue for CRC screening and mailed fecal immunochemical test (FIT) kits directly to 12,000 enrollees, with over 18 percent completing FIT within 6 months. In year 2 Oregon expanded its program, while Washington decided to limit the program to Medicare-Medicaid dually enrolled beneficiaries. Oregon required insurance plans to report Medicaid CRC screening rates while Washington required plans to report Medicare CRC screening rates. Oregon CRC screening rates increased by 11 points (from 46 percent to 57 percent) since required reporting began in 2014. ¹⁶ In Washington, the rates increased 3 points (from 43 percent to 46 percent). 17 WGMs cited additional evidence from FQHCs, with CRC screening rates increasing since UDS reporting began in 2012. 18,19 Harmonizing FQHC and Medicaid plan CRC screening reporting requirements would provide additional opportunities for health plans and clinics to work together to decrease disparities in CRC screening rates and outcomes. Finally, WGMs noted that in a survey of state Medicaid health agencies, states reported the biggest barrier to increasing CRC screening in their states was lack of a Medicaid CRC screening performance measure.²⁰

Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The U.S. Preventive Services Task Force recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years. The incidence of CRC increases with age. In the U.S. population, annual incidence rates are as follows: 59.5/100,000 for 50-54 years, 68.4/100,000 for 55-59 years, and 90.2/100,000 for 60-64 years. The incidence rate in men and women ages 50 to 64 was decreasing until 2012 but has been increasing since 2012. ²¹
Use of measure in other CMS programs	 Required CMS Medicare HEDIS quality performance measure (and 5-star incentivized) Core Quality Measure Collaborative (CQMC) Accountable Care Organizations/Patient Centered Medical Homes Core Measure Set Marketplace Quality Rating System (QRS) Medicare and Medicaid Electronic Health Record Incentive Program for Eligible Professionals Medicare Shared Savings Program Merit-Based Incentive Payment System (MIPS) Program



Potential barriers states could face in calculating measure and recommended technical assistance resources

According to one of the WGMs who suggested the measure for addition to the Core Set, states would require assistance in implementing the new measure and with coding (for example, the administrative specification includes SNOMED and LOINC codes). The measure steward indicated that health plans that encounter coding challenges with the existing Medicare or commercial-specified measure can report using the hybrid method, which supplements administrative codes with medical record review.

Two other WGMs noted that the main technical difficulty in measuring CRC screening is the look back period for colonoscopy (10 years) and sigmoidoscopy (5 years). However, they noted that this is a problem for all health plans regardless of insurance type and that Medicaid health plans already report this measure for their Medicaid-Medicare dually eligible enrollees. They also noted that numerous states have been able to overcome the long look back period required. For example, in Oregon, CCOs and clinics have worked together to harmonize colonoscopy claims and EHR data. Finally, WGMs indicated that fecal testing programs are increasingly being offered (especially since COVID-19, since testing can be done by mail)²² and testing completion is easily captured from claims data with a shorter look back period (up to 3 years rather than 10).

Citations

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⁹ Ibid.

¹⁰ Center for Medicaid and CHIP Services D of Q and HO. Medicaid and CHIP Beneficiary Profile.; 2020.

¹¹ Coronado GD, Green BB, West II, et al. Direct-to-member mailed colorectal cancer screening outreach for Medicaid and Medicare enrollees: Implementation and effectiveness outcomes from the BeneFIT study. *Cancer*. 2020;126(3):540-548. doi: https://doi.org/10.1002/cncr.32567.

² Siegel R, Miller K, Goding Sauer A, et al. Colorectal cancer statistics, 2020. *CA Cancer J Clin.* 2020;70(3):145-164. doi:10.3322/caac.21601. Epub 2020 Mar 5. PMID: 32133645.

³ American Cancer Society. *Cancer Facts & Figures 2021*. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf.

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⁵ National Cancer Institute S Epidemiology, and End Results Program. *Colon and Rectum Cancer SEER Survival Rates by Time Since Diagnosis, 2000-2016.* Accessed January 13, 2021. Colon and Rectum Cancer SEER Survival. <a href="https://seer.cancer.gov/explorer/application.html?site=20&data_type=4&graph_type=5&compareBy=stage&chk_stage_101=101&chk_stage_104=104&chk_stage_105=105&chk_stage_106=106&series=9&sex=1&race=1&age_range=1&advopt_precision=1&advopt_display=2.

⁶ Lin JS, Piper MA, Perdue LA, et al. Screening for Colorectal Cancer: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*. 2016;315(23):2576. doi:10.1001/jama.2016.3332.

⁷ Doubeni CA, Fedewa SA, Levin TR, et al. Modifiable Failures in the Colorectal Cancer Screening Process and Their Association with Risk of Death. *Gastroenterology*. 2019;156(1):63-74.e6. doi:10.1053/j.gastro.2018.09.040.

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CARE OF ACUTE AND CHRONIC CONDITIONS



Measure Information	
Measure name	Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis
Description	The percentage of episodes for members ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event.
Measure steward	National Committee for Quality Assurance (NCQA)
NQF number (if endorsed)	Note: The measure was revised for HEDIS measurement year (MY) 2019 reporting, with an expanded age range (starting at age 3 months) and an episode-based denominator (rather than member-based); the revised version is under consideration and has not been endorsed.
Core Set domain	Care of Acute and Chronic Conditions
Meaningful Measures area(s) of measure	Make Care Affordable
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 3 months and older as of the episode date.
Data collection method	Administrative (claims only).
Denominator	Episodes for members 3 months of age and older as of the episode date who had an outpatient, telephone, e-visit or virtual check-in, an observation visit, or ED encounter with a diagnosis of acute bronchitis/bronchiolitis during the intake period.
Numerator	Dispensed prescription for an antibiotic medication on or 3 days after the episode date.
Exclusions	 Exclude episodes with the following: Outpatient, observation, or ED visits that result in an inpatient stay. Diagnosis for a comorbid condition during the 12 months prior to or on the episode date. A new or refill prescription for an antibiotic medication filled 30 days prior to the episode date. A claim/encounter with a competing diagnosis on or 3 days after the episode date. A previous eligible episode in a 31-day period.



	Exclude members in hospice from the eligible population.
Continuous enrollment period	The member must be continuously enrolled without a gap in coverage from 30 days prior to the episode date through 3 days after the episode date (34 total days).
Level of reporting for which specifications were developed	Plan-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	See HEDIS MY 2020 and MY 2021 Vol. 2 for current measure specifications.
Information on testing or use at state Medicaid/CHIP level	The Workgroup member (WGM) stated that the measure has been used by state Medicaid programs and state public health departments to target antibiotic improvement activities and provide clinician feedback. This measure is currently specified for health-plan level reporting and the commercial, Medicaid, and Medicare product lines. The measure has been tested with administrative claims data from Medicaid plans using HEDIS data. According to the WGM, the Utah Department of Health, Office of Health Care Statistics utilizes their state All Payers Claims Database to publicly report performance by clinic on quality measures and has included this measure since 2016. New Hampshire, Michigan, and Colorado are also using this measure in their Medicaid/CHIP programs.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	State-based Medicaid programs can calculate the measure using claims data. The WGM indicated that data should be universally available to calculate the measure.

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status The WGM indicated that states can use this measure to promote appropriate outpatient antibiotic prescribing. States can provide performance data to health care providers compared to performance goals and other providers who are top performers on this measure. The WGM noted that audit-and-feedback on antibiotic prescribing is an evidence-based strategy to promote adherence to national guidelines and is recommended in CDC's Core Elements of Outpatient Antibiotic Stewardship.⁵



	The WGM also indicated that state Medicaid programs can partner with state public health departments to deliver tools and interventions to improve antibiotic use with opportunities to improve performance on this measure. The CDC's 6 18 Initiative recommends the use of audit-and-feedback using this quality measure as an intervention to improve appropriate antibiotic use. ⁶
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM stated that this measure helps identify over-prescribing of antibiotics for a common condition for which it is not indicated. They noted that by quantifying this prescribing, health care delivery systems have a benchmark that they can use to work toward quality improvement for their beneficiaries. They also noted that most human antibiotic use, an estimated 85-95 percent by volume, occurs among outpatients. The CDC estimates that at least 30 percent of outpatient antibiotic use is unnecessary. The WGM highlighted that Medicaid and CHIP beneficiaries are particularly vulnerable to COVID-19 infection. The WGM reported that respiratory infections, including acute bronchitis/bronchiolitis, a common syndrome among patients with COVID-19, may be a key driver of unnecessary antibiotic use. The existing Core Set measures do not address the appropriate use of
	antibiotics. The WGM suggested that this HEDIS measure addresses this key gap by addressing one of the major drivers of unnecessary antibiotic use in outpatient settings.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	In 2019, antibiotics were avoided for acute bronchitis in adults only 52.3 percent of the time in the Medicaid HMO population. ⁹ In other words, nearly 48 percent of the time patients received antibiotics when they were not indicated for treatment, providing a significant opportunity for appropriate antibiotic use improvement. Nearly 60 percent of pediatric bronchitis and bronchiolitis visits to emergency departments and physician offices lead to an antibiotic prescription. ¹⁰ The WGM noted that several studies have shown that interventions aimed at providers improve appropriate antibiotic use for respiratory conditions.
How measure can be used to monitor improvement	Data for the original measure are available starting in 2006 on the NCQA website. 11 The WGM stated that as current achievement rates for this HEDIS measure are less than 60 percent, there is room for improvement on this measure. This measure could also be trended over time, allowing Medicaid and CHIP programs to directly assess improvement in appropriate antibiotic use. Programs can use this measure to promote appropriate outpatient antibiotic prescribing by providing data to health care providers on their performance compared with performance goals and the performance of peer providers. (Note that recent changes in the underlying measure could break trending.)



Additional Information for Consideration

Prevalence of condition
being measured among
Medicaid and CHIP
beneficiaries

The WGM stated that cough is the most common symptom for which adult patients visit their primary care provider, and bronchitis is the most common diagnosis in these patients. ¹² Bronchiolitis is also the most common lower respiratory tract infection in young children. ¹³ Direct estimates for bronchitis diagnosis for Medicaid and CHIP beneficiaries do not exist, but the WGM suggested that prevalence in these groups is likely similar to the general population.

Bronchitis and bronchiolitis are common acute respiratory infections and although antibiotics are not indicated for these conditions, almost 60 percent of children presenting to EDs and physician offices receive antibiotics for these conditions, as do almost half of adults. ¹⁴ The WGM noted that current prescribing rates suggest that the prevalence of inappropriate antibiotic prescriptions for bronchitis and bronchiolitis is quite high.

Use of measure in other CMS programs

- Merit-Based Incentive Payment System (MIPS) Program.
- Marketplace Quality Rating System (QRS).
- Core Quality Measures Collaborative (CQMC) Accountable Care Organizations/Patient Centered Medical Homes/Primary Care.

Potential barriers states could face in calculating measure and recommended technical assistance resources

The WGM noted that as with any measure using claims data, analytic expertise and familiarity with claims data methods and limitations are required to calculate the measure.

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¹² Ralston SL, Lieberthal AS, Meissner HC, et al. American Academy of Pediatrics. Clinical practice guideline: the diagnosis, management, and prevention of bronchiolitis. *Pediatrics*. 2014 Nov;134(5):e1474-502. Available at: http://pediatrics.aappublications.org/content/134/5/e1474.long.

¹³ Albert RH. Diagnosis and treatment of acute bronchitis. Am Fam Physician. 2010;82(11):1345-50.

¹⁴ Snyder RL, King L, Hersh AL, Fleming-Dutra KE. Unnecessary antibiotic prescribing in pediatric ambulatory care visits for bronchitis and bronchiolitis in the United States, 2006-2015. *Infect Control Hosp Epidemiol*. 2020 Oct 16;1-4. doi: 10.1017/ice.2020.1231. Online ahead of print.



Measure Information	
Measure name	Appropriate Treatment for Upper Respiratory Infection (URI)
Description	The percentage of episodes for members 3 months of age and older with a diagnosis of upper respiratory infection (URI) that did not result in an antibiotic dispensing event.
Measure steward	National Committee for Quality Assurance (NCQA)
NQF number (if endorsed)	Note: The measure was revised for HEDIS measurement year (MY) 2019 reporting, with an expanded age range (beyond age 18) and an episode-based denominator (rather than member-based); the revised version of the measure is under consideration and has not been endorsed.
Core Set domain	Care of Acute and Chronic Conditions
Meaningful Measures area(s) of measure	Make Care Affordable
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 3 months and older as of the episode date.
Data collection method	Administrative (claims only).
Denominator	Episodes for members 3 months of age and older as of the episode date who had an outpatient, telephone, e-visit or virtual check-in, an observation visit, or emergency department (ED) encounter with a diagnosis of upper respiratory infection during the intake period.
Numerator	Dispensed prescription for an antibiotic medication on or 3 days after the episode date.
Exclusions	 Exclude episodes with the following: Outpatient, observation, or ED visits that result in an inpatient stay. Diagnosis for a comorbid condition during the 12 months prior to or on the episode date. A new or refill prescription for an antibiotic medication filled 30 days prior to the episode date. A claim/encounter with a competing diagnosis on or 3 days after the episode date. A previous eligible episode in a 31-day period.



	Exclude members in hospice from the eligible population.
Continuous enrollment period	The member must be continuously enrolled without a gap in coverage from 30 days prior to the episode date through 3 days after the episode date (34 total days).
Level of reporting for which specifications were developed	Plan-level.

Minimum Technical	Minimum Technical Feasibility Criteria	
Link to current technical specifications	See HEDIS MY 2020 and MY 2021 Vol. 2 for current measure specifications.	
Information on testing or use at state Medicaid/CHIP level	The Workgroup member (WGM) stated that this measure has been used by state Medicaid programs and state public health departments to target antibiotic improvement activities and provide clinician feedback. This measure is currently specified for health-plan level reporting, and the commercial, Medicaid, and Medicare product lines. The recent changes added Medicare product line reporting to the existing product lines. The measure has been tested using administrative claims data from Medicaid plans using HEDIS data. According to the WGM, the Texas Health and Human Services Commission (HHSC) Medicaid program has included this measure in its Pay-for-Quality (P4Q) for managed care organizations as a STAR Program Measure and a CHIP measure. Colorado, Michigan, and New Hampshire are also using this measure in their Medicaid/CHIP programs.	
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	State-based Medicaid programs can calculate the measure using claims data. The WGM indicated that data should be universally available to calculate the measure.	

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status The WGM indicated that states can use this measure to promote appropriate outpatient antibiotic prescribing. States can provide performance data to health care providers compared to performance goals and other providers who are top performers on this measure. The WGM noted that audit-and-feedback on antibiotic prescribing is an evidence-based strategy to promote adherence to national guidelines and is recommended in CDC's Core Elements of Outpatient Antibiotic Stewardship.⁵



	The WGM also indicated that state Medicaid programs can partner with state public health departments to deliver tools and interventions to improve antibiotic use with opportunities to improve performance on this measure. The CDC's 6 18 Initiative recommends the use of audit-and-feedback using this quality measure as an intervention to improve appropriate antibiotic use. ⁶
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM stated that this measure helps identify over-prescribing of antibiotics for a common condition for which it is not indicated. They noted that by quantifying this prescribing, health care delivery systems have a benchmark that they can use to work toward quality improvement for their beneficiaries. They also noted that most human antibiotic use, an estimated 85-95 percent by volume, occurs among outpatients. The CDC estimates that at least 30 percent of outpatient antibiotic use is unnecessary. The WGM highlighted that Medicaid and CHIP beneficiaries are particularly vulnerable to COVID-19 infection. URI is the most common syndrome among patients with COVID-19 and may be a key driver of unnecessary antibiotic use. The existing Core Set measures do not address the appropriate use of antibiotics. The WGM suggested that this HEDIS measure addresses this key gap by addressing one of the major drivers of unnecessary antibiotic use in outpatient settings.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	In 2019, antibiotics were avoided for this condition in children 78.6 percent of the time for commercial HMOs, 78.7 percent of the time for Commercial PPOs, and 87 percent of the time for Medicaid HMOs. ⁹ The WGM stated that data have shown that antibiotic prescribing for this condition is even more common for adults. They also noted that several studies have shown that interventions aimed at providers improve appropriate antibiotic use for respiratory conditions.
How measure can be used to monitor improvement	Data for the original measure are available starting in 2006 on the NCQA website. 10 The WGM stated that there is an opportunity for improvement in performance on this measure. This measure could also be trended over time, allowing Medicaid and CHIP programs to directly assess improvement in appropriate antibiotic use. Programs can use this measure to promote appropriate outpatient antibiotic prescribing by providing data to health care providers on their performance compared with performance goals and the performance of peer providers. (Note that recent changes in the underlying measure could break trending.)



Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The WGM stated that URI is a very common syndrome for which patients seek health care and for which antibiotics are commonly prescribed, even though they are unnecessary and potentially harmful. About 1 out of 8 adults (12 percent) in 2012 reported receiving a diagnosis of rhinosinusitis in the previous 12 months, resulting in more than 30 million diagnoses. 12
Use of measure in other CMS programs	 Merit-Based Incentive Payment System (MIPS) Program Marketplace Quality Rating System (QRS) Core Quality Measures Collaborative (CQMC) Pediatrics Core Set
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM noted that as with any measure using claims data, analytic expertise and familiarity with claims data methods and limitations are required to calculate the measure.

¹ https://hhs.texas.gov/about-hhs/process-improvement/medicaid-chip-quality-efficiency-improvement/pay-quality-p4q-program.

² https://www.colorado.gov/pacific/sites/default/files/CO2020 Medicaid HEDIS-Aggregate Report F1.pdf.

³https://www.michigan.gov/documents/mdhhs/2020 HEDIS Aggregate Report for Michigan Medicaid F1 7061 65 7.pdf.

⁴ https://medicaidquality.nh.gov/reports/appropriate-treatment-for-upper-respiratory-infection-uri.

⁵ https://www.cdc.gov/mmwr/volumes/65/rr/rr6506a1.htm?s cid=rr6506a1 e.

⁶ https://www.cdc.gov/sixeighteen/hai/index.htm.

⁷ https://www.cdc.gov/antibiotic-use/community/programs-measurement/measuring-antibiotic-prescribing.html.

⁸ https://www.cdc.gov/media/releases/2016/p0503-unnecessary-

prescriptions.html#:~:text=At%20least%2030%20percent%20of,other%20public%20health%20and%20medical.

⁹ https://www.ncqa.org/hedis/measures/appropriate-treatment-for-children-with-upper-respiratory-infection/.

¹¹ Rosenfeld RM, Piccirillo JF, Chandrasekhar SS, et al. Clinical practice guideline (updated): adult sinusitis. *Otolaryngol Head Neck Surg.* 2015;152(2 Suppl):S1-39.

¹² Hersh AL, Jackson MA, Hicks LA, et al. Principles of judicious antibiotic prescribing for upper respiratory tract infections in pediatrics. *Pediatrics*. 2013;132(6):1146-54. Available at: http://pediatrics.aappublications.org/content/132/6/1146?rss=1External.



Measure Information	
Measure name	Proportion of Days Covered: Diabetes All Class
Description	The percentage of individuals 18 years and older who met the Proportion of Days Covered (PDC) threshold of 80 percent for diabetes medications during the measurement year.
Measure steward	Pharmacy Quality Alliance (PQA)
NQF number (if endorsed)	0541
Core Set domain	Care of Acute and Chronic Conditions
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 18 and older as of the first day of the measurement year.
Data collection method	Administrative (enrollment, prescription claims, and medical claims).
Denominator	Individuals with at least two prescription claims for any of the diabetes medications (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-4 Inhibitors, GLP-1 Receptor Agonists, Meglitinides, or SGLT2 Inhibitors) on different dates of service in the treatment period.* The prescriptions can be for the same or different medications and can be from any of the seven classes of medications listed. *The individual's treatment period begins on the index prescription start date (the earliest date of service for a target medication during the measurement year) and extends through whichever comes first: the last day of enrollment during the measurement year, death, or the end of the measurement year. The treatment period should be at least 91 days.
Numerator	The number of individuals who met the PDC threshold of 80 percent during the measurement year.
Exclusions	 Exclude individuals with any of the following: Hospice care at any time during the measurement year. An end-stage renal disease (ESRD) diagnosis at any time during the measurement year. One or more prescription claims for insulin during the treatment period.



Continuous enrollment period	The treatment period (see description in denominator). Exclude individuals with more than a one-day gap in enrollment during the treatment period.
Level of reporting for which specifications were developed	Plan-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	The specifications are included at the end of the form for reference.
Information on testing or use at state Medicaid/CHIP level	The measure was tested using 2014 Medicaid Analytic Extract (MAX) data including 322 plans (17 FFS, 305 MCO) from 17 states (CA, GA, IA, ID, LA, MI, MN, MO, MS, NJ, PA, SD, TN, UT, VT, WV, WY). This measure is publicly reported by the New Hampshire Department of Health and Human Services for their Medicaid plans. Washington also publicly reports this measure at the state level, with the ability to stratify results by payer.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The data sources for this measure include eligibility information and both prescription and medical claims. The WGM who suggested this measure did not note any barriers or limitations to accessing the data sources.

Actionability and Strategic Priority	
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The WGM stated that non-adherence to diabetes medications leads to more hospitalizations and an overall cost burden to the health care system. They suggested that adoption of this measure has the potential to drive patient education on the importance of adherence at the health plan, pharmacy, and provider levels. The WGM added that this measure complements the existing Core Set measure, Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (HPC-AD). The measure has been tested for stratification of Medicaid beneficiaries with Serious Mental Illness in 14 states.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM noted that this measure has demonstrated its effectiveness in the Medicare Part D Star Ratings program. ³ (Some Medicare Advantage members are dually-eligible for Medicare and Medicaid.) The WGM stated that this measure will encourage health plans and providers to address non-adherence through proper medication use education if non-adherence is being measured.



Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM stated that inclusion of this measure in the Medicare Part D Star Ratings program has enabled Medicare Advantage health plans and standalone Prescription Drug Plans to track their performance as well as benchmark to other health plans. The WGM noted that in order to be competitive, health plans may have implemented quality improvement strategies to drive up adherence rates. The WGM suggested that that including this measure for the Medicaid population should lead to more investment in adherence improvement strategies (e.g., member education on the importance of adherence, email/text reminders to pick up medications), which may drive adherence rates, reduce medical
	costs, and improve a beneficiary's overall quality of life.
How measure can be used to monitor improvement	The WGM reported that this measure can be monitored on a monthly, annual, and year-over-year basis. For example, the national Medicare Advantage Prescription Drug (MAPD) plans average for the measure increased six percentage points over a five-year period. ⁵ . The WGM suggested that Medicaid providers may be able to directly influence improvement of this measure through multiple initiatives (e.g., implementing programs to address the social determinants of health that impact medication adherence; member education through letters, text message, emails; provider outreaches notifying which of their patients is non-adherent).

Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	National prevalence data are available from CMCS's Medicaid and CHIP Beneficiary Profile. Of adults ages 18 to 64 enrolled in Medicaid or CHIP in 2017, 10 percent self-reported they had ever been diagnosed with diabetes. ⁶
	The WGM noted that Medicaid adherence rates to diabetes medications are much lower compared to the Medicare population (Medicaid had 66 percent adherence and Medicare had 87 percent adherence). The source for this data is OptumRX Medicare and Medicaid book-of-business, $1/1/2020 - 11/30/2020$.
Use of measure in other CMS programs	 Medicare Part D Star Ratings Program Marketplace Quality Rating System
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM stated that measure calculation requires access to prescription claims, eligibility data, and medical claims. Medical claims are needed for measure exclusions (hospice and ESRD diagnosis).



- ¹ https://medicaidquality.nh.gov/reports/proportion-of-days-covered---diabetes-all-class-rate-pdc-dr.
- ² https://www.wacommunitycheckup.org/compare-scores/measure-detail/?Measure%20Name=Taking%20diabetes%20medications%20as%20directed.
- ³ CMS modified the measure specifications for use in the Star Ratings program. The primary change is that the unit of observation for the numerator and denominator for the modified Star Ratings measure is member-years, rather than individuals.
- ⁴ Performance data at the health-plan level can be found in the Star Rating Data zip files, available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.
- ⁵ Comparison of 2016 to 2021 Star Rating Data, available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.
- ⁶ Center for Medicaid and CHIP Services, Division of Quality and Health Outcomes. Medicaid and CHIP Beneficiary Profile. Centers for Medicare & Medicaid Services. Baltimore, MD. February 2020.



Measure Information					
Measure name	Proportion of Days Covered: Renin Angiotensin System Antagonists				
Description	The percentage of individuals 18 years and older who met the Proportion of Days Covered (PDC) threshold of 80 percent for renin angiotensin system (RAS) antagonists during the measurement year.				
Measure steward	Pharmacy Quality Alliance (PQA)				
NQF number (if endorsed)	0541				
Core Set domain	Care of Acute and Chronic Conditions				
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease				
Measure type	Process				
Recommended to replace current measure?	No				

Technical Specifications				
Ages	Age 18 and older as of the first day of the measurement year.			
Data collection method	Administrative (enrollment, prescription claims, and medical claims).			
Denominator	Individuals with at least two prescription claims for any RAS antagonist (Direct Renin Inhibitor Medications and Combinations, ARB Medications and Combinations, and/or ACE Inhibitor Medications and Combination Products) on different dates of service in the treatment period.* The prescriptions can be for the same or different medications and can be from any of the three classes of medications listed. * The individual's treatment period begins on the index prescription start date and extends through whichever comes first: the last day of enrollment during the measurement year, death, or the end of the measurement year. The treatment period should be at least 91 days.			
Numerator	The number of individuals who met the PDC threshold during the measurement year.			
Exclusions	 Exclude individuals with any of the following: Hospice care at any time during the measurement year. An end-stage renal disease (ESRD) diagnosis at any time during the measurement year. One or more prescription claims for the medication sacubitril/valsartan during the treatment period. 			



Continuous enrollment period	The treatment period (see description in denominator). Exclude individuals with more than a one-day gap in enrollment during the treatment period.
Level of reporting for which specifications were developed	Plan-level.

Minimum Technical Feasibility Criteria			
Link to current technical specifications	The specifications are included at the end of the form for reference.		
Information on testing or use at state Medicaid/CHIP level	The measure was tested using 2014 Medicaid Analytic Extract (MAX) data including 322 plans (17 FFS, 305 MCO) from 17 states (CA, GA, IA, ID, LA, MI, MN, MO, MS, NJ, PA, SD, TN, UT, VT, WV, WY). This measure is publicly reported by the New Hampshire Department of Health and Human Services for their Medicaid plans. Washington also publicly reports this measure at the state level, with the ability to stratify results by payer.		
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The data sources for this measure include eligibility information and both prescription and medical claims. The WGM who suggested this measure did not note any barriers or limitations to accessing the data sources.		

Actionability and Strategic Priority How measure contributes The WGM stated that non-adherence to hypertension medications leads to more hospitalizations and an overall cost burden to the health care to measuring overall quality of health care in system. They suggested that adoption of this measure has the potential Medicaid and CHIP, to drive patient education on the importance of adherence at the health plan, pharmacy, and provider levels. The WGM added that this measure including ability to complements the existing Core Set measure, Controlling High Blood perform comparative Pressure (CBP-AD). analyses based on race, ethnicity, or The measure has been tested for stratification of Medicaid beneficiaries socioeconomic status with Serious Mental Illness in 14 states. The WGM noted that this measure has demonstrated its effectiveness in How measure addresses the unique and complex the Medicare Part D Star Ratings program.³ (Some Medicare Advantage members are dually-eligible for Medicare and Medicaid.) needs of Medicaid and **CHIP** beneficiaries and The WGM stated that this measure will encourage health plans and promotes effective care providers to address non-adherence through proper medication use delivery education if non-adherence is being measured.



Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM stated that inclusion of this measure in the Medicare Part D Star Ratings program has enabled Medicare Advantage health plans and standalone Prescription Drug Plans to track their performance as well as benchmark to other health plans. The WGM noted that in order to be competitive, health plans may have implemented quality improvement strategies to drive up adherence rates. The WGM suggested that including this measure for the Medicaid population should lead to more investment in adherence improvement strategies (e.g., member education on the importance of adherence, email/text reminders to pick up medications), which may drive adherence rates, reduce medical costs and improve a beneficiary's overall quality of life.
How measure can be used to monitor improvement	The WGM reported that this measure can be monitored on a monthly, annual, and year-over-year basis. For example, the national Medicare Advantage Prescription Drug (MAPD) plans average for the measure increased five percentage points over a five-year period. The WGM suggested that Medicaid providers may be able to directly influence improvement of this measure through multiple initiatives (e.g., implementing programs to address the social determinants of health that impact medication adherence; member education through letters, text message, emails; outreach notifying providers which patients are non-adherent).

Additional Information for Consideration			
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	National prevalence data are available from CMCS's Medicaid and CHIP Beneficiary Profile. Of adults ages 18 to 64 enrolled in Medicaid or CHIP in 2017, 28 percent self-reported they had ever been diagnosed with hypertension. ⁶		
	According to the measure steward, 11 percent of adult Medicaid beneficiaries were eligible for the PDC RAS antagonist measure in the testing data (2014). The WGM noted that Medicaid adherence rates to RAS antagonist medications are much lower compared to the Medicare population (Medicaid had 66 percent adherence and Medicare had 89 percent adherence). The source for this data is OptumRX Medicare and Medicaid book-of-business, 1/1/2020 – 11/30/2020.		
Use of measure in other CMS programs	 Medicare Part D Star Ratings Program Marketplace Quality Rating System 		
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM stated that measure calculation requires access to prescription and medical claims and eligibility data. Medical claims are needed for measure exclusions (hospice and ESRD diagnosis).		



- ¹ https://medicaidquality.nh.gov/reports/proportion-of-days-covered---renin-angiotensin-system-antagonists-pdc-rasa.
- ² https://www.wacommunitycheckup.org/compare-scores/measure-detail/?Measure%20Name=Taking%20hypertension%20medications%20as%20directed.
- ³ CMS modified the measure specifications for use in the Star Ratings program. The primary change is that the unit of observation for the numerator and denominator for the modified Star Ratings measure is member-years, rather than individuals.
- ⁴ Performance data at the health-plan level can be found in the Star Rating Data zip files, available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.
- ⁵ Comparison of 2016 to 2021 Star Rating Data, available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.
- ⁶ Center for Medicaid and CHIP Services, Division of Quality and Health Outcomes. Medicaid and CHIP Beneficiary Profile. Centers for Medicare & Medicaid Services. Baltimore, MD. February 2020.



Measure Information					
Measure name	Proportion of Days Covered: Statins				
Description	The percentage of individuals 18 years and older who met the Proportion of Days Covered (PDC) threshold of 80 percent for statins during the measurement year.				
Measure steward	Pharmacy Quality Alliance (PQA)				
NQF number (if endorsed)	0541				
Core Set domain	Care of Acute and Chronic Conditions				
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease				
Measure type	Process				
Recommended to replace current measure?	No				

Technical Specifications				
Ages	Age 18 and older as of the first day of the measurement year.			
Data collection method	Administrative (enrollment, prescription claims, and medical claims).			
Denominator	Individuals with at least two prescription claims for any statin medication on different dates of service in the treatment period.* The prescriptions can be for the same or different medications. *The individual's treatment period begins on the index prescription start date (the earliest date of service for a target medication during the measurement year) and extends through whichever comes first: the last day of enrollment during the measurement year, death, or the end of the measurement year. The treatment period should be at least 91 days.			
Numerator	The number of individuals who met the PDC threshold during the measurement year.			
Exclusions	 Exclude individuals with any of the following: Hospice care at any time during the measurement year. An end-stage renal disease (ESRD) diagnosis at any time during the measurement year. 			
Continuous enrollment period	The treatment period (see description in denominator). Exclude individuals with more than a one-day gap in enrollment during the treatment period.			
Level of reporting for which specifications were developed	Plan-level.			



Minimum Technical Feasibility Criteria			
Link to current technical specifications	The specifications are included at the end of the form for reference.		
Information on testing or use at state Medicaid/CHIP level	The measure was tested using 2014 Medicaid Analytic Extract (MAX) data including 322 plans (17 FFS, 305 MCO) and 17 states (CA, GA, IA, ID, LA, MI, MN, MO, MS, NJ, PA, SD, TN, UT, VT, WV, WY). This measure is publicly reported by the New Hampshire Department of Health and Human Services for their Medicaid plans. Washington also publicly reports this measure at the state level, with the ability to stratify results by payer.		
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The data sources for this measure include eligibility information and both prescription and medical claims. The WGM who suggested this measure did not note any barriers or limitations to accessing the data sources.		

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM stated that non-adherence to statin medications leads to more hospitalizations and an overall cost burden to the health care system. They suggested that adoption of this measure has the potential to drive patient education on the importance of adherence at the health plan, pharmacy, and provider levels. The WGM added that there are no statin medication use measures currently in the existing Core Set.

The measure has been tested for stratification of Medicaid beneficiaries with Serious Mental Illness in 14 states.

How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery The WGM noted that this measure has demonstrated its effectiveness in the Medicare Part D Star Ratings program.³ (Some Medicare Advantage members are dually-eligible for Medicare and Medicaid.) The WGM stated that this measure will encourage health plans and providers to address non-adherence through proper medication use education if non-adherence is being measured.



Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM stated that inclusion of this measure in the Medicare Part D Star Ratings program has enabled Medicare Advantage health plans and standalone Prescription Drug Plans to track their performance as well as benchmark to other health plans. The WGM noted that in order to be competitive, health plans may have implemented quality improvement strategies to drive up adherence rates. The WGM suggested that including this measure for the Medicaid population should lead to more investment in adherence improvement strategies (e.g., member education on the importance of adherence, email/text reminders to pick up medications), which may drive adherence rates, reduce medical costs, and improve a beneficiary's overall quality of life.
How measure can be used to monitor improvement	The WGM reported that this measure can be monitored on a monthly, annual, and year-over-year basis. For example, the national Medicare Advantage Prescription Drug (MAPD) plans average for the measure increased nine percentage points over a five-year period. The WGM suggested that Medicaid providers may be able to directly influence improvement of this measure through multiple initiatives (e.g., implementing programs to address the social determinants of health that impact medication adherence; member education through letters, text message, emails; outreach notifying providers which patients are non-adherent).

Additional Information for Consideration				
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	According to the measure steward, 9 percent of adult Medicaid beneficiaries were eligible for the PDC statins measure in the testing data (2014). The WGM noted that Medicaid adherence rates to statin medications are much lower compared to the Medicare population (Medicaid had 66 percent adherence and Medicare had 88 percent adherence). The source for this data is OptumRX Medicare and Medicaid book-of-business, 1/1/2020 – 11/30/2020.			
Use of measure in other CMS programs	 Medicare Part D Star Ratings Program Marketplace Quality Rating System 			
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM stated that measure calculation requires access to prescription and medical claims and eligibility data. Medical claims are needed for measure exclusions (hospice and ESRD diagnosis).			

 $^{^{1}\ \}underline{https://medicaidquality.nh.gov/reports/proportion-of-days-covered---statins-pdc-sta}.$

² https://www.wacommunitycheckup.org/compare-scores/measure-detail/?Measure%20Name=Taking%20cholesterol-lowering%20medications%20as%20directed.

³ CMS modified the measure specifications for use in the Star Ratings program. The primary change is that the unit of observation for the numerator and denominator for the modified Star Ratings measure is member-years, rather than individuals.



⁴ Performance data at the health-plan level can be found in the Star Rating Data zip files, available at:

https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.

5 Comparison of 2016 to 2021 Star Rating Data, available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.

BEHAVIORAL H	HEALTH CARE	



Measure Information	
Measure name	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
Description	Percentage of patients 18 and older who were screened for tobacco use one or more times within 24 months AND who received tobacco cessation intervention if identified as a tobacco user. Three rates are reported:
	 Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months. Percentage of patients aged 18 years and older who were screened for tobacco use and identified as a tobacco user who received tobacco cessation intervention. Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received tobacco cessation intervention if identified as a tobacco user.
Measure steward	National Committee for Quality Assurance (NCQA), formerly Physician Consortium for Performance Improvement (PCPI) Foundation
NQF number (if endorsed)	0028/0028e
Core Set domain	Behavioral Health Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	Yes, Medical Assistance with Smoking and Tobacco Use Cessation (MSC-AD)

Technical Specifications	
Ages	Age 18 years and older on date of encounter.
Data collection method	Administrative (claims), electronic health records (EHR), registry.
Denominator	 This measure includes denominators for three rates: All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period. All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period who were screened for tobacco use and identified as a tobacco user. All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period.



Numerator	 This measure includes numerators for three rates: Patients who were screened for tobacco use at least once within 24 months. Patients who received tobacco cessation intervention. Patients who were screened for tobacco use at least once within 24 months AND who received tobacco cessation intervention if identified as a tobacco user. Definitions:
	 Tobacco Use – Includes any type of tobacco, including e-cigarettes and vaping. Tobacco Cessation Intervention – Includes brief counseling (three minutes or less), and/or pharmacotherapy. For the purpose of this measure, brief counseling (e.g., minimal and intensive advice/counseling interventions conducted both in person and over the phone) qualifies for the numerator. Written self-help materials (e.g., brochures, pamphlets) and complementary/alternative therapies do not qualify for the numerator.
Exclusions	 Exclude patients with any of the following only if the patients do not meet the criteria for inclusion in the numerator: Documentation of medical reason(s) for not screening for tobacco use (e.g., limited life expectancy, other medical reason). Documentation of medical reason(s) for not providing tobacco cessation intervention (e.g., limited life expectancy, other medical reason). Note: This exception only applies for performance rates 2 and 3.
Continuous enrollment period	Not specified.
Level of reporting for which specifications were developed	Provider-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	Specifications for the MIPS version of the measure are available at: Quality ID #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention (cms.gov)
Information on testing or use at state Medicaid/CHIP level	The measure developer tested the measure using claims, EHR, and registry data from the Physician Quality Reporting System (PQRS), a CMS program focused on Medicare providers. The EHR version of the measure was also tested with community health centers serving primarily low-income and uninsured patients with multiple, complex needs. The measure was tested with calendar year 2011 data from 301 physicians and other mid-level providers (e.g., nurse practitioners, midwives and physician assistants) in a large, urban safety-net network.



	California is using the measure for its Medicaid population as part of the Public Hospital Redesign and Incentives in Medi-Cal (PRIME) and Value-Based Payment (VBP) programs.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The measure can be calculated using claims, electronic health records, paper medical records, or registry data. The Workgroup member (WGM) who suggested the measure did not describe any barriers, limitations, or variations that could affect the consistency of calculations. However, testing results from the measure developer suggest that performance rates may vary based on the data collection method used. The mean performance rate when the measure was calculated using clinical registry data was 0.84, and the median performance rate was 0.93 (based on a sample from 29,949 physicians). The mean and median performance rates were 0.96 and 1.00 when the measure was calculated using claims data (based on a sample from 53,326 physicians), and 0.76 and 0.87 when the measure was calculated using EHR data (based on a sample from 39,291 physicians). ²

Actionability and Strategic Priority	
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The WGM who suggested this measure did not specify how this measure would contribute to measuring overall quality of health care in Medicaid in CHIP. They indicated that if the measure is collected with claims data, the data can then be linked with eligibility data and stratified to perform comparative analyses.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM noted that tobacco use continues to be a significant factor in contributing to preventable health conditions.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM noted that tobacco cessation is a U.S. Preventive Services Task Force Recommendation, Grade A.
How measure can be used to monitor improvement	The WGM indicated that there is room for improvement on the measure.



Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	Medicaid beneficiaries smoke at a higher rate than the general population; 30.0 percent of adults with Medicaid coverage reported tobacco product use "every day" or "some days" in 2019, as compared to 20.8 percent of all adults. ³
Use of measure in other CMS programs	 Medicare Shared Savings Program (MSSP) Merit-Based Incentive Payment System (MIPS) Program Medicare and Medicaid Electronic Health Record Incentive Program for Eligible Professionals Core Quality Measures Collaborative (CQMC) Behavioral Health Core Set and Cardiology Core Set Million Hearts
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM who suggested the measure noted that states would benefit from technical assistance in improving data quality and collection. (Note that calculation of this measure may require use of codes not frequently used on Medicaid/CHIP claims, such as G-codes and CPT II codes, or use of other data sources, such as EHRs or chart abstraction.)

http://www.qualityforum.org/QPS/QPSTool.aspx?Exact=false&Keyword=0028.
² Ibid.

¹ NQF #0028 Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention, testing attachment. Last Updated Date: Apr 03, 2013. Available at:

³ MMWR Morb Mortal Wkly Rep. 2019; 69 (46). http://dx.doi.org/10.15585/mmwr.mm6946a4.



Measure Information	
Measure name	Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (FUA)
Description	Percentage of emergency department (ED) visits for beneficiaries age 13 and older with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence, who had a follow-up visit for AOD abuse or dependence. Two rates are reported:
	 Percentage of ED visits for which the beneficiary received follow-up within 30 days of the ED visit (31 total days); Percentage of ED visits for which the beneficiary received follow-up within 7 days of the ED visit (8 total days).
Measure steward	National Committee for Quality Assurance (NCQA)
NQF number (if endorsed)	3488
Core Set domain	Behavioral Health Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	Ambulatory Care: Emergency Department (ED) Visits (AMB-CH)

Technical Specifications	
Ages	Age 13 and older as of the ED visit. The measure includes stratifications for ages 13 to 17, age 18 and older, and a total rate.
	 The Adult Core Set includes this measure for beneficiaries age 18 and older. Rates are reported for two age groups: ages 18 to 64 and age 65 and older. The Health Home Core Set includes this measure for enrollees age 13 and older. Rates are reported for ages 13 to 17, ages 18 to 64, age 65 and older, and a total rate. This measure has been suggested for addition to the Child Core Set for beneficiaries ages 13 to 17.
Data collection method	Administrative (claims).
Denominator	The denominator for this measure is based on ED visits, not on beneficiaries. The denominator includes ED visits with a principal diagnosis of AOD abuse or dependence on or between January 1 and December 1 of the measurement year where the beneficiary was age 13 or older on the date of the visit.



Numerator	 30-Day Follow-Up: A follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 30 days after the ED visit (31 total days). Include visits that occur on the date of the ED visit. 7-Day Follow-Up: A follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit.
Exclusions	 Exclude beneficiaries in hospice from the eligible population. Exclude ED visits that result in an inpatient stay and ED visits followed by an admission to an acute or nonacute inpatient care setting on the date of the ED visit or within 30 days after the ED visit (31 total days), regardless of the principal diagnosis for the admission.
Continuous enrollment period	Date of the ED visit through 30 days after the ED visit (31 total days).
Level of reporting for which specifications were developed	State-level, plan-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	The specifications for this measure on the Adult Core Set are available at https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf .
Information on testing or use at state Medicaid/CHIP level	The measure is currently being reported as part of the Adult Core Set and the Health Home Core Set. For FFY 2019, 36 states reported the measure for the Adult Core Set.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	This is a claims-based measure. Required data elements include enrollment data, date of service, AOD diagnosis codes, place of service codes, ED visits, and treatment procedure codes.



Actionability and Strategic Priority	
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The Workgroup member (WGM) felt that this measure would address a gap area for the quality of care for those adolescents diagnosed with substance use disorder and allow for comparative analyses across various populations.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM noted that AOD is a serious public health issue and adolescents frequent the ED for treatment of behavioral health issues.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM noted linking patients to appropriate follow-up care may reduce future ED visits. Emergency departments are a good place to integrate substance use treatment modalities such as Screening, Brief Intervention, and Referral to Treatment (SBIRT). ¹
How measure can be used to monitor improvement	The WGM noted that there is much room for improvement on this measure. According to NCQA benchmarks for Medicaid managed care (all ages), follow-up occurred within 7 days for 13 percent of ED visits and within 30 days for 20 percent for measurement year 2019. ² For FFY 2019 Adult Core Set reporting, states reported a median 7-day follow-up rate of 13.9 percent and a median 30-day follow-up rate of 21.7 percent for beneficiaries age 18 and older (36 states reporting). ³

Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The WGM noted that the rate of current illicit drug use among all youth (Medicaid and non-Medicaid) ages 12 to 17 is 10.1 percent, which is 25 percent higher than among individuals age 18 or older. ⁴
Use of measure in other CMS programs	 Adult Core Set Health Home Core Set Certified Community Behavioral Health Clinic Demonstration



Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM noted that sample size may be an issue for some states.
Other	Changes proposed by the measure steward for measurement year 2022 (the 2023 Core Set) include: Expand the denominator to include ED visits due to overdose of
	drugs with common abuse potential in "any" diagnosis position.
	• Expand the numerator to allow follow-up visits with SUD indicated in "any" diagnosis position.
	Expand the numerator to include additional follow-up options that do not require a diagnosis of SUD.
	More information is available at https://www.ncqa.org/wp-content/uploads/2021/02/12FUA.pdf .

¹ https://link.springer.com/article/10.1007/s11920-012-0304-9.

² https://www.ncqa.org/hedis/measures/follow-up-after-emergency-department-visit-for-alcohol-and-other-drug-abuse-or-dependence/.

³ https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2020-adult-chart-pack.pdf.

⁴ https://www.medicaid.gov/medicaid/benefits/behavioral-health-services/children-and-youth/index.html.



Measure Information	
Measure name	Follow-Up After Emergency Department Visit for Mental Illness (FUM)
Description	Percentage of emergency department (ED) visits for beneficiaries age 6 and older with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness. Two rates are reported:
	 Percentage of ED visits for mental illness for which the beneficiary received follow-up within 30 days of the ED visit (31 total days); Percentage of ED visits for mental illness for which the beneficiary received follow-up within 7 days of the ED visit (8 total days).
Measure steward	National Committee for Quality Assurance (NCQA)
NQF number (if endorsed)	3489
Core Set domain	Behavioral Health Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	Ambulatory Care: Emergency Department (ED) Visits (AMB-CH)

Technical Specifications	
Ages	 Age 6 and older as of the ED visit. The measure includes stratifications for ages 6 to 17, ages 18 to 64, age 65 and older, and a total rate. The Adult Core Set includes this measure for beneficiaries age 18 and older. Rates are reported for two age groups: ages 18 to 64 and age 65 and older. This measure has been suggested for addition to the Child Core Set for beneficiaries ages 6 to 17.
Data collection method	Administrative (claims).
Denominator	The denominator for this measure is based on ED visits, not on beneficiaries. The denominator includes ED visits with a principal diagnosis of mental illness or intentional self-harm on or between January 1 and December 1 of the measurement year where the beneficiary was 6 years or older on the date of the visit.



Numerator	 30-Day Follow-Up: A follow-up visit with any practitioner, with a principal diagnosis of a mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 30 days after the ED visit (31 total days). Include visits that occur on the date of the ED visit. 7-Day Follow-Up: A follow-up visit with any practitioner, with a principal diagnosis of a mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit.
Exclusions	 Exclude beneficiaries in hospice from the eligible population. Exclude ED visits that result in an inpatient stay and ED visits followed by an admission to an acute or nonacute inpatient care setting on the date of the ED visit or within the 30 days after the ED visit (31 total days), regardless of the principal diagnosis for the admission.
Continuous enrollment period	Date of the ED visit through 30 days after the ED visit (31 total days).
Level of reporting for which specifications were developed	State-level, plan-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	The specifications for this measure on the Adult Core Set are available at https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf .
Information on testing or use at state Medicaid/CHIP level	This measure is currently being reported as part of the Adult Core Set. For FFY 2019, 36 states reported the measure for the Adult Core Set.
Description of required data source and data elements, including any	The Workgroup member (WGM) indicated that they have no concerns about any issues that could affect the consistency of calculations of this measure.
barriers, limitations, or variations that could affect consistency of	Required data elements include enrollment data, date of service, mental illness and intentional self-harm diagnosis codes, place of service codes, ED visits, and treatment procedure codes.
calculations	Beginning with the FFY 2023 Core Set, this measure may be reported using the Fast Healthcare Interoperability Resource (FHIR) data model.



Actionability and Str	rategic Priority
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The WGM indicated that Medicaid is the single largest payer for mental health services in the United States. High numbers of ED visits are an issue for Medicaid beneficiaries.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM indicated that EDs are frequent sources of care for adolescents for behavioral health issues. Evidence suggests that follow-up care for people with mental illness is associated with fewer repeat ED visits. ¹
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	ED visits for mental health for children increased in light of COVID-19. ² The WGM indicated that children's mental health during the public health emergency can have both short- and long-term consequences to their overall health and well-being. They felt that this is an emerging issue and supports and services should be put in place for children on Medicaid.
How measure can be used to monitor improvement	NCQA benchmarks for all Medicaid managed care (all ages) show that 41 percent of all ED visits had a follow-up within 7 days and 56 percent had a follow-up within 30 days. ³ For FFY 2019 Adult Core Set reporting, states reported a median 7-day follow-up rate of 38.4 percent and a median 30-day follow-up rate of 52.1 percent for beneficiaries age 18 and older (36 states reporting). ⁴

Additional Information	Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	Eleven percent of the 27 million children in the U.S. have been diagnosed with mental illness ⁵ and nearly half of the children who qualify for Medicaid because of a disability have a behavioral health diagnosis. ⁶	
Use of measure in other CMS programs	 Adult Core Set Core Quality Measures Collaborative (CQMC) Behavioral Health Core Set Certified Community Behavioral Health Clinic Demonstration 	
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM indicated that sample size could be a barrier in some states, but that the sample size for this measure should be larger than the Follow-Up After Hospitalization for Mental Illness (FUH) measure, which most states are already reporting.	



- ¹ Bruffaerts, R..., Sabbe, M., Demyffenaere, K. (2005). Predicting Community Tenure in Patients with Recurrent Utilizations of a Psychiatric Emergency Service. General Hospital Psychiatry, 27, 269-74.
- ² https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a3.htm.
- ³ https://www.ncqa.org/hedis/measures/follow-up-after-emergency-department-visit-for-mental-illness/.
- ⁴ https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2020-adult-chartpack.pdf.

 https://www.medicaid.gov/medicaid/benefits/behavioral-health-services/children-and-youth/index.html.
- ⁶ https://www.nashp.org/wp-content/uploads/2018/07/Behavioral-Health-Fact-Sheet-w-links.pdf.

DENTAL AND ORAL HEALTH SERVICES



Measure Information	
Measure name	Oral Evaluation, Dental Services
Description	Percentage of enrolled children under age 21 who received a comprehensive or periodic oral evaluation within the reporting year.
Measure steward	American Dental Association (ADA) on behalf of the Dental Quality Alliance (DQA)
NQF number (if endorsed)	2517
Core Set domain	Dental and Oral Health Services
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	Percentage of Eligibles Who Received Preventive Dental Services (PDENT-CH)

Technical Specifications	
Ages	Less than age 21 as of the last day of the reporting year.
Data collection method	Administrative (enrollment and claims only).
Denominator	Unduplicated number of enrolled children under age 21.
Numerator	Unduplicated number of children who received a comprehensive or periodic oral evaluation as a dental service.
Exclusions	None.
Continuous enrollment period	180 days during the reporting year.
Level of reporting for which specifications were developed	Plan-level, state-level.



Minimum Technical Feasibility Criteria	
Link to current technical specifications	DQA Measure Technical Specifications: https://www.ada.org/~/media/ADA/DQA/2021_OralEvaluation.pdf?la=en
Information on testing or use at state Medicaid/CHIP level	The measure was tested with Medicaid and CHIP data from Texas and Florida, including data from fee-for-service and managed care delivery systems. The measure is currently used in Nebraska Medicaid and Florida Medicaid, for pay-for-performance in Texas Medicaid, and for Massachusetts Medicaid's Delivery System Reform Incentive payment program.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The measure requires administrative enrollment and claims data for a single year, without a lookback period. Data elements include beneficiary ID, birthdate, enrollment indicator, dental procedure codes (CDT codes), and NUCC Provider Taxonomy codes.

Actionability and Strategic Priority	
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The Workgroup member (WGM) suggested this measure as a replacement for the current measure of preventive care—Percentage of Eligibles Who Received Preventive Dental Services (PDENT-CH)—because PDENT-CH includes codes that would not indicate an evaluation of oral health.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM noted that good oral health not only impacts physical health, but also impacts individuals' self-esteem.
Evidence that measure could be used to monitor improvement and lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM noted that the measure can be used to trend access to care for oral health and provided a link to Texas's measure dashboard: https://thlcportal.com/measures/dental



Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The WGM stated that all children in Medicaid need an annual oral exam.
Use of measure in other CMS programs	No other programs were listed in CMS's Measure Inventory Tool or reported by the measure steward.
Potential barriers states could face in calculating measure and recommended technical assistance resources	No barriers were noted by the WGM.

 $^{{}^{1}\,\}underline{https://www.ada.org/\sim/media/ADA/DQA/FINALREPORT_FloridaTexasMedicaidCHIPPrograms.pdf?la=en.}$

https://hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2020/hb-1629-quality-measures-value-based-payments-dec-2020.pdf.
 https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-

Topics/Waivers/1115/downloads/ma/MassHealth/ma-masshealth-cms-apprvd-dsrip-protocol-10312018.pdf.



Measure Information	
Measure name	Prevention: Topical Fluoride for Children at Elevated Caries Risk
Description	Percentage of children ages 1 to 21 years who are at "elevated" risk (i.e., "moderate" or "high") who received at least 2 topical fluoride applications as (a) dental OR oral health services, (b) dental services, and (c) oral health services within the reporting year.
Measure steward	American Dental Association (ADA) on behalf of the Dental Quality Alliance (DQA)
NQF number (if endorsed)	2528 (only rate b [dental services] is NQF endorsed)
Core Set domain	Dental and Oral Health Services
Meaningful Measures area(s) of measure	Promote Effective Prevention and Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	Percentage of Eligibles Who Received Preventive Dental Services (PDENT-CH)

Technical Specifications	
Ages	Age 1 to 20 years as of the last day of the reporting year. The measure includes the following required age stratifications: 1–2; 3–5; 6–7; 8–9; 10–11; 12–14; 15–18; 19–20.
Data collection method	Administrative (enrollment and claims only)
Denominator	Unduplicated number of children age 1 to 21 years at "elevated" risk for dental caries (i.e. "moderate" or "high").
Numerator	Unduplicated number of children at "elevated" risk for dental caries (i.e., "moderate" or "high") who received at least 2 topical fluoride applications as (a) dental OR oral health services, (b) dental services, and (c) oral health services. The DQA Measures User Guide provides additional information on categorization of "dental" and "oral health" services.
Exclusions	None.
Continuous enrollment period	The measurement period with a gap of no more than 31 days.
Level of reporting for which specifications were developed	Plan-level, state-level.



Minimum Technical Feasibility Criteria	
Link to current technical specifications	Specifications are available separately for the three rates. • Dental OR oral health services: https://www.ada.org/~/media/ADA/DQA/2021_DorOHS_TopicalFl uoride.pdf?la=en • Dental services: https://www.ada.org/~/media/ADA/DQA/2021_DS_TopicalFluorid e.pdf?la=en • Oral health services: https://www.ada.org/~/media/ADA/DQA/2021_OHS_Fluoride.pdf? la=en
Information on testing or use at state Medicaid/CHIP level	The Workgroup member (WGM) noted that measure testing was conducted using data from Medicaid, CHIP, and commercial programs/plans. The measure was tested for the following Medicaid and CHIP programs: Texas Medicaid and CHIP programs and Florida Medicaid and CHIP programs. The measure is currently in use by Texas Medicaid and Florida Medicaid and CHIP.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	Administrative enrollment and claims data are required (including both dental and medical claims). Data elements include: beneficiary ID, birthdate, enrollment indicator, dental procedure codes (CDT codes), date of service, and National Uniform Claim Committee (NUCC) provider taxonomy codes. The WGM noted that all data elements are standard data elements required for billing and reimbursement. Elevated risk determination includes looking back three years prior to the measurement year; data availability may vary by state and beneficiary. The specifications allow use of state-specific service codes for fluoride.

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM proposed this measure to replace the existing PDENT measure in the current Child Core Set. They noted that dental caries is the most common chronic disease in children in the U.S., affecting almost half of all children. Untreated caries can lead to pain, infection, school absences, and difficulty eating and speaking. Professionally applied topical fluoride has demonstrated effectiveness in reducing caries among children at elevated caries risk, thereby improving oral health, overall health, and overall well-being. This measure, which complements the existing Child Core Set sealant measure, allows Medicaid and CHIP programs to assess whether children at elevated risk for caries are receiving evidence-based preventive services and to target performance improvement initiatives accordingly.



	The WGM suggested that the proposed measure improves upon the existing PDENT measure by focusing on one of two interventions with the strongest evidence base for reducing the prevalence and severity of dental caries (dental sealants is the other intervention with the strongest evidence base). PDENT reports on whether a child has received at least one "preventive" dental service during the reporting period, using a very broad definition of preventive services without delineating those with stronger versus weaker evidence for prevention of oral diseases. The WGM noted that the measure includes options (with guidance in a companion User Guide) for stratification by patient characteristics including age, sex, race, ethnicity and geographic location.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	CDC reports that for 2015–2016, the prevalence (untreated and treated) dental caries in primary or permanent teeth among 2–19 year olds was 45.8 percent.² The WGM noted that disparities in the prevalence of caries and untreated caries are well-documented and significant. The disparities are related to social determinants and demographic characteristics such as race, ethnicity, income, and insurance coverage. For example, 39 percent of non-Hispanic whites have caries compared with 52 percent of Hispanic children. Roughly 33 percent of children with a household income greater than 300 percent of the federal poverty level experience caries compared with 51.8 percent of children with household income below the federal poverty level.³ These population groups are disproportionately represented among Medicaid and CHIP beneficiaries. The WGM noted that this measure allows states to assess if eligible Medicaid and CHIP beneficiaries are receiving evidence-based preventive services either as a dental service (provided by or under the supervision of a dentist) or as an oral health service (not provided by or under the supervision of a dentist, e.g., by a primary care provider or dental hygienist working in a community setting). Children, particularly young children, may receive topical fluoride application from "nondental" providers, such as medical primary care providers. Delineating the measure by "dental" and "oral health" helps programs and health care systems to understand the role of "non-dental" providers and at what age children appear to be establishing care with dental providers.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM noted that the measure is grounded in evidence-based clinical recommendations for professionally applied topical fluoride, an intervention that has demonstrated effectiveness in reducing caries prevalence and severity among children at elevated caries risk, thereby improving oral health, overall health, and overall well-being. ⁴
How measure can be used to monitor improvement	The WGM suggested that this measure can be used to monitor improvement and can be trended over time to assess Medicaid and CHIP programs, based on DQA's initial testing of the measure.



The WGM also noted that testing data indicated a clear opportunity for improvement. In examining two state Medicaid programs, only 18 percent of children at elevated caries risk in one program and 38 percent in the other program had received at least two topical fluoride applications during the year. Finally, the WGM indicated that state Medicaid and CHIP programs can directly influence improvement on this measure. The most effective improvement strategies for a given Medicaid/CHIP program will vary. However, a range of strategies can be used to improve topical fluoride application including:

- Integrating oral health into overall primary care.
- Establishing bi-directional referral and follow-up between medical and dental providers.
- Sharing reports with providers that demonstrate the oral health status of their members and preventive care that they have received.
- Educating dentists and their teams on evidence-based guidelines.
- Developing oral health toolkits for providers.
- Providing incentives/bonuses to providers for improvement.
- Assisting members with making and keeping dental appointments.
- Educating families about their dental benefits and the importance of oral health care.

Additional Information for Consideration

Prevalence of condition	
being measured among	
Medicaid and CHIP	
beneficiaries	

CDC found that for 2015–2016, the prevalence of total dental caries (untreated and treated) in primary or permanent teeth among 2–19 years was 45.8 percent.⁵ Prevalence of tooth decay is higher among low-income children, who are likely to be enrolled in Medicaid and CHIP. In the period 2011–2016, 2–11 year olds in households with incomes less than 100 percent of the Federal Poverty Level (FPL) were twice as likely to experience tooth decay than children in households with income over 200 percent FPL.⁶

This measure applies to children ages 1–21; consequently, the denominator for this measure will be sufficiently large to produce reliable and meaningful results across states. This measure allows Medicaid and CHIP programs to assess whether children at risk for caries are receiving evidence-based preventive services and target performance improvement initiatives accordingly.

Use of measure in other CMS programs

No other programs were listed in CMS's Measure Inventory Tool or reported by the measure steward.

Potential barriers states could face in calculating measure and recommended technical assistance resources

The WGM noted that feasibility assessments were conducted as part of the overall testing of this measure and no potential issues were found to be barriers to calculating this measure. DQA has developed a user guide to assist with implementation of this measure.⁷



Other	DQA indicated that changes to the measure are under consideration for measurement year 2021. The proposed changes would expand the measure denominator beyond those at elevated risk to include all enrolled children who meet the continuous eligibility criteria during the measurement period. The measure would include an optional risk stratification. The proposed changes would eliminate the need for a three-year lookback unless the optional risk stratification is implemented.
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¹ https://www.nationaloralhealthconference.com/docs/presentations/2013/04-21/Jill%20Boylston%20Herndon.pdf; https://pubmed.ncbi.nlm.nih.gov/26227643/.

² https://www.cdc.gov/nchs/products/databriefs/db307.htm.

³ https://www.cdc.gov/nchs/data/databriefs/db307.pdf.

⁴ https://jada.ada.org/article/S0002-8177%2814%2960659-0/fulltext?dgcid=PromoSpots_EBDsite_topical-fluoride. 5 https://www.cdc.gov/nchs/products/databriefs/db307.htm.

⁶ https://www.medicaid.gov/federal-policy-guidance/downloads/cib062520.pdf.

⁷ https://www.ada.org/~/media/ADA/DQA/2021 DQA%20PedsUG.pdf?la=en.



Measure Information	
Measure name	Ambulatory Care Sensitive Emergency Department Visits for Non-Traumatic Dental Conditions in Adults
Description	Number of emergency department (ED) visits for ambulatory care sensitive non-traumatic dental conditions per 100,000 beneficiary months for adults.
Measure steward	American Dental Association (ADA) on behalf of the Dental Quality Alliance (DQA)
NQF number (if endorsed)	Not endorsed
Core Set domain	Dental and Oral Health Services
Meaningful Measures area(s) of measure	Make Care Affordable
Measure type	Outcome
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 18 and older.
Data collection method	Administrative (enrollment and medical claims).
Denominator	All beneficiary months for individuals 18 years and older during the reporting year.
Numerator	Number of ED visits with an ambulatory care sensitive non-traumatic dental condition diagnosis code among individuals 18 years and older.
Exclusions	 Exclude the following: Ambulatory care sensitive ED visits for non-traumatic dental conditions resulting in inpatient admission within 48 hours of the ED visit. All beneficiary months (and associated claims in those months) in which an individual was eligible for both Medicare and Medicaid (i.e., "dual eligible").
Continuous enrollment period	None.
Level of reporting for which specifications were developed	State-level.



Minimum Technical	Feasibility Criteria
Link to current technical specifications	Dental Quality Alliance technical specifications: https://www.ada.org/~/media/ADA/DQA/2021_AmbulatoryCareSensitiv eEmergencyDepartmentVisitsforNonTraumaticDentalConditionsinAdults .pdf?la=en
Information on testing or use at state Medicaid/CHIP level	The Workgroup member (WGM) identified that measure testing was conducted using data from the Oregon and Iowa Medicaid programs using data from calendar years 2014–2016. Testing also included data element validation through chart reviews. Feasibility was assessed by (1) evaluating availability of critical data elements; (2) evaluating the calculation logic for complexity and reporting burden; (3) implementing the calculation logic to report measure scores; and (4) soliciting stakeholder feedback through public comment periods. The measure steward found that the measure could be calculated using Oregon and Iowa Medicaid administrative data and did not receive stakeholder feedback regarding concerns with feasibility. Measure reliability and validity also were established as part of measure testing. This measure is currently in use in Oregon Medicaid and Florida Medicaid. Delaware is currently using this measure to assess dental benefit administration for adults in the state.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	Administrative enrollment and medical claims data are required. Data elements include: beneficiary ID, birthdate, enrollment indicator, Medicare-Medicaid dual eligibility indicator, date of service, medical procedure codes (CPT/HCPCS), facility revenue codes, CMS place of service codes, admission date, ICD-10 diagnosis codes, and facility UB type of bill. The WGM noted that all data elements are standard administrative claims data elements. The WGM noted that dental benefits for adults in Medicaid programs vary across states. This may lead to variation in state performance on the measure, but should not result in any inconsistencies in calculations, given that dental claims are not required to calculate this measure.

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status The WGM indicated that this measure would address a significant gap in the Adult Core Set in that there are currently no measures related to oral health care. This measure would serve as a broad indicator of the performance of state Medicaid programs with respect to their impact on minimizing acute dental conditions in adults. This measure allows states to evaluate how the scope of their dental benefits coverage (or lack thereof) may be affecting oral health care outcomes (with potential implications for systemic health) and program-wide resource use. This measure is applicable to adults of all ages.



	The WGM stated that there is a growing body of research indicating important connections between oral health and overall systemic health. Significant disparities in oral health related to social determinants and demographic characteristics (e.g., race/ethnicity, income, insurance coverage) also have been documented. Poor oral health not only imposes additional disease burden on individuals, but also results in additional societal and Medicaid program costs (including costs related to medical care and hospital admissions when dental problems are not dealt with in a more cost-effective manner in community dental practices or clinics). Reductions in ED use for dental problems in adults also may help reduce the number of adults receiving prescriptions for opioids.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM noted that ED use for non-traumatic dental conditions (NTDC) has been a growing public health concern across the United States with over two million visits and an average charge per visit of \$994 for adults. ² Medicaid is a primary payer for these visits. Nationally, NTDC ED visits exceeded the growth rate for ED visits overall and for non-dental ambulatory care sensitive conditions. ³ State-level studies also report an increase in the trend of dental-related ED visits. ⁴ NTDC visits are largely preventable through primary prevention, early identification of disease, and disease management in primary dental care outpatient settings. Moreover, care in the ED is not definitive, necessitating a follow-up visit with a dental provider for definitive resolution of the underlying problem. Consequently, this measure serves as a tested indicator of access to effective and timely outpatient oral health care.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM cited a study of a community-based intervention in Michigan that provided oral health education and dental services (including screenings, diagnostic services, and treatment) to uninsured adults, which decreased the number of patients going to the local ED for dental pain by 70 percent over a six-year period. Additionally, implementation of a community dental access program in rural Maryland was associated with a decrease in ED visits and was estimated to avert 670 ED visits over a four-year period. Another Maryland study highlighted the value of reducing adult dental ED visits on cost savings and opioid use. The WGM stated that this measure provides an important resource for efforts to promote standardized measurement of dental-related ED visits and for state Medicaid programs to drive improvements focused on
How measure can be used to monitor improvement	assuring better access to timely, effective, and cost-effective ambulatory care and reductions in ED use for NTDC. The WGM noted that the most effective improvement strategies for a given Medicaid program will vary. However, there are a range of strategies that can be used to improve access to care and reduce NTDC dental visits. Examples include developing an ED referral program, establishing community dental health coordinator programs, improving dental provider participation in Medicaid, and improving medical-dental collaboration and care coordination. ⁸



Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	 According to the WGM, state and national estimates indicate that dental-related ED visits account for about 2 percent of total ED visits.⁹ Kelekar et al. (2019) estimated that there are 761 dental-related visits per 100,000 people or 1.76 percent of all ED visits nationally. Medicaid is a primary payer of dental-related ED visits.¹⁰ A study of Oregon's All Payer All Claims database found that dental-related visits accounted for 2.5 percent of all ED visits and were the second most common diagnosis in adults ages 20 to 39.¹¹ Maryland Medicaid estimated that the rate of dental-related ED visits among adult Medicaid enrollees in FY 2016 was 321 per 10,000 Medicaid eligibles. An analysis of frequent ED users in the New Hampshire Medicaid program found that "disorders of the teeth and jaw" was the leading subcategory of ED visits among low-income adult frequent ED users (4 or more ED visits/year), representing 12 percent among this group. A Maryland study also showed high use of EDs for dental problems among frequent ED users.¹²
Use of measure in other CMS programs	No other programs were listed in CMS's Measure Inventory Tool or reported by the measure steward.
Potential barriers states could face in calculating	This measure relies on standard data elements contained in administrative enrollment and claims data. Measure steward testing demonstrated

feasibility of this measure. DQA has developed a user guide and

programming code to assist with implementation of this measure. 13

Citations

measure and

recommended technical assistance resources

https://familiesusa.org/wp-

content/uploads/2019/09/Health Action 2018 Keys to Oral Health Coverage Dr Natalia Chalmers.pdf.

https://www.ncbi.nlm.nih.gov/pubmed/30922460; https://www.ncbi.nlm.nih.gov/pubmed/27103213; https://pubmed.ncbi.nlm.nih.gov/25790415/.

¹ Information on adult dental benefits offered by state Medicaid programs is available at: https://www.chcs.org/media/Medicaid-Adult-Dental-Benefits-Overview-Appendix 091519.pdf.

² https://jada.ada.org/article/S0002-8177(18)30800-6/abstract.

³ https://www.ncbi.nlm.nih.gov/pubmed/23674919.

⁴ https://www.ncbi.nlm.nih.gov/pubmed/31774203; https://www.ncbi.nlm.nih.gov/pubmed/27515432; https://www.ncbi.nlm.nih.gov/pubmed/29346000.

⁵ https://www.healthaffairs.org/doi/10.1377/hlthaff.2013.0159.

⁶ https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2016.303467?journalCode=ajph.

⁷ https://familiesusa.org/wp-

content/uploads/2019/09/Health Action 2018 Keys to Oral Health Coverage Dr Natalia Chalmers.pdf.

https://www.ada.org/en/public-programs/action-for-dental-health/10-step-plans-to-improve-oral-health; https://www.healthaffairs.org/doi/10.1377/hlthaff.2013.0159;

https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2016.303467?journalCode=ajph;

¹⁰ https://pubmed.ncbi.nlm.nih.gov/30922460/.

¹¹ https://pubmed.ncbi.nlm.nih.gov/25790415/.

¹² https://familiesusa.org/wp-

content/uploads/2019/09/Health_Action_2018_Keys_to_Oral_Health_Coverage_Dr_Natalia_Chalmers.pdf. https://www.ada.org/~/media/ADA/DQA/2021_AdultsUG.pdf?la=en.

LONG-TERM SERVICES AND SUPPORTS



Measure Information			
Measure name	Long-Term Services and Supports Comprehensive Care Plan and Update		
Description	The percentage of long-term services and supports (LTSS) organization members 18 years of age and older who have documentation of a comprehensive LTSS care plan in a specified time frame that includes core elements. The following rates are reported:		
	 Care Plan with Core Elements Documented: Members who had a comprehensive LTSS care plan with nine core elements documented within 120 days of enrollment (for new members) or during the measurement year (for established members). Care Plan with Supplemental Elements Documented: Members who had a comprehensive LTSS care plan with nine core elements and at least four supplemental elements documented within 120 days of enrollment (for new members) or during the measurement year (for established members). 		
Measure steward	National Committee for Quality Assurance (NCQA)		
NQF number (if endorsed)	Not endorsed		
Core Set domain	Long-Term Services and Supports		
Meaningful Measures area(s) of measure	Strengthen Person & Family Engagement as Partners in their Care		
Measure type	Process		
Recommended to replace current measure?	No		

Technical Specifications		
Ages	Age 18 and older as of December 31 of the measurement year.	
Data collection method	Case management record review.	
Denominator	Members who are enrolled in the LTSS benefit (coverage or coordination of home and community- or institution-based LTSS) and require the use of LTSS services. This measure is based on review of LTSS case management records drawn from a systematic sample of the eligible population. The minimum required sample size is 96 members identified using a systematic sampling methodology.	
Numerator	The measure reports two numerators. • Care Plan with Core Elements Documented: The number of LTSS members who had either of the following:	



- For new members: A comprehensive LTSS care plan completed within 120 days of enrollment, with nine core elements documented.
- If the comprehensive care plan is developed as part of the process to determine eligibility for the LTSS benefit and occurs within 30 days prior to the enrollment start date, it may be counted toward the measure if the care plans meets the rest of the numerator criteria.
- For established members: A comprehensive LTSS care plan completed during the measurement year with nine core elements documented.
- Care Plan with Supplemental Elements Documented: The number of LTSS members who had either of the following:
 - For new members: A comprehensive LTSS care plan completed within 120 days of enrollment with nine core elements and at least four supplemental elements documented.
 - If the comprehensive care plan is developed as part of the process to determine eligibility for the LTSS benefit and occurs within 30 days prior to the enrollment start date, it may be counted toward the measure if the care plans meets the rest of the numerator criteria.
 - For established members: A comprehensive LTSS care plan created during the measurement year with nine core elements and at least four supplemental elements documented.

The care plan must be discussed during a face-to-face, telephone, or video conference encounter between the care manager and the member.

Core elements of the care plan include:

- 1. At least one individualized member goal (medical or nonmedical outcome important to the beneficiary).
- 2. A plan of care to meet the member's medical needs.
- 3. A plan of care to meet the member's functional needs.
- 4. A plan of care to meet the member's needs due to cognitive impairment.
- 5. A list of all LTSS services and supports the member receives, or is expected to receive in the next month, in the home or in other settings, including the amount and frequency.
- 6. A plan for the care manager to follow up and communicate with the member.
- 7. A plan to ensure that the member's needs are met in an emergency.
- 8. Family/friend caregivers who were involved in the documentation of the care plan, and their contact information.
- 9. Member or member representative agreement to or appeal of the completed care plan.

Supplemental elements of the care plan include:

- 1. A plan of care to meet the member's mental health needs.
- 2. A plan of care to meet the member's social or community integration needs.



	 The duration of all LTSS the member receives or is expected to receive in the next month, in the home or in other settings, or the date when services will be reassessed. Contact information for the member's LTSS providers. A plan to assess the member's progress toward meeting established goals, including a time frame for reassessment and follow-up. Barriers to meeting defined goals. The member's first point of contact. Contact information for the member's primary care practitioner (PCP), or a plan for connecting the member to the PCP if the beneficiary does not currently have one.
Exclusions	 New members who could not be contacted to create an LTSS comprehensive care plan within 120 days of enrollment or established members who could not be contacted to create an LTSS comprehensive care plan during the measurement year. There must be documentation in the case management record that at least three attempts were made to contact the member, the date and mode of each contact (e.g., telephone call, letter) and that the member could not be reached. Members with partial care plans cannot be classified as could not be contacted for care plan. Members who refused a LTSS comprehensive care plan. There must be documentation in the case management record that the member was contacted and refused the care plan, and the date of the refusal. Members with partial care plans cannot be classified as refused care plan.
Continuous enrollment period	Enrollment in the LTSS organization for at least 150 days between August 1 of the year prior to the measurement year and December 31 of the measurement year. For members with multiple distinct continuous enrollment periods during the measurement year, look at the care plan completed in the last continuous enrollment period of 150 days or more during the measurement year.
Level of reporting for which specifications were developed	Medicaid managed LTSS plan-level and LTSS case management organizational-level. Any type of organization that provides or coordinates Medicaid-covered LTSS is eligible to report the measure.



Minimum Technical	Feasibility Criteria
Link to current technical specifications	Specifications are available in the HEDIS LTSS Volume free of charge at: https://store.ncqa.org/hedis-my-2020-technical-specifications-forlong-term-services-and-supports-measures-epub.html.
Information on testing or use at state Medicaid/CHIP level	This measure is currently in use in several states, including Pennsylvania and Florida. While it is not typically reported at the state level, the Workgroup member (WGM) noted that several other HEDIS measures, intended for health plans, have been adapted to report at the state level and are included in the Core Set. In addition, the WGM indicated that this measure has already been specified for "LTSS Organizations" to include entities other than health plans who provide care management for LTSS beneficiaries.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The WGM indicated that as this is a relatively new measure, technical assistance may be needed to ensure that data are collected consistently by LTSS entities within and across states. While there are variations in LTSS populations and benefits across states, the WGM noted that this would be a concern for nearly any measure of Medicaid LTSS program quality. The WGM indicated that the presence of a care plan and the core care plan elements should be standard across all LTSS programs and populations.

Actionability and Strategic Priority

Actionability and Str	ategic Filolity
How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status	The WGM indicated that currently there are no LTSS measures on the Core Set that measure quality of care management. The development of a holistic care plan, with input from the beneficiary's chosen circle of support, is essential to any quality LTSS program, regardless of whether it is delivered by managed care, the state, or another entity/designee. Assuming the availability of accurate data on race/ethnicity, the WGM noted that this measure could potentially be broken down to assess disparities in access to high-quality LTSS care planning and services.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	LTSS is a priority area, as it comprises 32 percent of all Medicaid spending. It has been cited as a gap area by the 2020 and 2021 Core Set Review Workgroups. The WGM indicated that this measure addresses whether beneficiaries are engaged in a care planning process that incorporates person-centered principles and looks at all of their needs, including physical, behavioral, functional, and social.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	Tavares et. al. (2021) found that that there is a major gap in access to person-centered care. The WGM member noted that inclusion of this measure could help to bring transparency and close such a gap.



How measure can be used to monitor improvement	The WGM indicated that there is significant room for improvement on this measure and it could be trended over time. States could use it to compare quality across their LTSS organizations, as a basis for contracting decisions, quality improvement initiatives, and potentially
	value-based payment.

Additional Information	Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	In federal fiscal year 2018, the share of LTSS out of total Medicaid expenditures was 32 percent. ² The WGM indicated that this measure is universal to the population of adults receiving LTSS benefits.	
Use of measure in other CMS programs	A similar version of the measure is included in CMS's Request for Information (RFI) for a Recommended Measure Set for Medicaid-Funded Home and Community-Based Services. ³ NCQA adapted the CMS version of the measure for inclusion in HEDIS.	
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM indicated that as the measure is relatively new, technical assistance could be needed both to ensure consistency of measurement and to help states aggregate data across plans and other entities to report at the state level.	

https://www.healthinnovation.org/resources/publications/body/Person-Centered-Care-Report_Jan-2021.pdf.
https://www.medicaid.gov/medicaid/long-term-services-supports/downloads/ltssexpenditures-2017-2018.pdf.

³ https://www.medicaid.gov/medicaid/quality-of-care/downloads/rfi-hcbs-recommended-measure-set.pdf.

MEASURES	THAT WILL	NOT BE RE	EVIEWED	



Measure Information		
Measure name	Prediabetes: Screening for Abnormal Blood Glucose	
Description	Percentage of patients aged 40 years and older with a BMI greater than or equal to 25 who are seen for at least two office visits or at least one preventive visit during the 12-month period who were screened for abnormal blood glucose at least once in the last three years.	
Measure steward	American Medical Association (AMA)	
NQF number (if endorsed)	Not endorsed	
Core Set domain	Primary Care Access and Preventive Care	
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease	
Measure type	Process	
Recommended to replace current measure?	No	

Technical Specifications		
Ages	Age 43 and older.	
Data collection method	Electronic health records (EHR).	
Denominator	All patients aged 43 years and older with a BMI greater than or equal to 25 seen for at least two office visits or at least one preventive visit during the 12-month measurement period.	
Numerator	Patients with screening for abnormal blood glucose in the last three years. Screening for abnormal blood glucose may include using a fasting plasma glucose, 2-h plasma glucose during a 75g oral glucose tolerance test, or A1C.	
Exclusions	 Exclude beneficiaries who meet any of the following: Patient is pregnant at encounter. Patient has active diabetes diagnosis at encounter. Hospice during measurement period. Palliative care during measurement period. Comfort measures during measurement period. 	
Continuous enrollment period	Not specified.	
Level of reporting for which specifications were developed	Provider-level.	



Minimum Technical	Feasibility Criteria
Link to current technical specifications	Current measure specifications are available at: http://www.qualityforum.org/ProjectMeasures.aspx?projectID=86088&cycleNo=1&cycleYear=2020
Information on testing or use at state Medicaid/CHIP level	Neither the Workgroup member (WGM) who suggested the measure nor the measure steward was aware of any states using the measure. The WGM noted that several state Medicaid programs cover screening for people at risk for prediabetes, which would facilitate implementation and use of this measure at the state level.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The WGM noted that this electronic clinical quality measure is specified using the Health Quality Measure Format and value sets. This measure has been tested for feasibility and data element validity within two EHR systems. The majority of data elements were found to be feasible to collect with the exception of fasting plasma glucose lab test and comfort measures. Validity testing showed that even with these data availability limitations, the measure produced kappa statistics with moderate to perfect strength of agreement. The WGM indicated that several health systems are in the process of implementing this measure.

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM noted that this measure is critical to identifying patients with prediabetes who are not screened, thus missing potential cases that progress to type 2 diabetes. The WGM indicated that this measure is part of a set that represents the first measurement set in the U.S. intended to prevent type 2 diabetes. This electronic clinical quality measure is specified to enable the reporting of performance scores by payer, race, ethnicity, and sex.

The WGM noted that 88 million Americans have prediabetes, and 85 percent of patients with prediabetes are unaware that they have this condition. The WGM noted that prevention of progression from prediabetes to type 2 diabetes is possible when systematic screening for abnormal glucose (e.g., prediabetes) is combined with referral to evidence-based effective interventions like the National Diabetes Prevention Program (National DPP) lifestyle change program (commonly referred to as the Diabetes Prevention Program or DPP). Multiple clinical guidelines, including those from the United States Preventive Services Task Force (USPSTF) and the American Diabetes Association (ADA), recommend regular systematic screening for abnormal glucose among at-risk adults. The WGM indicated that this quality measure was modeled after the USPSTF recommendation.



How measure addresses
the unique and complex
needs of Medicaid and
CHIP beneficiaries and
promotes effective care
delivery

One study using South Carolina's Medicaid claims data found that the progression to type 2 diabetes increased total health care costs by 22.1 percent, 39.1 percent, and 47.6 percent during the first three years after diagnosis of type 2 diabetes, after adjusting for demographic and comorbid conditions.¹

However, diabetes prevention interventions are associated with significant cost savings. For example, for every beneficiary engaged in the Medicare Diabetes Prevention Program, at 15 months, cost savings are at least \$2,650 per person. The WGM noted that 17 state Medicaid agencies have approved coverage for the National DPP lifestyle change program and are in various stages of operationalizing and implementing that coverage. According to the WGM, screening for prediabetes and identifying patients before they progress to type 2 diabetes is the first step to enabling beneficiaries to utilize diabetes prevention initiatives.

The WGM indicated that this measure was designed with flexibility to accommodate the needs of multiple populations, including Medicaid beneficiaries. The measure numerator can be met by conducting one of three different laboratory tests: a fasting plasma glucose, a hemoglobin A1c, or a two-hour glucose tolerance test. These three test options are consistent with current clinical guidelines (e.g., USPSTF and ADA). The WGM explained that the three test options provide flexibility for people on Medicaid to access the test that is covered or available at minimal cost through their health insurance plan.

Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries

The WGM indicated that this measure is based on existing guideline recommendations. The USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults ages 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity. Testing for prediabetes and risk for future diabetes in asymptomatic people should be considered in adults of any age who are overweight or obese (BMI \geq 25kg/m2 or \geq 23kg/m2 in Asian Americans) and who have one or more additional risk factors for diabetes.

How measure can be used to monitor improvement

The WGM suggested that screening patients for prediabetes does not occur as often as it should. In a nationally representative sample of patients from the National Health and Nutrition Examination Survey (NHANES) from 2005-2012, only 45 percent of those who met screening criteria were actually screened.⁴

Additionally, survey data show that while primary care physicians are aware of the guidelines that support screening for prediabetes, there is a disconnect between this knowledge and actual practice. ^{5,6}



Additional	Information	for Consideration
Additional	Intormation	i for Consideration

Prevalence of condition
being measured among
Medicaid and CHIP
beneficiaries

The WGM noted that Medicaid beneficiaries are diagnosed with diabetes at a higher rate than other low income adults. Among nonelderly adults with incomes at or below 138 percent of poverty, Medicaid beneficiaries were nearly twice as likely as the uninsured (nine percent versus five percent) to have diabetes.⁷ The prevalence of abnormal glucose among Medicaid beneficiaries is not reported by the CDC; however, one study estimated that 47.2 percent of Medicaid beneficiaries had undiagnosed prediabetes or diabetes.⁸

The WGM noted that health care costs are higher for adult Medicaid beneficiaries with diabetes than for those without diabetes. The average annual cost for adult Medicaid beneficiaries with diabetes is \$13,490 compared to \$5,133 for Medicaid beneficiaries without diabetes. This includes the costs for all services, and the total reflects the substantial health care needs and high comorbidity rate among this population.⁹

Use of measure in other CMS programs

No other programs were listed in CMS's Measure Inventory Tool. However, the WGM noted that this measure is being considered for use in Maryland's Primary Care Program, which is part of the state's Total Cost of Care Center for Medicare and Medicaid Innovation model.

Potential barriers states could face in calculating measure and recommended technical assistance resources

The WGM noted that the potential barriers for this measure are similar to those encountered with any electronic clinical quality measure included in the Core Set and include:

- Use of the measure would be limited to sites documenting clinical information in electronic health record systems.
- Workflow modifications or changes to electronic health record system may be necessary to calculate the measure. For example, some electronic health record systems are modifying their base platform to accommodate clinical workflows including prediabetes identification and treatment.
- Missing data or ambiguous information stored in a provider's
 electronic health record system could lead to calculation errors and
 low performance on the measure. However, parallel forms validity
 testing in two EHR systems revealed good validity of the measure.
- Aggregating clinic/provider data from multiple EHRs and reporting the information to state Medicaid programs may require additional guidance and resources. Many of the electronic health record systems have reporting data that could be standardized to provide states with the aggregated data.

The measure steward is committed to working with any interested group, including state Medicaid programs, to ensure that this measure is feasible to collect and report at all measurement levels and is willing to work with others to develop and maintain any technical assistance or guidance that may be needed.



- ¹ https://pubmed.ncbi.nlm.nih.gov/28230458/.
- ² B recommendation, U.S. Preventive Services Taskforce, 2015.
- ³ Table 2.3, American Diabetes Association. Standards of medical care in diabetes—2018. Diabetes Care. 2018. (41) Supplement 1. Available at: http://care.diabetesjournals.org.
- ⁴ Kiefer MM, Silverman JB, Young BA, Nelson KM. National patterns in diabetes screening: data from the National Health and Nutrition Examination Survey (NHANES) 2005-2012. *J Gen Intern Med.* 2015 May;30(5):612-8. doi: 10.1007/s11606-014-3147-8. Epub 2014 Dec 23. PMID: 25533392; PMCID: PMC4395592.
- ⁵ Tseng E, Greer RC, O'Rourke P, Yeh HC, McGuire MM, Albright AL, Marsteller JA, Clark JM, Maruthur NM. National Survey of Primary Care Physicians' Knowledge, Practices, and Perceptions of Prediabetes. *J Gen Intern Med.* 2019 Nov;34(11):2475-2481. doi: 10.1007/s11606-019-05245-7. Epub 2019 Sep 9. PMID: 31502095; PMCID: PMC6848700.
- ⁶ Mehta S, Mocarski M, Wisniewski T, Gillepsie K, Narayan Venkat KM, Lang K. Primary care physician's utilization of type 2 diabetes screening guidelines and referrals to behavioral interventions: a survey-linked retrospective study. *BMJ Open Diab Res Care*. 2017;5:e000406. Doi:10.1136/bmjdrc-2017-000406.
- ⁷ The Role of Medicaid for People with Diabetes. (2012). Retrieved July 17, 2017, from Kaiser Commission on Medicaid and the Uninsured: https://www.kff.org/wp-content/uploads/2013/01/8383_d.pdf.
- ⁸ Mahoney S, Bradley A, Pitts L, Waletzko S, Robinson-Lane SG, Fairchild T, Terbizan DJ, McGrath R. Health Insurance Is Associated with Decreased Odds for Undiagnosed Prediabetes and Type 2 Diabetes in American Adults. *Int J Environ Res Public Health*. 2020 Jun 30;17(13):4706. doi: 10.3390/ijerph17134706. PMID: 32629937; PMCID: PMC7369944.
- ⁹ The Role of Medicaid for People with Diabetes. (2012).



Measure Information	
Measure name	Intervention for Prediabetes
Description	Percentage of patients aged 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period who were provided an intervention.
Measure steward	American Medical Association (AMA)
NQF number (if endorsed)	Not endorsed
Core Set domain	Primary Care Access and Preventive Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 18 and older.
Data collection method	Electronic health records (EHR).
Denominator	All patients age 18 years and older with identified abnormal lab result in the range of prediabetes during the 12-month measurement period.
	Abnormal lab result in the range of prediabetes includes a fasting plasma glucose level between 100 mg/dL (5.6 mmol/L) to 125
	mg/dL (6.9 mmol/L) OR a 2-hour glucose during a 75g oral glucose tolerance test between 140 mg/dL (7.8 mmol/L) to 199 mg/dL
	(11.0 mmol/L) OR and A1C between 5.7-6.4 percent (39-47 mmol/mol).
Numerator	Patients who were provided an intervention.
	Intervention must include one of the following: referral to a CDC-recognized diabetes prevention program (DPP); referral to medical
	nutrition therapy with a registered dietician; prescription of metformin.
Exclusions	Exclude beneficiaries who meet any of the following criteria:
	 Patient is pregnant. Patient has any existing diagnosis of diabetes (Type 1, Type 2, latent autoimmune diabetes of adults [LADA], monogenic diabetes [MODY]).
Continuous enrollment period	Not specified.



Level of reporting for
which specifications
were developed

Provider-level.

Minimum Technical	Minimum Technical Feasibility Criteria	
Link to current technical specifications	Current measure specifications are available at: http://www.qualityforum.org/ProjectMeasures.aspx?projectID=86088&cycleNo=1&cycleYear=2020	
Information on testing or use at state Medicaid/CHIP level	Neither the Workgroup member (WGM) who suggested the measure nor the measure steward were aware of any states testing or using the measure. The WGM noted that several state Medicaid programs cover screening for people at risk for prediabetes, which would facilitate implementation and use of this measure at the state level.	
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The WGM noted that this electronic clinical quality measure is specified using the Health Quality Measure Format and value sets. To date, this measure has been tested for feasibility and data element validity within two EHR systems and for measure score reliability across one practice with more than 350 clinicians. The majority of data elements were found to be feasible to collect except for fasting plasma glucose lab test and referrals to a diabetes prevention program or dietitian. Validity testing showed that even with these data availability limitations, the measure produced kappa statistics with moderate to perfect strength of agreement. Minimum and maximum reliability rates were 0.34 (case minimum of 10 events) to 0.84 (case minimum of 100 events). Note that this measure is the only one of the three prediabetes measures suggested by the WGM that has undergone reliability testing. The WGM indicated that several health systems are in the process of implementing this measure.	

Actionability and Strategic Priority

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM noted that this measure is critical to promoting the use of effective evidence-based interventions to prevent type 2 diabetes among patients with prediabetes. The WGM indicated that this measure is part of a set that represents the first measurement set in the U.S. intended to prevent type 2 diabetes. This electronic clinical quality measure is specified to enable the reporting of performance scores by payer, race, ethnicity, and sex.



The WGM noted that 88 million Americans have prediabetes, and 85 percent of patients with prediabetes are unaware that they have this condition. The WGM noted that prevention of progression from prediabetes to type 2 diabetes is possible when systematic screening for abnormal glucose (e.g., prediabetes) is combined with referral to evidence-based interventions like the National Diabetes Prevention Program (National DPP) lifestyle change program, medical nutrition therapy, or use of the medication metformin. The WGM indicated that implementing this measure to increase screening and identifying patients with prediabetes can help close significant gaps in care among Medicaid beneficiaries and improve health outcomes for patients by preventing the progression to type 2 diabetes.

How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery

One study using South Carolina's Medicaid claims data found that 30 percent of people with prediabetes progressed to type 2 diabetes within three years. The progression to type 2 diabetes increased total health care costs by 22.1 percent, 39.1 percent, and 47.6 percent during the first three years after diagnosis of type 2 diabetes, after adjusting for demographic and comorbid conditions.¹

However, diabetes prevention interventions are associated with significant cost savings. For example, for every beneficiary engaged in the Medicare Diabetes Prevention Program, at 15 months, costs savings are at least \$2,650 per person. The WGM noted that 17 state Medicaid agencies have approved coverage for the National DPP lifestyle change program and are in various stages of operationalizing and implementing that coverage.

The WGM indicated that this measure was designed with flexibility to accommodate the needs of multiple populations, including Medicaid beneficiaries. The measure numerator can be met by conducting one of three different evidence-based interventions: a referral to DPP, a referral for medical nutrition therapy, or a prescription for metformin. The WGM explained that these three intervention options are consistent with current clinical guidelines and provide choice and flexibility for people on Medicaid to access the intervention that is most practical according to their individual needs.

Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries

The U.S. Preventive Services Task Force recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults ages 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.²

Patients with prediabetes should be referred to an intensive behavioral lifestyle intervention program modeled on the Diabetes Prevention Program to achieve and maintain seven percent loss of initial body weight and increase moderate-intensity physical activity (such as brisk walking) to at least 150 min/week.³ Metformin therapy for prevention of type 2 diabetes should be considered in those with prediabetes, especially for those with BMI greater than or equal to 35 kg/m2, those under age 60, and women with prior gestational diabetes mellitus.⁴



	Additionally, the WGM noted that studies in Medicaid populations have demonstrated that the National DPP lifestyle change program is effective in achieving weight loss comparable to that observed in the original DPP randomized controlled trial. A study modeling Medicaid claims data estimated that offering the program to Medicaid beneficiaries would result in long-term cost savings, and that minority and low-income groups would disproportionately benefit. ⁵
How measure can be used to monitor improvement	According to the WGM, the literature clearly demonstrates significant gaps in care regarding the management of people with prediabetes with effective preventive interventions. One study used National Health Interview Survey data to examine the uptake of the DPP and found that only four percent of eligible people reported being referred to a DPP. This same study found that Medicaid beneficiaries had an adjusted odds of receiving a DPP referral of 45 percent compared to people with private insurance. Studies tracking the use of metformin among people with prediabetes show that somewhere between one and eight percent of people with prediabetes are prescribed metformin. One study examining Medicaid claims data from South Carolina estimated that 7.4 percent of beneficiaries with prediabetes received metformin. The WGM concluded that the measure can support closing these gaps in care in Medicaid and can be used to trend improvement over time.

Additional Information for Consideration The WGM noted that Medicaid beneficiaries are diagnosed with **Prevalence of condition** diabetes at a higher rate than other low income adults. Among being measured among **Medicaid and CHIP** nonelderly adults with incomes at or below 138 percent of poverty, Medicaid beneficiaries were nearly twice as likely as the uninsured beneficiaries (nine percent versus five percent) to have diabetes. The prevalence of abnormal glucose among Medicaid beneficiaries is not reported by the CDC; however, one study estimated that 47.2 percent of Medicaid beneficiaries had undiagnosed prediabetes or diabetes.⁸ The WGM noted that health care costs are higher for adult Medicaid beneficiaries with diabetes than for those without diabetes. The average annual cost for adult Medicaid beneficiaries with diabetes is \$13,490 compared to \$5,133 for Medicaid beneficiaries without diabetes. This includes the costs for all services, and the relatively high total reflects the substantial health care needs and high comorbidity rate among this population.9 No other programs were listed in CMS's Measure Inventory Tool or Use of measure in other **CMS** programs reported by the measure steward. The WGM noted that the potential barriers for this measure are similar **Potential barriers states** to those encountered with any electronic clinical quality measure could face in calculating included in the Core Set and include: measure and recommended technical Use of the measure would be limited to sites documenting clinical assistance resources information in electronic health record systems.



- Workflow modifications or changes to electronic health record system may be necessary in order to calculate the measure. For example, some electronic health record systems are modifying their base platform to accommodate clinical workflows including prediabetes identification and treatment.
- Missing data or ambiguous information stored in a provider's
 electronic health record system could lead to calculation errors and
 low performance on the measure. However, parallel forms validity
 testing in two EHR systems revealed good validity of the measure.
- Aggregating clinic/provider data from multiple EHRs and reporting the information to state Medicaid programs may require additional guidance and resources. Many of the electronic health record systems have reporting data that could be standardized to provide states with the aggregated data.

The measure steward is committed to working with any interested group, including state Medicaid programs, to ensure that this measure is feasible to collect and report at all measurement levels and is willing to work with others to develop and maintain any technical assistance or guidance that may be needed.

- ¹ https://pubmed.ncbi.nlm.nih.gov/28230458/.
- ² B recommendation, U.S. Preventive Services Taskforce, 2015.
- ³ A recommendation, American Diabetes Association. Standards of medical care in diabetes—2018. Diabetes Care. 2018. (41) Supplement 1. Available at: http://care.diabetesjournals.org.
- ⁴ A recommendation, ADA, 2018.
- ⁵ Laxy M, Zhang P, Ng BP, Shao H, Ali MK, Albright A, Gregg EW. Implementing Lifestyle Change Interventions to Prevent Type 2 Diabetes in US Medicaid Programs: Cost Effectiveness, and Cost, Health, and Health Equity Impact. *Appl Health Econ Health Policy*. 2020 Oct;18(5):713-726. doi: 10.1007/s40258-020-00565-w. PMID: 32607728; PMCID: PMC7518987.
- ⁶ Venkataramani M, Pollack CE, Yeh HC, Maruthur NM. Prevalence and Correlates of Diabetes Prevention Program Referral and Participation. *Am J Prev Med.* 2019 Mar;56(3):452-457. doi: 10.1016/j.amepre.2018.10.005. Epub 2019 Jan 17. PMID: 30661888.
- ⁷ The Role of Medicaid for People with Diabetes. (2012). Retrieved July 17, 2017, from Kaiser Commission on Medicaid and the Uninsured: https://www.kff.org/wp-content/uploads/2013/01/8383 d.pdf.
- ⁸ Mahoney S, Bradley A, Pitts L, Waletzko S, Robinson-Lane SG, Fairchild T, Terbizan DJ, McGrath R. Health Insurance Is Associated with Decreased Odds for Undiagnosed Prediabetes and Type 2 Diabetes in American Adults. *Int J Environ Res Public Health*. 2020 Jun 30;17(13):4706. doi: 10.3390/ijerph17134706. PMID: 32629937; PMCID: PMC7369944.
- ⁹ The Role of Medicaid for People with Diabetes. (2012).



Measure Information	
Measure name	Retesting of Abnormal Blood Glucose in Patients with Prediabetes
Description	Percentage of patients aged 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the previous year who have a blood glucose test performed in the one-year measurement period.
Measure steward	American Medical Association (AMA)
NQF number (if endorsed)	Not endorsed
Core Set domain	Primary Care Access and Preventive Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 18 and older.
Data collection method	Electronic health records (EHR).
Denominator	All patients age 18 years and older who had an abnormal fasting plasma glucose, oral glucose tolerance test, or hemoglobin A1c result in the range of prediabetes in the year prior to the one-year measurement period.
	Abnormal lab result in the range of prediabetes includes a fasting plasma glucose level between 100 mg/dL (5.6 mmol/L) to 125
	mg/dL (6.9 mmol/L) OR a two-hour glucose during a 75g oral glucose tolerance test between 140 mg/dL (7.8 mmol/L) to 199 mg/dL
	(11.0 mmol/L) OR an A1C between 5.7-6.4 percent (39-47 mmol/mol).
Numerator	Patients who had a blood glucose test performed. Retesting for abnormal blood glucose may include using a fasting plasma glucose, 2-h plasma glucose during a 75g oral glucose tolerance test, or A1C.
Exclusions	 Exclude beneficiaries who meet any of the following criteria: Patient is pregnant. Patient has any existing diagnosis of diabetes (Type 1, Type 2, latent autoimmune diabetes of adults [LADA]. monogenic diabetes [MODY]).



	Patient is in palliative care/hospice.
Continuous enrollment period	Not specified.
Level of reporting for which specifications were developed	Provider-level.

Minimum Technical Feasibility Criteria	
Link to current technical specifications	Current measure specifications are available at: http://www.qualityforum.org/ProjectMeasures.aspx?projectID=86088&cycleNo=1&cycleYear=2020
Information on testing or use at state Medicaid/CHIP level	Neither the Workgroup member (WGM) who suggested the measure nor the measure steward was aware of any states using the measure. The WGM noted that several state Medicaid programs cover screening for people at risk for prediabetes, which would facilitate implementation and use of this measure at the state level.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The WGM noted that this electronic clinical quality measure is specified using the Health Quality Measure Format and value sets. To date, this measure has been tested for feasibility and data element validity within two EHR systems. The majority of data elements were found to be feasible to collect except for fasting plasma glucose lab test and comfort measures. Validity testing showed that even with these data availability limitations, the measure produced kappa statistics with moderate to perfect strength of agreement. The WGM indicated that several health systems are in the process of
	implementing this measure.

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM noted that this measure is critical to monitoring people with prediabetes to track health outcomes among this population and to ensure early identification of cases that progress to diabetes. The WGM indicated that this measure is part of a set that represents the first measurement set in the U.S. intended to prevent type 2 diabetes. This electronic clinical quality measure is specified to enable the reporting of performance scores by payer, race, ethnicity, and sex.

The WGM noted that annual glucose testing in patients who were previously found to have lab results in the range of prediabetes is an important aspect of care so that patients can be monitored for improvement or potential transition to type 2 diabetes. This measure is modeled after an expert-level recommendation from the American Diabetes Association (ADA).



	According to the WGM, this measure helps to fill a care gap in the literature. From a quality improvement standpoint, a process measure that supports annual monitoring of people with prediabetes is important because the results of this follow-up laboratory testing provide insight into the effectiveness of the screening and prediabetes management interventions. The WGM indicated that this measure is the first step to prepare health care organizations to eventually begin to track the incidence of type 2 diabetes in their population.
How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery	The WGM indicated that this measure would be relevant to a large proportion of Medicaid beneficiaries who would benefit from preventive services, including ongoing laboratory monitoring. Additionally, one study using South Carolina's Medicaid claims data found that 30 percent of people with prediabetes progressed on to type 2 diabetes within three years. According to the WGM, this measure is critical to monitoring people with prediabetes to track health outcomes among this population and to ensure early identification of cases that progress to diabetes. The WGM noted that this measure was designed with flexibility to accommodate the needs of multiple populations, including Medicaid beneficiaries. The measure numerator can be met by conducting one of three different laboratory tests: a fasting plasma glucose, a hemoglobin A1c, or a two-hour glucose tolerance test. These three test options are consistent with current clinical guidelines (e.g., U.S. Preventive Services Task Force and ADA). The WGM explained that the three test options provide flexibility for Medicaid beneficiaries to access the test that is covered or available at minimal cost through their health insurance plan.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	 This measure is based on the following guideline recommendations: At least annual monitoring for the development of diabetes in those with prediabetes is suggested.² To test for prediabetes, fasting plasma glucose, 2-h plasma glucose during 75-g oral glucose tolerance test, and A1C are equally appropriate.³
How measure can be used to monitor improvement	The WGM noted that there is evidence in the literature for a care gap. One study used the National Health Interview Survey to ask people who knew they had a diagnosis of prediabetes whether they had recent laboratory testing. Eighty-one percent reported that they had a glucose test within the past year. The methodology involved analyzing only people who knew they had a diagnosis of prediabetes, so the actual percentage of people with prediabetes who receive an annual blood test is likely much lower. The WGM concluded that this measure can be used to track longitudinal improvements in this gap in care.



Additional Information for Consideration

Prevalence of condition being measured among Medicaid and CHIP beneficiaries

The WGM noted that Medicaid beneficiaries are diagnosed with diabetes at a higher rate than other low income adults. Among nonelderly adults with incomes at or below 138 percent of poverty, Medicaid beneficiaries were nearly twice as likely as the uninsured (nine percent versus five percent) to have diabetes.⁵ The prevalence of abnormal glucose among Medicaid beneficiaries is not reported by the CDC; however, one study estimated that 47.2 percent of Medicaid beneficiaries had undiagnosed prediabetes or diabetes.⁶

The WGM noted that health care costs are higher for adult Medicaid beneficiaries with diabetes than for those without diabetes. The average annual cost for adult Medicaid beneficiaries with diabetes is \$13,490 compared to \$5,133 for Medicaid beneficiaries without diabetes. This includes the costs for all services, and the relatively high total reflects the substantial healthcare needs and high comorbidity rate among this population.⁷

Use of measure in other CMS programs

No other programs were listed in CMS's Measure Inventory Tool or reported by the measure steward.

Potential barriers states could face in calculating measure and recommended technical assistance resources

The WGM noted that the potential barriers for this measure are similar to those encountered with any electronic clinical quality measure included in the Core Set and include:

- Use of the measure would be limited to sites documenting clinical information in electronic health record systems.
- Workflow modifications or changes to electronic health record system may be necessary in order to calculate the measure. For example, some electronic health record systems are modifying their base platform to accommodate clinical workflows including prediabetes identification and treatment.
- Missing data or ambiguous information stored in a provider's
 electronic health record system could lead to calculation errors and
 low performance on the measure. However, parallel forms validity
 testing in two EHR systems revealed good validity of the measure.
- Aggregating clinic/provider data from multiple EHRs and reporting
 the information to state Medicaid programs may require additional
 guidance and resources. Many of the electronic health record
 systems have reporting data that could be standardized to provide
 states with the aggregated data.

The measure steward is committed to work with any interested group, including state Medicaid programs, to ensure that this measure is feasible to collect and report at all measurement levels and is willing to work with others to develop and maintain any technical assistance or guidance that may be needed.



- ¹ https://pubmed.ncbi.nlm.nih.gov/28230458/.
- ² E recommendation, American Diabetes Association. Standards of medical care in diabetes—2018. Diabetes Care. 2018. (41) Supplement 1. Available at: http://care.diabetesjournals.org.
- ³ B recommendation, American Diabetes Association. Standards of medical care in diabetes—2018. Diabetes Care. 2018. (41) Supplement 1. Available at: http://care.diabetesjournals.org.
- ⁴ Ali MK, McKeever Bullard K, Imperatore G, Benoit SR, Rolka DB, Albright AL, Gregg EW. Reach and Use of Diabetes Prevention Services in the United States, 2016-2017. *JAMA Netw Open*. 2019 May 3;2(5):e193160. doi: 10.1001/jamanetworkopen.2019.3160. PMID: 31074808; PMCID: PMC6512285.
- ⁵ The Role of Medicaid for People with Diabetes. (2012). Retrieved July 17, 2017, from Kaiser Commission on Medicaid and the Uninsured: https://www.kff.org/wp-content/uploads/2013/01/8383 d.pdf.
- ⁶ Mahoney S, Bradley A, Pitts L, Waletzko S, Robinson-Lane SG, Fairchild T, Terbizan DJ, McGrath R. Health Insurance Is Associated with Decreased Odds for Undiagnosed Prediabetes and Type 2 Diabetes in American Adults. *Int J Environ Res Public Health*. 2020 Jun 30;17(13):4706. doi: 10.3390/ijerph17134706. PMID: 32629937; PMCID: PMC7369944.
- ⁷ The Role of Medicaid for People with Diabetes. (2012).



Measure Information	
Measure name	Statin Therapy for the Prevention and Treatment of Cardiovascular Disease
Description	Percentage of the following patients - all considered at high risk of cardiovascular events - who were prescribed or were on statin therapy during the measurement period:
	 Adults age 21 and older who were previously diagnosed with or currently have an active diagnosis of clinical atherosclerotic cardiovascular disease (ASCVD); OR Adults age 21 and older who have ever had a fasting or direct low-density lipoprotein cholesterol (LDL-C) level at or above 190 mg/dL or were previously diagnosed with or currently have an active diagnosis of familial or pure hypercholesterolemia; OR Adults age 40 to 75 years with a diagnosis of diabetes with a fasting or direct LDL-C level of 70-189 mg/dL.
Measure steward	Centers for Medicare & Medicaid Services (CMS)
NQF number (if endorsed)	Not endorsed
Core Set domain	Care of Acute and Chronic Conditions
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 21 and older as of the measurement period.
Data collection method	Electronic health records (EHR) or registry.



Denominator	 All patients who meet one or more of the following criteria (considered at "high risk" for cardiovascular events, under American College of Cardiology/American Heart Association guidelines): 1. Patients age 21 and older at the beginning of the measurement period with clinical ASCVD diagnosis. 2. Patients age 21 and older at the beginning of the measurement period who have ever had a fasting or direct laboratory result of LDL-C greater than or equal to 190 mg/dL or were previously diagnosed with or currently have an active diagnosis of familial or pure hypercholesterolemia. 3. Patients age 40 to 75 years at the beginning of the measurement period with Type 1 or Type 2 diabetes and with an LDL-C result of 70-189 mg/dL recorded as the highest fasting or direct laboratory test result in the measurement year or during the two years prior to the beginning of the measurement period.
Numerator	Patients who are actively using or who receive an order (prescription) for statin therapy at any point during the measurement period.
Exclusions	 Exclude patients with any of the following: Patients who have a diagnosis of pregnancy. Patients who are breastfeeding. Patients who have a diagnosis of rhabdomyolysis. Exclude patients with any of the following <i>only</i> if the patients do not meet the criteria for inclusion in the numerator: Patients with adverse effect, allergy, or intolerance to statin medication. Patients who are receiving palliative or hospice care. Patients with active liver disease or hepatic disease or insufficiency. Patients with end-stage renal disease (ESRD). Patients with diabetes who have the most recent fasting or direct LDL-C laboratory test result less than 70 mg/dL and are not taking statin therapy.
Continuous enrollment period	Not specified.
Level of reporting for which specifications were developed	Provider-level.



Minimum Technical Feasibility Criteria	
Link to current technical specifications	Specifications for the 2021 performance period are available at: https://ecqi.healthit.gov/ecqm/ep/2021/cms347v4
Information on testing or use at state Medicaid/CHIP level	The Workgroup member (WGM) who nominated this measure indicated that the measure has gone through extensive testing, per CMS requirements for e-specifications. The WGM did not cite evidence of testing or use by state Medicaid/CHIP programs.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The data sources for this measure are electronic health records or clinical registry. Diagnosis codes, lab values, prescription information, and demographic data are needed for this measure. The CMS-generated data element repository for this measure can be found here: https://ecqi.healthit.gov/measure-data-elements/158581 . The WGM did not note any barriers or limitations to accessing the data source.

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM stated that heart disease and stroke are the first and fifth leading causes of death in the U.S.² Studies show that, despite prior decades-long declines in heart disease mortality, from 2010 to 2017 heart disease mortality increased among adults aged 35 to 64 years in almost 70 percent of counties in the U.S.³ A similar trend can be seen in stroke mortality; from 2010 to 2016, stroke mortality increased among adults ages 35 to 64 years in 61 percent of counties in the U.S.⁴

The WGM noted that for people at high risk of having an ASCVD event, including heart attacks and strokes, taking a high- or moderate-intensity statin, as appropriate, can greatly reduce the risk of having a primary or secondary event. The WGM noted that because of their generic status, statins are relatively inexpensive and readily available, making this a highly effective cardiovascular risk reduction strategy accessible to many and an intervention that states should be tracking.

How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery The WGM noted that states can use this measure to drive improvements in quality of care and beneficiary outcomes in several ways. States can examine the results at different levels of aggregation (e.g., overall and by managed care organization (MCO), health system, clinic, and even individual provider levels) and use these to identify potential opportunities for targeted outreach and technical assistance to drive performance improvement. States can also compare their performance (overall and at different levels as desired) to that of other states and use differences to potentially identify higher-performing states from whom they might learn best practices for improving statin therapy implementation. Finally, states can use changes in performance over time to evaluate the effectiveness of specific performance/quality improvement activities and initiatives.



	The WGM stated that measuring and tracking performance can be a powerful tool for driving improved access to and delivery of statin treatment among Medicaid beneficiaries. States can further incentivize efforts to translate measured performance into measured improvements by adopting the Statin measure as part of the quality measures they use to structure value-based payments (e.g., incentive payments, whether in the form of withholds or bonuses) for MCOs, accountable care organizations, etc. Because the measure is an electronic clinical quality measure (eCQM) and has been validated at the provider/clinic level, states have an opportunity to simultaneously roll it out at multiple levels, including provider, clinic, system, plan, and state.
Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries	The WGM noted that, according to the latest clinical guidelines for managing blood cholesterol and supported by numerous randomized controlled trials and meta analyses, a lowering of LDL-C levels of 1 percent gives ~ 1 percent reduction in the risk of ASCVD—slightly more at higher baseline LDL-C levels and slightly less at lower baseline levels. By definition, high-intensity and moderate-intensity statins lower LDL cholesterol values by more than 50 percent and 30-49 percent, respectively. Even low-intensity statins lower LDL-C values. Thus, just being on a statin of any kind or intensity has the ability to reduce risk of ASCVD events and associated morbidity and mortality.
How measure can be used to monitor improvement	In a recent analysis of NHANES data, over 25 million adults ages 35 to 64 were not taking a statin as recommended. Moreover, CDC is currently working on a project with several health centers, in conjunction with the National Association of Community Health Centers, to find at-risk patients who could benefit from being on a statin but are not currently taking one. At the beginning of the current project year, there were over 15,000 high-risk patients from 23 health centers who could benefit from taking a statin but were not taking one. More broadly, HRSA Uniform Data System (UDS) data on this measure show only 70 percent performance across all federally qualified health centers in 2019.

Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The WGM indicated there are 25.2 million people in the U.S. ages 35 to 64 who are not currently taking a statin though it is recommended they do so. HRSA UDS data show that 30 percent of the pertinent high-risk adult population is not currently taking a statin.
Use of measure in other CMS programs	 Quality Payment Program Medicaid Promoting Interoperability Program for Eligible Professionals (scheduled for removal in 2022) Medicare Shared Savings Program Merit-Based Incentive Payment System Program Million Hearts Initiative



Potential barriers states could face in calculating measure and recommended technical assistance resources

The WGM suggested that access to all needed components of electronic health record data could be a barrier for states. However, they noted that many states have Health Center Controlled Networks and other health information exchanges or clinical data repositories that could assist.

¹ https://ecqi.healthit.gov/ecqm-lifecycle.

² https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm.

³ Ritchey MD, Wall HK, George MG, Wright JS. US trends in premature heart disease mortality over the past 50 years: Where do we go from here? Trends in Cardiovasc Med. 2020 Aug;30(6):364-374.

⁴ Hall EW, Vaughan AS, Ritchey MD, Schieb L, Casper M. Stagnating National Declines in Stroke Mortality Mask

Widespread County-Level Increases, 2010–2016. Stroke. 2019;50:3355–3359.

⁵ Grundy SM, et al. J Am Coll Cardiol. 2019 Jun 25;73(24):e285-e350.

⁶ https://data.hrsa.gov/tools/data-reporting/program-data/national#fn17.



Measure Information	
Measure name	Tobacco Use and Help with Quitting Among Adolescents
Description	The percentage of adolescents 12 to 20 years of age with a primary care visit during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user.
Measure steward	National Committee for Quality Assurance (NCQA)
NQF number (if endorsed)	2803 (no longer endorsed) ¹
Core Set domain	Behavioral Health Care
Meaningful Measures area(s) of measure	Promote Effective Prevention & Treatment of Chronic Disease
Measure type	Process
Recommended to replace current measure?	No

Technical Specifications	
Ages	Age 12 through 20 years on date of encounter.
Data collection method	Administrative (claims), Electronic health records (EHRs).
Denominator	All patients aged 12-20 years with a visit during the measurement period.
Numerator	Patients who were screened for tobacco use at least once within 18 months (during the measurement period or the six months prior to the measurement period) AND who received tobacco cessation counseling intervention if identified as a tobacco user. Definitions: Tobacco Use Status – Any documentation of smoking or tobacco use status, including 'never' or 'non-use.' Tobacco User – Any documentation of active or current use of tobacco products, including smoking.
Exclusions	None.
Continuous enrollment period	Not specified.
Level of reporting for which specifications were developed	Provider-level.



Minimum Technical	Minimum Technical Feasibility Criteria	
Link to current technical specifications	Specifications for the Medicare version of the measure are available at: https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-measures/2020_Measure_402_MIPSCQM.pdf	
Information on testing or use at state Medicaid/CHIP level	This measure was developed as part of the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) Pediatric Quality Measure Program (PQMP) initiative. The National Collaborative for Innovation in Quality Measurement (NCINQ), the measure developer, conducted field tests to assess the feasibility of the measure for electronic health record (EHR) systems, as well as validity and reliability of the measure itself. Through two field testing studies, the measure developer obtained data from five pediatric centers located in diverse geographic regions of the United States. Testing results were stratified by payer at three sites. ² Neither the Workgroup member (WGM) who suggested the measure nor the measure steward were aware of any testing or use of the measure by state Medicaid or CHIP programs.	
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The data needed for calculating the Tobacco Use and Help with Quitting Among Adolescents measure are not available in claims data. According to the measure developer, the data are available in the medical record; however, at the time of field testing, the data were not consistently recorded in structured fields that would allow calculation of the measure electronically. The measure developer acknowledged that collecting these data items using paper or non-electronic formats can be a difficult and time-intensive task. However, their testing results show that changes in the implementation of EHR capabilities, improved methods for searching text fields, and changes in clinical workflow (such as encouraging documentation in structured fields rather than text-based notes), would improve the feasibility of calculating the measure using electronic data. ³	

How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

The WGM who suggested the measure for addition noted that cigarette smoking is the leading preventable cause of disease, disability, and death in the United States, and 90 percent of adults who smoke cigarettes daily first tried cigarettes before the age of 18 years.⁴ However, the current Child Core Set does not include a tobacco-related measure.



The WGM also noted that the tobacco product landscape has diversified in recent years to include a variety of other tobacco products that are appealing to youth, including e-cigarettes. Accordingly, measuring delivery of clinical tobacco prevention services to this age group is important for understanding pediatric clinical care quality. According to the WGM, inclusion of this measure in the Child Core Set could drive down tobacco use prevalence, particularly among populations disproportionately impacted by tobacco use and tobaccorelated disease. Inclusion of the measure would also complement existing measures that pertain to chronic conditions within the Child Core Set as well as those related to child behavioral health care.

How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery

According to the WGM who suggested the measure, cigarettes are the most commonly used tobacco product among adults, and adults enrolled in Medicaid report using tobacco at a disproportionately higher prevalence than U.S. adults overall. The WGM noted that nearly 9 out of 10 adults who smoke cigarettes daily first tried cigarettes by age 18, and nearly all started smoking before age 25.

The WGM noted that youth use of tobacco products can lead to adult tobacco use and chronic illness, and nicotine exposure during youth and young adulthood can also adversely impact the developing brain. Exposing the developing brain to nicotine can change the way the brain works, leading to a lifetime of addiction and, in some cases, increased impulsivity and mood disorders. Smoking initiation before age 13 years has been associated with increased risk for cardiovascular/metabolic disease, pulmonary disease, and smoking-related cancers. The WGM indicated that the intention of the suggested measure is to encourage tobacco use screening among youth and young adults and, among those who use tobacco products, provide cessation support to help them quit. According to the WGM, the measure could help improve individual and population health by driving down tobacco use prevalence, particularly among disproportionately impacted populations such as those enrolled in Medicaid and CHIP.

Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries

The WGM noted that the proposed measure is intended to promote tobacco use screening among youth and young adults, and tobacco cessation interventions for those who use tobacco products. Current data suggest that most youth who use tobacco are not receiving advice from health care professionals to not use tobacco. For example, data from the 2017 National Youth Tobacco Survey show that only 29.5 percent of high school students and 24.6 percent of middle school students who used tobacco had been advised by a doctor, dentist, or nurse to not use tobacco. The American Academy of Pediatrics recommends screening for tobacco use at all health supervision visits, delivering tobacco use prevention as part of anticipatory guidance, and offering tobacco dependence treatment and/or referral to adolescents who want to stop smoking. The WGM indicated that while the evidence for youth-focused cessation interventions is limited, there is strong evidence that tobacco screening and brief intervention is effective in helping adults, including young adults, quit tobacco use.



	The WGM also noted that there is strong evidence that linking tobacco- related clinical quality measures to payment can increase the delivery of cessation interventions. Evidence also suggests that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, can increase rates of clinician intervention.
How measure can be used to monitor improvement	Current data suggest that most youth who use tobacco are not receiving advice from health care professionals to not use tobacco. The WGM noted that this measure could be used to assess tobacco use screening among youth and young adults, and tobacco cessation interventions for those who use tobacco products.

Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	In 2020, 23.6 percent (3.65 million) of high school and 6.7 percent (800,000) of middle school students reported current (past 30-day) use of any tobacco product (all-payer data). ⁵ In 2019, 3.01 percent of adolescents (ages 12 to 17) and 20.11 percent of young adults (ages 18 to 25) with Medicaid or CHIP coverage reported any cigarette use in the past 30 days. ⁶ In addition, in 2019, 30.0 percent of adults insured by Medicaid reported current tobacco use compared to 20.8 percent of U.S. adults overall. ⁷
Use of measure in other CMS programs	Merit-Based Incentive Payment System (MIPS) Program.
Potential barriers states could face in calculating measure and recommended technical assistance resources	Not specified by WGM.

Citations

² https://www.ahrq.gov/sites/default/files/wysiwyg/pqmp/measures/preventive/chipra-0090-fullreport.pdf https://www.ahrq.gov/sites/default/files/wysiwyg/pqmp/measures/preventive/chipra-0090-fullreport.pdf.

⁵ Gentzke AS, Wang TW, Jamal A, et al. Tobacco Product Use Among Middle and High School Students — United States, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1881–1888. DOI: http://dx.doi.org/10.15585/mmwr.mm6950a1.

⁶ Substance Abuse & Mental Health Service Administration. National Survey on Drug Use and Health (2019) in the Public-use Data Analysis System. Available at: https://pdas.samhsa.gov/saes/substate

⁷ Cornelius ME, Wang TW, Jamal A, Loretan CG, Neff LJ. Tobacco Product Use Among Adults — United States, 2019. MMWR Morb Mortal Wkly Rep 2020;69:1736–1742. DOI: http://dx.doi.org/10.15585/mmwr.mm6946a4.

¹ NQF endorsement was removed because the committee did not reach consensus on evidence. In 2020, the USPSTF released an updated recommendation related to tobacco use in adolescents. The updated recommendation rated evidence related to tobacco cessation interventions in adolescents as "Insufficient" due to the lack of high-powered studies looking at cessation interventions in this population.

⁴ U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.



Measure Information	
Measure name	State Use of Experience of Care Surveys for Beneficiaries Using Long-Term Services and Supports
Description	The Medicaid & CHIP Scorecard includes a count of states' use of at least one of three experience of care surveys administered to long-term services and supports (LTSS) beneficiaries. Surveys included in the count are:
	 Consumer Assessment of Healthcare Providers and Systems Home and Community-Based Surveys Survey (HCBS CAHPS): HCBS CAHPS is a cross-disability survey of HCBS beneficiaries' experience receiving LTSS. The survey is designed to facilitate comparisons across state Medicaid HCBS programs that target adults with disabilities, including frail elderly, individuals with physical disabilities, persons with developmental or intellectual disabilities, those with acquired brain injury, and persons with severe mental illness.¹ National Core Indicators (NCI) In-Person Survey: NCI is a collaborative effort by developmental disability agencies to gather a standard set of performance and outcome measures on individuals with intellectual or developmental disabilities.² National Core Indicators for Aging and Disabilities (NCI-AD): NCI-AD is a collaborative effort by state Medicaid, aging, and disability agencies to gather a standard set of performance and outcome measures on older adults and individuals with physical disabilities.³
Measure steward	Center for Medicaid and CHIP Services (CMCS) (Note: CMCS developed this metric for inclusion in the Medicaid &
	CHIP Scorecard.)
NQF number (if endorsed)	Not endorsed
Core Set domain	Long-Term Services & Supports
Meaningful Measures area(s) of measure	Strengthen Person & Family Engagement as Partners in their Care
Measure type	CMS count of surveys administered
Recommended to replace current measure?	No



Technical Specifica	Technical Specifications	
Ages	All three surveys are conducted with Medicaid beneficiaries age 18 and older.	
Data collection method	The 2020 Medicaid & CHIP Scorecard included the following information about the data collection method: Data on states' HCBS CAHPS administration status were verified	
	 by the Centers for Medicare & Medicaid Services (CMS). The 2020 Medicaid & CHIP Scorecard data reflect HCBS CAHPS administration between 2018 and 2020. Administration status was not available for Illinois, and CMS was not able to verify information for New Jersey or Rhode Island. The 2020 Medicaid & CHIP Scorecard data on states' NCI administration come from NCI administrative records and reflect administration during the 2018-2019 and 2019-2020 reporting cycles. The 2020 Medicaid & CHIP Scorecard data on states' NCI-AD administration come from NCI-AD administrative records and reflect administration during the 2018-2019 and 2019-2020 reporting cycles. 	
Denominator	There are no technical specifications.	
Numerator	There are no technical specifications.	
Exclusions	There are no technical specifications.	
Continuous enrollment period	Not applicable.	
Level of reporting for which specifications were developed	State-level.	

Minimum Technical Feasibility Criteria	
Link to current technical specifications	More information on the measure is available at https://www.medicaid.gov/state-overviews/scorecard/state-use-patient-surveys-ltss-beneficiaries/index.html
Information on testing or use at state Medicaid/CHIP level	This metric is currently being publicly reported on the 2020 Medicaid & CHIP Scorecard for 51 states.
Description of required data source and data elements, including any barriers, limitations, or variations that could affect consistency of calculations	The count of states conducting each survey is collected by CMCS. However, there are no written technical specifications about how each survey owner counted states. The Workgroup member (WGM) who suggested this measure indicated that the count should be fairly consistent across states, both across managed care and fee-for-service states as well as across different LTSS populations. However, states may vary on which waiver populations are included in their survey samples.



How measure contributes to measuring overall quality of health care in Medicaid and CHIP, including ability to perform comparative analyses based on race, ethnicity, or socioeconomic status

In federal fiscal year 2018, LTSS comprised 32 percent of Medicaid spending, or \$129 billion. The WGM noted that it is essential that the Core Sets include meaningful measures of LTSS quality, and beneficiary experience is at the core of measuring the quality of any state's program. The WGM indicated that the three surveys that count toward this metric are comprehensive in scope and are administered in thoughtful ways to maximize participation among people with different kinds of disabilities.

How measure addresses the unique and complex needs of Medicaid and CHIP beneficiaries and promotes effective care delivery The WGM indicated that these surveys address the complex needs of beneficiaries and the results can be used in many ways, for example, identifying issues in the quality of the care management infrastructure, identifying gaps in the LTSS workforce, identifying necessary enhancements in person-centered approaches, and identifying gaps in access to health care services. In addition, the WGM noted that some of the surveys (e.g., NCI-AD) can allow states to compare quality across health plans and fee-for-service waivers to ensure that there is parity across the state's whole program.

Evidence that measure could lead to improvement in quality of health care for Medicaid and CHIP beneficiaries The WGM noted that in addition to individual states having made improvements within their delivery systems, there have been several studies using the NCI, for example, which help to frame services and highlight disparities for individuals with intellectual and developmental disabilities.⁵

How measure can be used to monitor improvement The WGM indicated that this information can be used to highlight the few states that are not using any of the survey tools and help promote transparency and accountability for ensuring that those states are measuring beneficiary experience in a meaningful manner.

Note that NCI and NCI-AD surveys suspended in-person data

collection in March 2020 due to COVID-19 and revised their administration protocols for subsequent data collection periods. CMCS encouraged continuation of collection of the HCBS CAHPS using telephone surveys. Nevertheless, the number of states completing data collection in 2020-2021 may decrease due to the COVID-19 public health emergency.



Additional Information for Consideration	
Prevalence of condition being measured among Medicaid and CHIP beneficiaries	The WGM noted that according to the annual LTSS expenditures report, 32 percent of all Medicaid dollars were spent on LTSS for federal fiscal year 2018. ⁶ The median number of LTSS surveys being conducted by states is one.
Use of measure in other CMS programs	 This information is included in the 2020 Medicaid & CHIP Scorecard. Measures from these surveys are included in CMS's Request for Information (RFI) for a Recommended Measure Set for Medicaid-Funded Home and Community-Based Services.⁷ The Adult Core Set includes the NCI survey.
Potential barriers states could face in calculating measure and recommended technical assistance resources	The WGM indicated that reporting of this information does not impose any burden on states because CMCS gathers the count of states directly from the survey administrators as part of the 2020 Medicaid & CHIP Scorecard.

¹ https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/cahps-hcbs-survey/index.html.

² https://www.nationalcoreindicators.org/.

³ https://nci-ad.org/.

⁴ https://www.medicaid.gov/medicaid/long-term-services-supports/downloads/ltssexpenditures-2017-2018.pdf.

⁵ https://www.nationalcoreindicators.org/resources/publications/.

⁶ https://www.medicaid.gov/medicaid/long-term-services-supports/downloads/ltssexpenditures-2017-2018.pdf.

⁷ https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/measuring-and-improving-quality-home-and-community-based-services-hcbs/index.html.