State Outcome Measures Calculation Criteria

Hepatitis C Medicaid Affinity Group

The Hepatitis C Medicaid Affinity Group (Affinity Group), a collaborative effort among states and federal partners sponsored by the Office of Infectious Disease and HIV/AIDS Policy (OIDP)[1], aimed to increase the number and percentage of Medicaid beneficiaries diagnosed with hepatitis C who are successfully treated and cured using direct-acting antivirals (DAAs). The Affinity Group developed five hepatitis C-related measures (outcome measures) that can be used to build a state's analytical capacity and to support data-driven approaches to improving their hepatitis C screening, treatment, and cure strategies and guide decision-making.

Affinity Group Outcome Measures

1) Hepatitis C screening for the overall Medicaid population, Baby Boomers, and people who inject drugs (PWID)
2) Confirmation of hepatitis C diagnosis
3) Hepatitis C prevalence
4) Hepatitis C treatment
5) Hepatitis C post-treatment care

Overview of Outcome Measures Along the Hepatitis C Cascade of Care

The outcome measures evaluate the different stages along the hepatitis C cascade of care, screening/testing, care, treatment and post-treatment care for a state's overall Medicaid population or special population (baby boomers or PWID). The first outcome measure evaluates screening for hepatitis C, which has been recommended since 2020 for all adults 18 years or older at least once in their lifetime[2], for all pregnant women during each pregnancy and routine testing for people with ongoing risk factors, including injection drug use and selected medical conditions[3]. This outcome measure is the percentage of the total Medicaid population or special population that is screened for hepatitis C. The second outcome measure evaluates confirmation of diagnosis, which is the percentage of recipients with a positive antibody test who received a confirmatory follow-up RNA-test. The third outcome measure evaluates HCV prevalence or the population in need of care, which is the percentage of the state's Medicaid population living with chronic hepatitis C. The fourth outcome measure evaluates treatment, which is the percentage of all individuals diagnosed with hepatitis C who were prescribed DAAs[4]. The final outcome measure evaluates post-treatment care by calculating the percentage of all individuals who received RNA testing post DAA treatment. Table 1 describes the metrics used for calculating each outcome measure. Please note that a 12-month reporting period is used as the example date range.

[1] OIDP is within the Office of the Assistant Secretary for Health in the U.S. Department of Health and Human Services.
[2] Hepatitis C Virus Infection in Adolescents and Adults: Screening. U.S. Preventive Services Task Force Final Recommendation Statement. Retrieved from: https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-c-screening
[3] Schillie S, Wester C, Osborne M, Wesolowski L, Ryerson AB. CDC Recommendations for Hepatitis C Screening Among Adults — United States, 2020. MMWR Recomm Rep 2020;69(No. RR-2):1–17. DOI: http://dx.doi.org/10.15585/mmwr.rr6902a1external icon
[4] The American Association for the Study of Liver Diseases guidelines state that all individuals with chronic hepatitis C should be treated with DAAs regardless of their stage of illness or history of substance use AASLD/IDSA. HCV Guidance: Recommendations for Testing, Managing, and Treating HCV. Retrieved from: https://www.hcvguidelines.org/

Table 1: Outcome Measure Definitions

Measure	Denominator	Numerator	CPT Codes	ICD-10-CM Codes	Additional Notes
1) Hepatitis C Screening: *Percentage of total Medicaid population screened for hepatitis C* **Adapted from PQRS 400*	Individuals 18 years or older before the start of the 12-month reporting period who were enrolled in Medicaid for 3 consecutive months during the 12-month reporting period (e.g., 1/1/2019 - 12/31/2019).	Enrollees in the denominator who also received a hepatitis C antibody test or RNA test (or both) during the 12-month reporting period (e.g., 1/1/2019 – 12/31/2019).	**Hepatitis C Antibody Test** 86803, 86804, 80074 **Hepatitis C RNA Test** 87520, 87521, 87522 **Hepatitis C Screening for High-Risk Individuals** G0472 (HCPCS code)	N/A	States can calculate population-specific screening measures (e.g., baby boomers and people who inject drugs, PWID). See TA document: *Identifying PWID in Medicaid Claims*.
2) Confirmation of Diagnosis: *Percentage of individuals with a positive antibody test who received a follow-up RNA test* **Adapted from the Department of Veterans Affairs (VA)*	Individuals 18 years or older before the start of the 12-month reporting period who received a hepatitis C antibody test between the first 9 months of the 12-month reporting period (e.g., 1/1/2019 - 9/30/2019) and had a claim with an HCV diagnosis code on or after the test date.	Enrollees in the denominator who received a hepatitis C RNA test on or after the date of the antibody test during the 12-month reporting period (e.g., 1/1/2019 - 12/31/2019).	**Hepatitis C Antibody Test** 86803, 86804, 80074 **Hepatitis C RNA Test** 87520, 87521, 87522 **Hepatitis C Screening for High-Risk Individuals** G0472 (HCPCS code)	**Hepatitis C Infection (Acute)** B1710, B1711 **Hepatitis C Infection (Chronic)** B182 **Hepatitis C Infection (Unspecified)** B1920, B1921	The initial test occurring within the first 9 months of the 12-month reporting period allows 3 months for the RNA test. Individuals with a hepatitis C antibody test and a subsequent claim with a hepatitis C diagnosis are assumed to have tested positive for hepatitis C. The RNA test claim may occur on the same date as the hepatitis C antibody test.

Measure	Denominator	Numerator	CPT Codes	ICD-10-CM Codes	Additional Notes
3) Chronic Hepatitis C Prevalence: *Percentage of the state's Medicaid population that is living with chronic hepatitis C as defined by ICD-10 codes*	Individuals 18 years or older before the start of the reporting period who were enrolled in Medicaid for at least 3 consecutive months during the 12-month reporting period (e.g., 1/1/2019 -12/31/2019).	Enrollees in the denominator who had a claim with a diagnosis code of chronic hepatitis C during the 12-month reporting period (e.g., 1/1/2019-12/31/2019) without a subsequent direct-acting antiviral (DAA) claim. See Table 2 for National Drug Codes (NDC) DAA codes.		**Hepatitis C Infection (Chronic)** B182 **Hepatitis C Infection (Unspecified)** B1920, B1921 ***ICD-9-CM Codes*** **Hepatitis C HCV Infection (Chronic)** 070.54, 070.44 **Hepatitis C Infection (Unspecified)** 070.70, 070.71	This measure assesses chronic hepatitis C prevalence only. States should note that the codes for acute hepatitis C (B1710, B1711) are not included on the list.

Measure	Denominator	Numerator	CPT Codes	ICD-10-CM Codes	Additional Notes
4) Treatment of Chronic hepatitis C: *Percentage of all individuals diagnosed with hepatitis C who were prescribed DAAs*	Individuals 18 years or older before the start of the 12-month reporting period who had a hepatitis C test claim occurring within the first 9 months of the 12-month reporting period (e.g., 1/1/2019 - 9/30/2019) and a subsequent claim with a diagnosis of chronic hepatitis C.	Enrollees in the denominator with at least 1 DAA claim after the hepatitis C test claim during the 12-month reporting period (e.g., 1/1/2019 -12/31/2019). **OR** Enrollees in the denominator with at least 2 DAA claims more than 10 days apart after the HCV test claim during the 12-month reporting period (e.g., 1/1/2019 - 12/31/2019).	See Table 2 for NDC DAA codes. **Hepatitis C Antibody Test** 86803, 86804, 80074 **Hepatitis C RNA Test** 87520, 87521, 87522 **Hepatitis C Screening for High-Risk Individuals** G0472 (HCPCS code)	**Hepatitis C Infection (Chronic)** B182 **Hepatitis C Infection (Unspecified)** B1920, B1921	The claim with the diagnosis occurring within the first 9 months of the 12-month reporting period allows 3 months for treatment to start. This measure assesses chronic hepatitis C diagnosis only. States should note that the codes for acute hepatitis C (B1710, B1711) are not included on the list. Pre-DAA hepatitis C medications are not included in the numerator. States may consider checking whether older medications continue to be prescribed. There are two versions of this measure to accommodate state or managed care billing patterns: 1 DAA claim or 2 DAA claims more than 10 days apart. For states that require two or more claims, differential rates between the two versions may be used to illustrate incomplete courses of treatment (i.e., non-adherence)

Measure	Denominator	Numerator	CPT Codes	ICD-10-CM Codes	Additional Notes
5) Post-Treatment Care: *percentage of all individuals who received RNA testing post DAA treatment* **Adapted from NQF 0398*	Individuals 18 years or older before the start of the 12-month reporting period who have a claim with a hepatitis C diagnosis and a DAA occurring within the first 6 months (e.g., 1/1/2019 - 6/30/2019) of the 12-month reporting period (e.g., 1/1/2019 - 12/31/2019).	Enrollees in the denominator for whom quantitative hepatitis C RNA testing was performed at no less than 3 months from the last DAA claim.	See Table 2 for NDC DAA codes. **Hepatitis C RNA Test** 87520, 87521, 87522	**Hepatitis C Infection (Chronic)** B182 **Hepatitis C Infection (Unspecified)** B1920, B1921	While this measure does not assess cure because it does not indicate the results of the test, it does indicate post-treatment care. The claim with the DAA occurring within the first 6 months of the 12-month reporting period allows 6 months for treatment and the hepatitis C RNA test to occur.

Table 2. National Drug Codes for Hepatitis C Direct-Acting Antivirals

NDC standardized to 11 digits	
00003001101	59676022507
00003021301	59676022528
00003021501	61958150101
00006307402	61958180101
00074006301	61958220101
00074006328	00074262528
00074308228	61958240101
00074309328	