

A public health and economic case for HIV care, treatment and prevention

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Medicaid and HIV

Medicaid is the largest source of insurance coverage for people with HIV, providing coverage for over 40% of nonelderly people with HIV. People with HIV are more likely to be covered by Medicaid than adults in the general population, largely because people with HIV tend to have lower incomes than the population overall. The Affordable Care Act's Medicaid expansion has increased access to the program to many low-income people with HIV who did not fall into a qualifying category of eligibility, such as being disabled, being pregnant or being a parent.

 $\label{eq:medicaid-which goes by $\frac{\text{different names}}{\text{depending on the state}^2$-covers essential HIV services, including}$

medications and clinical care. Medicaid also covers non-HIV services that, while not directly related to someone's HIV, ensure that individuals are getting appropriate care for other co-occurring conditions.

Medicaid expansion and people with HIV

The Affordable Care Act opened up access to Medicaid coverage for tens of thousands of people with HIV. Forty-two percent of Medicaid enrollees are eligible through the Medicaid expansion coverage pathway. Many people with HIV could not qualify under pre-ACA rules that often required them to be disabled by the disease before they could become eligible for the care and treatment that would have prevented the disability in the first place.

Medicaid services critical for HIV care, treatment and prevention

Prescription drugs: Medicaid must generally cover all drugs produced by manufacturers that participate in the Medicaid Drug Rebate Program. This includes every antiretroviral medication for the treatment and prevention of HIV as well as medications needed to treat comorbidities, including hepatitis C treatment, medications for opioid use disorder and medications used to treat cardiovascular disease, although Medicaid programs may use utilization management techniques like prior authorization that limit access to certain medications.

Primary care and specialist care: Medicaid must cover primary care and infectious disease provider visits as long as the provider participates in the Medicaid program.

Labs: Medicaid must cover labs used for HIV and STI testing and screening, viral load, resistance testing and all labs recommended by the Centers for Disease Control and Prevention for pre-exposure prophylaxis.

Mental health and substance use services: Medicaid covers mental and substance use disorder services, including outpatient and inpatient treatment, counseling and MOUD.

Case management and supportive services: State Medicaid programs have the option to cover case management, care coordination and linkage services that are critical to ensuring people with HIV are referred to appropriate supporting and social services.



Early access to HIV care, treatment and prevention is cost effective

The standard of HIV care and prevention coverage in Medicaid is spelled out in great detail in a <u>bulletin</u> released by the Department of Health and Human Services, the Centers for Medicare and Medicaid Services, the Centers for Disease Control and Prevention, and the Health Resources and Service Administration in early 2025.³ The bulletin draws heavily from clinical guidelines for both HIV treatment and prevention (see Appendix) and describes how Medicaid programs can ensure they are providing coverage for clinically appropriate care and treatment.⁴

The individual and public health benefits of early access to comprehensive HIV care, treatment and prevention that are described in the bulletin referenced above are well documented. ⁵ ⁶Early intervention supports viral suppression, where the virus is no longer detectable in the blood. ⁷ Once someone is virally suppressed, they are no longer able to transmit HIV through sex to other people. ⁸ This means that early access to antiretroviral medications not only ensures positive individual health outcomes, but also averts sexual transmission of HIV. ⁹ Early and consistent access to care and treatment also prevents hospitalizations associated with untreated HIV. ¹⁰ Uninterrupted access to HIV treatment is important as breaks in treatment can have negative consequences for long-term viral suppression and the likelihood of HIV-related complications. ¹¹ Similarly, expanded access to pre-exposure prophylaxis – the biomedical prevention intervention where individuals at risk of acquiring HIV take antiretroviral medications regularly to prevent acquisition – drastically reduces new HIV diagnoses. ¹²

In addition to the clinical and public health benefits described above, there is also a growing body of evidence described below that supports the economic benefits of early and comprehensive access to HIV treatment and prevention.

Averting new HIV transmissions saves significant lifetime costs of HIV

HIV is a lifelong chronic condition, and people with HIV must take antiretroviral medications for the rest of their lives. Researchers estimate that the average lifetime health care expenditures associated with an HIV diagnosis range from at least \$500,000 to more than \$1.2 million (discounted to reflect that future costs and benefits are valued less). ¹³ ¹⁴ ¹⁵ ¹⁶ More recent analyses have estimated higher lifetime costs because they take into account updated cost estimates and utilize a wider range of claims data on

Lifetime costs of HIV

Average lifetime cost for a person with HIV is between \$500,000 and \$1.2 million.

which the estimates are based. However, costs also vary depending on where in the disease trajectory someone is diagnosed, whether they remain in stable care and treatment, and the underlying price of the HIV medication (e.g., Medicaid programs are entitled to a steep discount, which means lifetime costs for HIV for Medicaid beneficiaries may be lower than for commercially insured individuals). Services that prioritize widespread and early access to antiretroviral treatment as well as HIV prevention interventions, including PrEP, can help avert HIV transmissions and avert lifetime costs of HIV.

Studies have found that a wide range of HIV interventions are cost effective in isolation and even more cost effective in combination

• Antiretroviral treatment: HIV medication access is not only lifesaving, it is a cost-effective intervention for the treatment of HIV. 17 There are a number of individual factors that influence the most effective therapy for a person with HIV to achieve viral suppression and prevent disease progression that include co-occurring conditions, tolerability and adherence.



The integrase inhibitor-based therapies available today are more effective at helping most people with HIV reach and maintain viral suppression than older regimens. They are more durable, are better tolerated and have a decreased risk of developing drug resistance. ¹⁸ While there are a few generic antiretroviral medications available, they are generic versions of older drugs that are no longer the standard for HIV care. While generic alternatives might lead to lower drug expenditures, it is important for HIV treatment decisions to be made by the HIV provider and the patient to better ensure viral suppression is achieved and sustained. When current standard-of-care antiretrovirals become available as generics, that will be economically advantageous.

- PrEP: As more PrEP antiretroviral medications have been approved by the Food and Drug Administration for the prevention of HIV, there have been several studies looking at comparative cost effectiveness across options.¹⁹ While there are some variations in the magnitude of cost effectiveness depending on HIV prevalence, PrEP adherence, the relative price of each PrEP medication and overall HIV vulnerability, studies support PrEP as a cost-effective intervention.²⁰
- Case management and care coordination: Evaluations of HIV care coordination and case management programs including the Medicaid Health Home option have found that these interventions support better health outcomes, help individuals avoid emergency room visits and hospitalizations, and are cost effective. ²¹ ²² These interventions vary in intensity and typically tailor services to patient acuity and needs, but at their core these interventions are designed to assess patient needs in a holistic manner and ensure that individuals are connected to a range of appropriate health and social services. ²³ Comprehensive care coordination can also help to reduce hospitalizations and other utilization of high-acuity sites of care by ensuring that patients are routed to the appropriate provider. This not only benefits the patient but also takes pressure off of already strained acute care facilities. ²⁴
- **HIV testing:** Universal, routine HIV testing is critical to diagnose people with HIV early so that they can fully benefit from treatment. Universal testing on an opt-out basis has been recommended by CDC since 2006 and was given a Grade A by the U.S. Preventive Services Task Force in 2013, but it has never been fully implemented by providers and health systems. A large body of evidence has found that various HIV testing initiatives including routine HIV testing in clinical and community settings are cost effective. ²⁵ ²⁶ ²⁷ Many of these studies concluded that testing is also cost effective across multiple testing technologies, including point-of-care rapid antibody testing of blood or oral fluid specimens and lab-based antibody/antigen testing.



• Combination of HIV treatment and prevention interventions: Multiple studies have looked at the combined effects of several HIV interventions at reducing HIV transmission, improving health outcomes and saving costs. Studies have generally found that interventions used in combination are generally more effective than those used in isolation.²⁸ ²⁹

Nontraditional plan designs can yield cost savings and address disparities

It is becoming increasingly clear that addressing the holistic needs of people with HIV and other complex or

chronic conditions not only leads to better health outcomes but also can be cost effective. In particular, people with HIV have higher rates than the general population of co-occurring mental health and substance use disorders, and treatments for these conditions are key obstacles to achieving HIV treatment goals. Specific Medicaid and Medicaid managed care plan designs to address the comanagement of HIV, substance use and mental health disorders are urgently needed and are likely to be cost effective.

Assessing the cost effectiveness of comprehensive care and coverage of nontraditional services or services that have preventive benefits is difficult. Historically, time horizons for the costs and benefits of interventions have been measured over only a one-year period. This is rarely, if ever, enough time to account for prevention benefits of particular interventions for chronic diseases, including for HIV.

The American Academy of Actuaries has published a number of resources on actuarial approaches to nontraditional plan designs that cover services that address the holistic needs of a patient and interventions that address population health. While many of the academy resources are focused on the commercial market, the resources are also relevant for Medicaid and other public payers. The academy identified certain plan designs that are best able to address health disparities – for instance, designing provider networks to ensure beneficiaries have access to culturally competent providers with whom they are more likely to develop a lasting therapeutic relationship. Similarly, cost-sharing designs (which may become more common in Medicaid over the next several years) can be designed in ways that do not discourage use of high-value care and treatment.

Key takeaways

As state Medicaid programs face increasingly tighter budgets, it will be more important to share evidence-based justifications for the individual, public health and economic benefits of HIV care, treatment and prevention. Using the summary of evidence above, it will be important to communicate to state Medicaid programs about the importance of continued investment in comprehensive HIV services. Programs should consider the following as they make coverage and access policy decisions:

Preserving HIV coverage saves lives and money. Access to HIV care, treatment and
prevention services is cost effective. Investing in these services not only helps to end the HIV
epidemic but also averts the health care costs associated with new HIV transmissions as well as
untreated HIV.

Combination interventions are most impactful and cost effective

Studies that assess the relative cost effectiveness of a range of HIV interventions have consistently found that a combination of interventions have the biggest impact on health outcomes and reducing disparities and are generally more cost effective than interventions in isolation.



- Formulary decisions that restrict access to antiretroviral medications are short-sighted. Early access to the most effective antiretroviral medications that are responsive to unique individual needs to achieve viral suppression will also avert new HIV transmissions and ultimately avert additional health care costs. Medicaid programs should design formularies, including preferred drug lists and utilization management policies, to ensure access to recommended regimens following HIV treatment guidelines.
- Investing in support services that link people to care and keep them engaged is critical.
 Case management services and other care coordination and linkage services, in combination with clinical and medication access, are necessary to engage more people in care and help them adhere to prescribed medications.
- Medicaid programs should invest in comprehensive plan designs to most effectively and
 efficiently treat and care for people with commonly co-occurring conditions: substance use
 and mental health disorders.
- Programs should take innovative approaches to assessing the costs and benefits of interventions that prevent HIV. This includes looking at longer time horizons for cost-effectiveness analyses and factoring in reduction of disparities into programmatic goals.

Appendix

Federally approved HIV clinical practice guidelines

Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents With HIV	clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv/
HIV Clinical Guidelines: Adult and Adolescent Opportunistic Infections	clinicalinfo.hiv.gov/en/guidelines/hiv-clinical- guidelines-adult-and-adolescent-opportunistic infections
HIV Clinical Guidelines: Pediatric HIV Treatment	clinicalinfo.hiv.gov/en/guidelines/pediatric-arv.
HIV Clinical Guidelines: Pediatric Opportunistic Infections Perinatal HIV Guidelines 2021 CDC PrEP Clinical Practice Guideline	clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-pediatric-opportunistic-infections/clinicalinfo.hiv.gov/en/guidelines/perinatal/stacks.cdc.gov/view/cdc/112360
Clinical Recommendation for the Use of Injectable Lenacapavir as HIV Preexposure Prophylaxis – United States, 2025	www.cdc.gov/mmwr/volumes/74/wr/mm7435ahtm



HIV Medicine Association of the Infectious Diseases Society of America Guideline

Primary Care Guidance for Persons With HIV

idsociety.org/practice-guideline/primary-care-management-of-people-with-hiv/

¹ Lindsey Dawson, Priya Chidambaram, and Jessica Mathers, KFF, 5 Key Facts about Medicaid Coverage for People with HIV (April 2025), available at https://www.kff.org/medicaid/issue-brief/5-key-facts-about-medicaid-coverage-for-people-with-hiv/

² American Council on Aging, Medicaid By State: Alternative Names and Contact Information (July 2025), https://www.medicaidplanningassistance.org/state-medicaid-resources/

³ HHS, CMS, CDC, and HRSA, Opportunities to Improve HIV Testing, Prevention, and Care Delivery for Medicaid and CHIP Beneficiaries (January 2025), https://www.medicaid.gov/federal-policy-guidance/downloads/cib01152025.pdf

⁴ HIV.gov, Federal HIV Guidelines, https://clinicalinfo.hiv.gov/en/guidelines

⁵ Adaora A Adimora, Implementing National HIV/AIDS Strategy 2015 Treatment Targets Is Cost-effective and Would Save Lives: What Other Evidence Do We Need?, *The Journal of Infectious Diseases*, Volume 216, Issue 7, 1 October 2017, Pages 787–789, https://doi.org/10.1093/infdis/jix351.

⁶⁶ Borre ED, Hyle EP, Paltiel AD, Neilan AM, Sax PE, Freedberg KA, Weinstein MC, Walensky RP. The Clinical and Economic Impact of Attaining National HIV/AIDS Strategy Treatment Targets in the United States. J Infect Dis. 2017 Oct 17;216(7):798-807. doi: 10.1093/infdis/jix349. PMID: 29029344; PMCID: PMC5853503.

⁷ Hoenigl, M., Chaillon, A., Moore, D. *et al.* Rapid HIV Viral Load Suppression in those Initiating Antiretroviral Therapy at First Visit after HIV Diagnosis. *Sci Rep* **6**, 32947 (2016) https://doi.org/10.1038/srep32947.

⁸ Cohen MS, Gamble T, McCauley M. Prevention of HIV Transmission and the HPTN 052 Study. Annu Rev Med. 2020 Jan 27;71:347-360. doi: 10.1146/annurev-med-110918-034551. Epub 2019 Oct 25. PMID: 31652410.

⁹ Goldman DP, Juday T, Seekins D, Linthicum MT, Romley JA. Early HIV treatment in the United States prevented nearly 13,500 infections per year during 1996-2009. Health Aff (Millwood). 2014 Mar;33(3):362-9. doi: 10.1377/hlthaff.2013.0830. PMID: 24590932; PMCID: PMC4124881.

¹⁰ Heslin KC (AHRQ), Elixhauser A (AHRQ). HIV Hospital Stays in the United States, 2006-2013. HCUP Statistical Brief #206. June 2016. Agency for Healthcare Research and Quality, Rockville, MD. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb206-HIV-Hospital-Stays-Trends.pdf.

¹¹ The UK Collaborative HIV Cohort (UK CHIC) Study. Are previous treatment interruptions associated with higher viral rebound rates in patients with viral suppression?. AIDS 22(3):p 349-356, January 30, 2008. | DOI: 10.1097/QAD.0b013e3282f4709a

¹² Sullivan, Patrick S et al., Association of state-level PrEP coverage and new HIV diagnoses in the USA from 2012 to 2022: an ecological analysis of the population impact of PrEP, The Lancet HIV, Volume 12, Issue 6, e440 - e448

¹³ Schackman BR, Fleishman JA, Su AE, et al. The lifetime medical cost savings from preventing HIV in the United States. Med Care. 2015;53(4):293–301.J

¹⁴ Bingham A, Shrestha RK, Khurana N, Jacobson EU, Farnham PG. Estimated Lifetime HIV-Related Medical Costs in the United States. Sex Transm Dis. 2021 Apr 1;48(4):299-304. doi: 10.1097/OLQ.00000000001366. PMID: 33492100.

¹⁵ J.P., Beaubrun, A., Ding, Y. et al. Estimation of the Incremental Cumulative Cost of HIV Compared with a Non-HIV Popul ¹⁶ Cohen, J.P., Anupindi, V.R., Doshi, R. et al. Estimation of Lifetime Costs Among Insured Persons with HIV in the United States. PharmacoEconomics Open (2025). https://doi.org/10.1007/s41669-025-00584-0.



- ¹⁷ Walensky RP, Sax PE, Nakamura YM, et al. Economic savings versus health losses: the cost-effectiveness of generic antiretroviral therapy in the United States. *Ann Intern Med.* 2013;158(2):84-92; Martin EG, Schackman BR. Treating and preventing HIV with generic drugs barriers in the United States. *N Engl J Med.* 2018;378(4):316-319.
- ¹⁸ HIV Treatment Guidelines, What to Start: Initial Combination Antiretroviral Regimens for People With HIV (September 2024), https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv/what-start-initial-combination.
- Emmanuel F. Drabo, Joel W. Hay, Raffaele Vardavas, Zachary R. Wagner, Neeraj Sood, A Cost-effectiveness Analysis of Preexposure Prophylaxis for the Prevention of HIV Among Los Angeles County Men Who Have Sex with Men, *Clinical Infectious Diseases*, Volume 63, Issue 11, 1 December 2016, Pages 1495–1504, https://doi.org/10.1093/cid/ciw578
 Walensky RP, Horn T, McCann NC, Freedberg KA, Paltiel AD. Comparative Pricing of Branded Tenofovir Alafenamide-Emtricitabine Relative to Generic Tenofovir Disoproxil Fumarate-Emtricitabine for HIV Preexposure Prophylaxis: A Cost-Effectiveness Analysis. Ann Intern Med. 2020 May 5;172(9):583-590. doi: 10.7326/M19-3478. Epub 2020 Mar 10. PMID: 32150602; PMCID: PMC7217721.
- ²¹ Flash MJE, Garland WH, Martey EB, Schackman BR, Oksuzyan S, Scott JA, Jeng PJ, Rubio M, Losina E, Freedberg KA, Kulkarni SP, Hyle EP. Cost-effectiveness of a Medical Care Coordination Program for People With HIV in Los Angeles County. Open Forum Infect Dis. 2019 Dec 16;6(12):ofz537. doi: 10.1093/ofid/ofz537. PMID: 31909083; PMCID: PMC6935680.
- ²² Gopalappa C, Farnham PG, Hutchinson AB, Sansom SL. Cost effectiveness of the National HIV/AIDS Strategy goal of increasing linkage to care for HIV-infected persons. J Acquir Immune Defic Syndr. 2012 Sep 1;61(1):99-105. doi: 10.1097/QAI.0b013e31825bd862. PMID: 22580563.
- ²³ Office of the Assistant Secretary for Planning and Evaluation, Evaluation of the Medicaid Health Home Option for Beneficiaries with Chronic Conditions: Evaluation of Outcomes of Selected Health Home Programs, Annual Report Year Five (2017), https://aspe.hhs.gov/reports/evaluation-medicaid-health-home-option-beneficiaries-chronic-conditions-evaluation-outcomes-selected-0
- ²⁴ Janke AT, Venkatesh AK. Understanding and Addressing the US Hospital Bed Shortage—Build, Baby, Build. *JAMA Netw Open*. 2025;8(2):e2460652. doi:10.1001/jamanetworkopen.2024.60652
- ²⁵ Serag H, Clark I, Naig C, Lakey D, Tiruneh YM. Financing Benefits and Barriers to Routine HIV Screening in Clinical Settings in the United States: A Scoping Review. Int J Environ Res Public Health. 2022 Dec 27;20(1):457. doi: 10.3390/ijerph20010457. PMID: 36612775; PMCID: PMC9819288.
- ²⁶ Walensky RP, Freedberg KA, Weinstein MC, Paltiel AD. Cost-effectiveness of HIV testing and treatment in the United States. Clin Infect Dis. 2007 Dec 15;45 Suppl 4(Suppl 4):S248-54. doi: 10.1086/522546. PMID: 18190295; PMCID: PMC2365915.
- ²⁷ Walensky RP, Weinstein MC, Kimmel AD, et al. Routine human Lin F, Farnham PG, Shrestha RK, Mermin J, Sansom SL. Cost effectiveness of HIV prevention interventions in the U.S. Am J Prev Med 2016; 50:699–708 immunodeficiency virus testing: an economic evaluation of current guidelines. Am J Med 2005;118:292–300.
- ²⁸ Nosyk B, Zang X, Krebs E, Enns B, Min JE, Behrends CN, Del Rio C, Dombrowski JC, Feaster DJ, Golden M, Marshall BDL, Mehta SH, Metsch LR, Pandya A, Schackman BR, Shoptaw S, Strathdee SA; Localized HIV Modeling Study Group. Ending the HIV epidemic in the USA: an economic modelling study in six cities. Lancet HIV. 2020 Jul;7(7):e491-e503. doi: 10.1016/S2352-3018(20)30033-3. Epub 2020 Mar 5. PMID: 32145760; PMCID: PMC7338235.
- ²⁹ Jenness SM, Johnson JA, Hoover KW, Smith DK, Delaney KP. Modeling an integrated HIV prevention and care continuum to achieve the Ending the HIV Epidemic goals. AIDS. 2020 Nov 15;34(14):2103-2113. doi:
- 10.1097/QAD.000000000002681. PMID: 32910062; PMCID: PMC7606461
- ³⁰ American Academy of Actuaries, Health Equity from an Actuarial Perspective Health Plan Benefit Design (July 2021), https://actuary.org/wp-content/uploads/2024/12/Health_Equity_Benefit_Design_Discussion_Brief_07.2021.pdf,