Cumulative net savings from chronic hepatitis C cures are expected to reach \$53 billion by 2028

State Medicaid programs often restrict access to curative treatments for chronic hepatitis C

Chronic hepatitis C (HCV) is a highly infectious disease impacting over 2 million Americans.¹ People with HCV are at risk of developing cirrhosis, liver cancer, and liver failure, and may also infect other people. Overall, HCV imposes significant costs on the healthcare system.^{2–6}

Interferon-free direct-acting antiviral (DAA) treatments became available beginning in 2013. This new therapy class provides a cure for almost all people with HCV.⁷ However, treatment uptake has varied. Given the disproportionate prevalence of HCV among Medicaid beneficiaries, universal coverage for these treatments in Medicaid is challenging and state programs have attempted to limit access to DAA treatments. (Details on access restrictions by states can be found at https://stateofhepc.org/).⁸

Restricting access to effective DAA treatments may save drug acquisition costs in the short-term, but would deny cures to individuals with HCV, prolonging routine care for the disease, increasing risk for disease complications, and could lead to higher costs in the long-term. Curing HCV patients not only improves quality of life in patients but also greatly reduces the short- and long-term healthcare utilization and costs associated with the disease. Therefore, decision makers should consider all consequences when determining access to DAA treatments.

A recent paper modeled the net cost savings to Medicaid of curing HCV patients with DAAs based on information on the cost burden of chronic hepatitis C and on changes in DAA price since their first approval in 2013

A paper by M. Christopher Roebuck and Joshua N. Liberman estimated the budget impact of utilizing curative therapies and can inform access decisions.⁹ Drs. Roebuck and Liberman analyzed a sample of Medicaid beneficiaries from 2012 and found that patients with HCV cost about \$17,000 more each year than patients without HCV. They also documented a decrease in per-patient treatment costs since the first approval of DAA drugs—from \$97,500 to \$21,500—as a result of increased competition among manufacturers.

Based on real-world utilization data from 2013 to 2018, Drs. Roebuck and Liberman estimated that a total of 157,519 patients had been cured by DAA treatments. When assuming that curing a patient reduces HCV cost consequences, they found that the introduction of curative treatments produced net savings within a few years following their first approval.

Savings quickly exceeded the cost of HCV treatments and continue to accumulate over time. Further analyses found that by 2028, cumulative savings are expected to reach \$53 billion, as annual savings grow to 10 times the annual treatment costs

Drs. Roebuck and Liberman analyses found that in 2017, the annual healthcare cost savings attributable to DAA treatments were more than the cost of treatment and by 2018, curative treatments produced an annual net savings of \$1.5 billion. By 2019, the cumulative savings predicted to exceed cumulative drug costs since the introduction of curative DAA treatments. A secondary analysis was conducted building on the publication findings by projecting outcomes beyond available data based on current utilization rates and treatment costs.¹⁰ When projecting future costs, cost savings attributable to cures increase annually while treatment costs remain

constant. Additionally, when comparing treatment costs with cost savings due to reduced downstream healthcare utilization, annual healthcare cost savings are expected to be five times higher than manufacturer retained annual treatment costs by 2021, and ten times higher by 2028 (Figure 1).

Figure 1: Comparison of manufacturer revenues and societal cost savings with interferonfree direct-acting antiviral treatment for hepatitis C



Values beyond 2017 are projected.

Conclusion

Results suggest that DAA therapies, which cure almost all treated patients with HCV, lead to substantial and sustained healthcare costs savings while annual treatment costs have decreased from their initial prices as the result of increased competition in the space. Eliminating HCV is an investment with very high returns, and stakeholders need to work on solutions to secure wider access to curative treatments for HCV.

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