Enhanced HIV prevention interventions, such as pre-exposure prophylaxis for high-risk individuals, require substantial investments.

We first estimated the lifetime medical costs for HIV-infected individuals. The medical cost saved by avoiding one HIV infection was then calculated. However, we did not include costs incurred by uninfected individuals. The impact of comorbidities is not modeled in these scenarios, and the differences in costs reflect the reality of current care in the United States, including treatments and medications that are not covered by health insurance. This limitation was addressed through several sensitivity analyses.

We used PROMIS long-form datasets (PROMIS 2.0 LSF) for data on health-related quality of life. The Teng and colleagues' utility values for HIV-infected individuals were used to calculate QALYs, which were then discounted. We used data from the Healthcare Cost and Utilization Project (HCUP) and Medicare to estimate the cost of care for HIV-Infected individuals.

By focusing on health system costs, our analysis does not capture all the health benefits of avoiding HIV infection.

The impact of comorbidities is not modeled in these results.

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The methods used to project future mortality and costs. The limitation was addressed through several sensitivity analyses.