Model-Projected Costs Associated with Increasing Numbers of Medicare Beneficiaries with HIV Aged 65+

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BACKGROUND

- Due to near-normal life expectancies, a substantial portion of people with HIV are expected to become eligible for Medicare based on age criteria (65+)
- People aging with HIV are likely to experience a high burden of multimorbidity, which is expected to increase clinical care costs to Medicare
- The extent of the increase in cost to Medicare is uncertain and likely dependent on the cost of ART
- The Inflation Reduction Act (IRA), which may allow for the federal government to negotiate the price of drugs, including Biktarvy, could result in substantial savings to Medicare in the coming decade

METHODS

- We used the Cost- Effectiveness of Preventing AIDS Complications (CEPAC) model to project the number of Medicare-eligible people with HIV aged 65 years or older from 2025-2035 and estimate clinical care costs
- We derived costs to Medicare using the 2014-2018 Traditional Medicare claims data and assume that costs remained fixed throughout the course of the simulation

Table 1. Key Input Parameters

Baseline cohort characteristics	Value	Source
Total number of Medicare beneficiaries with HIV who are 65y+ and in care, 2025		Model projections
65-69 years	83,660	
70-74 years	48,400	
75-79 years	21,510	
≥ 80 years	9,460	
Number of Medicare beneficiaries with HIV who are in care turning 65y, annually	16,080-23,400	Model projections
Number people aged 65+ newly diagnosed with HIV, annually	840	[1]
Mean per-person spending in year survived, ART ($)		
65-69 years	34,410	[2]
70-74 years	33,770	
75-79 years	33,430	
≥ 80 years	30,950	
Mean per-person spending in year survived, Non-ART HIV Direct Medical Treatment ($)		
65-69 years	2,230	[2]
70-74 years	2,160	
75-79 years	2,380	
≥ 80 years	2,830	
Mean per-person spending in year survived, Other Medical Conditions ($)		
65-69 years	19,920	
70-74 years	20,070	[2]
75-79 years	19,320	
≥ 80 years	19,470	

1. Centers for Disease Control and Prevention. Diagnoses of HIV infection among adults aged 50 years and older in the United States and dependent areas, 2011-2016. Centers for Disease Control and Prevention, 2018. Available at: https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Accessed 15 August 2023
2. Figueroa JF. Preliminary communication.

The number of 65y+ Medicare beneficiaries with HIV is likely to increase by 72% over the next decade, resulting in annual costs of up to $14.7 billion to Medicare by 2035.

RESULTS

- The number of people with HIV ages 65y+ is expected to increase from 163,030 in 2025 to 280,580 in 2035
- Costs to Medicare are expected to rise substantially, from 8.6 billion in 2025 to 14.7 billion in 2035
- 58% of all costs to Medicare in 2035 can be attributed to ART

Figure 1.

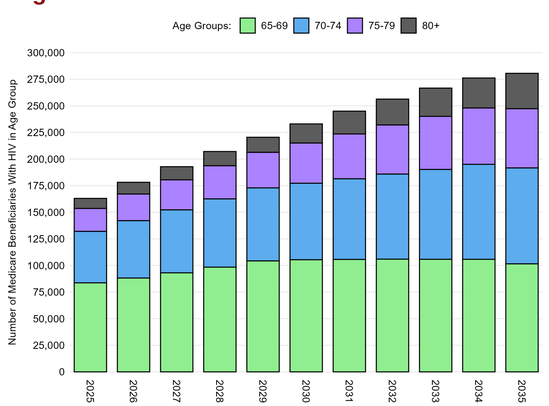
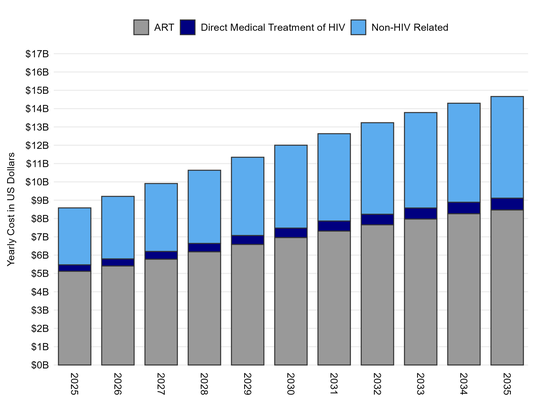


Figure 2.



LIMITATIONS

- This analysis excludes younger people with HIV who are eligible for Medicare benefits through non-age eligibility pathways
- We use Traditional Medicare costs as estimates for the average cost per beneficiary, which does not take into account differences in spending for Medicare Advantage plans, which now cover nearly half of Medicare beneficiaries
- This analysis addresses costs to Medicare and thus does not consider costs to Medicaid for Medicare and Medicaid dual-eligible beneficiaries
- We do not incorporate an increase in ART costs over time, which has historically outpaced inflation[3]

NEXT STEPS

- Estimate the potential impact of the Inflation Reduction Act on negotiating ART prices by modeling the impact of various ART discount levels on total Medicare spending
- Sensitivity analyses assessing the impact of the number of people with HIV in care, ART costs, HIV-related care costs, non-HIV related care costs, and background mortality on annual costs to Medicare
- Adjust projections to account for trends in ART cost increases annually

CONCLUSIONS

- By 2035, the number of people with HIV ages 65y+ is expected to increase substantially to 280,580
- Costs to Medicare are expected to rise substantially, from 8.6 billion in 2025 to 14.7 billion in 2035
- By 2035, 58% of all costs to Medicare can be attributed to ART, suggesting that reductions in the cost of ART can lead to substantial savings to Medicare in the coming decade

ADDITIONAL KEY INFORMATION

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3. McCann NC, Horn TH, Hyle EP, Walensky RP. HIV antiretroviral therapy costs in the United States, 2012-2018. *JAMA Internal Medicine*. 2020;180(4):601-603. doi:10.1001/jamainternmed.2019.7108