

Background

Given the advancement in antiretroviral therapy, patients with human immunodeficiency virus (HIV) are living longer, similar to the general population.^{1,2} However, little is known about end-of-life costs among older adults living with HIV.

Objective

To examine the end-of-life costs among older adults living with HIV enrolled in Medicare.

Methods

- Data: 5% national Medicare claims data from 2012-2020.
- Study design: Retrospective cohort study.
- Study cohort: Medicare beneficiaries with HIV diagnosis who died between 2012-2020 (Death date=index date). Included beneficiaries should also be older than 66 at index date and have continuous Part A, B, and D, but not C enrollment for 9 months prior to index date.
- Key variables of interest: All-cause costs in the end-of-life period (3 months prior to death)
- The cost components assessed included inpatient, outpatient, prescription drugs and other (comprising of home health and hospice).
- For all cost components, mean (SD) and median [quartile range] were reported.
- All cost components were adjusted to 2020 US dollars using the Medical Care Component of the Consumer Price Index and assessed from Medicare's perspective.

Methods

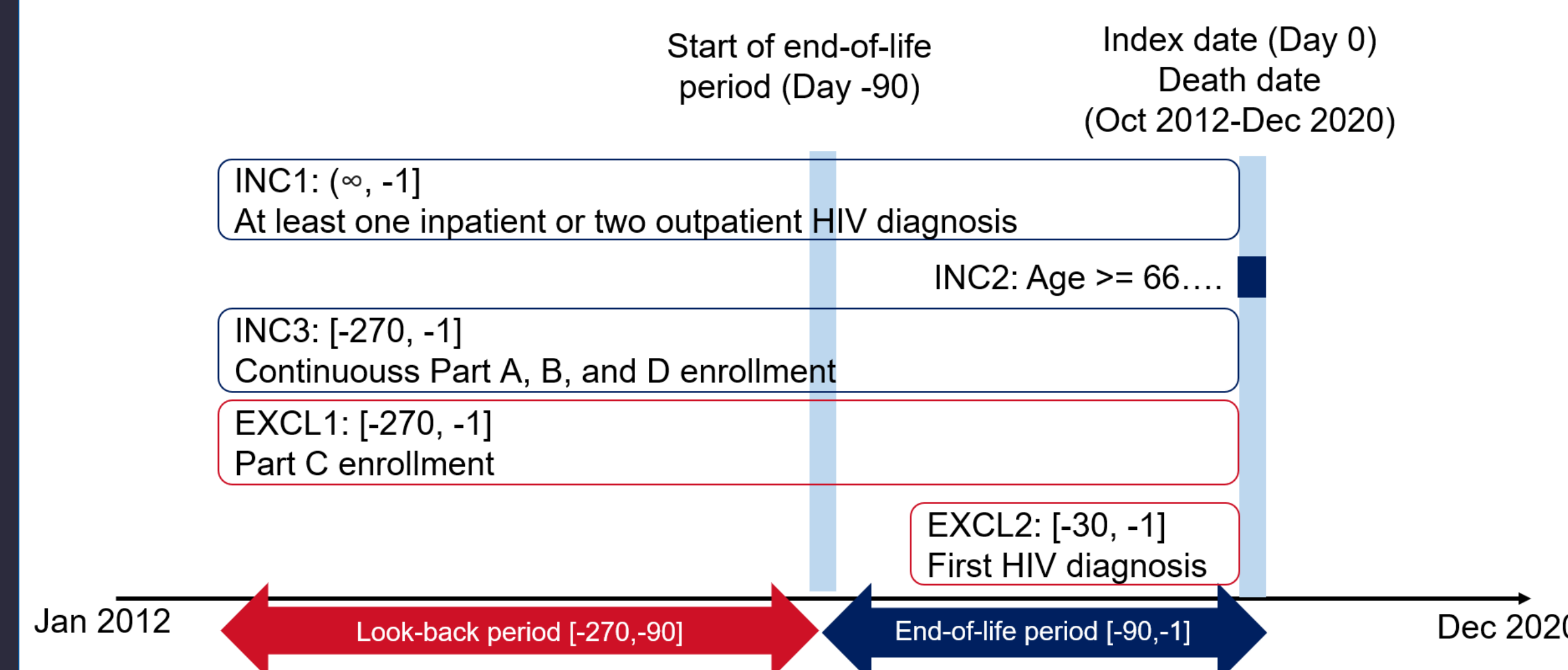


Figure 1. Study design

Results

- Of the 724 eligible beneficiaries, 71.96% were male, with mean age of 73.89 years (SD=7.02). A majority of them were residing in southern states (47.79%), followed by northeast (25.83%).
- 68.78% of eligible population were enrolled in a low-income subsidy program, and 53.73% of them had home health or hospice use during the end-of-life period.
- Median total cost during end-of-life period were \$38,360.54, where majority of it being due to inpatient cost followed by outpatient cost, prescription cost and other costs.

Cost components	Mean (SD)	Median [interquartile range]
Total cost	\$ 50,845 (\$45,954)	38,360 [\$ 16,542 - \$ 68,289]
Inpatient cost	\$ 34,000 (\$41,408)	21,003 [\$ 0 - \$ 50,014]
Outpatient cost	\$ 8,437 (\$7,734)	6,388 [\$ 2408 - \$ 11,931]
Prescription cost	\$ 5,593 (\$7,331)	3,230 [\$ 474 - \$ 8,500]
Other cost*	\$ 2,815 (\$4,643)	0 [\$ 0 - \$ 3,702]

*Other cost includes home health and hospice costs.

Table 1. Descriptives of cost information

Results

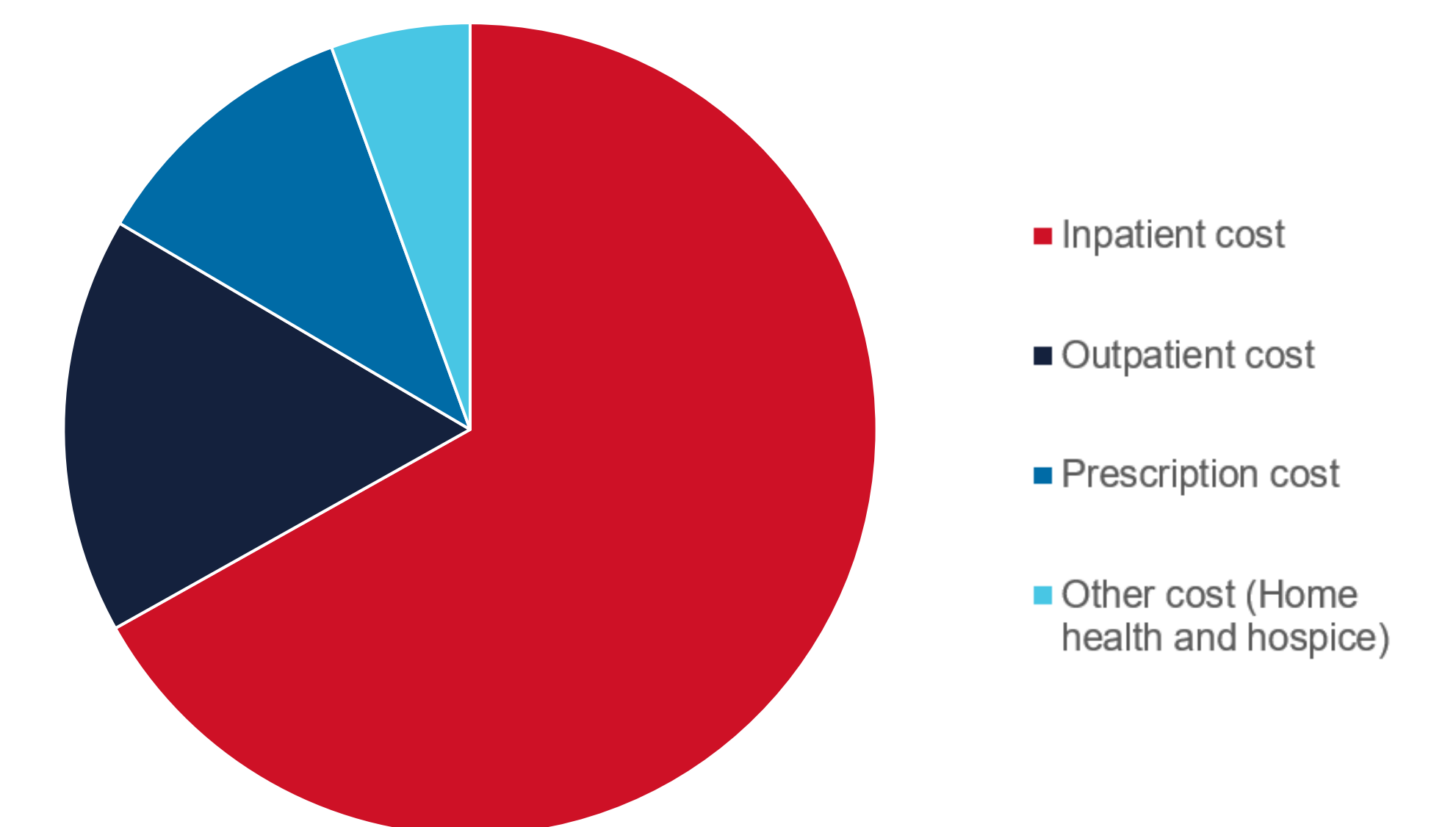


Figure 2. Average total cost distribution

Conclusion

- In this cohort of older Medicare beneficiaries with HIV who died between 2012-2020, end-of-life costs pose a significant burden to Medicare.
- Further studies are required to identify demographic, clinical, and social predictors of EOL costs in this population and assess quality of care in the end-of-life period.

Contact information

- Dr. Shadi Bazzazzadehgan (sbazzazz@go.olemiss.edu)
- Dr. Swarnali Goswami (swarnaligoswami34@gmail.com)

Key references

- Rhodes RL, Nazir F, Lopez S, et al. Use and Predictors of End-of-Life Care Among HIV Patients in a Safety Net Health System. *J Pain Symptom Manage*. 2016;51(1):120-125. doi:10.1016/j.jpainsymman.2015.08.010
- Cianelli R, Villegas N, Lewis-Pierre L, Valdes B, Iriarte E. Predictors of End of Life Discussions Among Minority Older Women Living With HIV Infection. *Am J Hosp Palliat Care*. 2021;38(6):583-589. doi:10.1177/1049909120971826