State *income eligibility limits* for the *Supplemental Nutrition Assistance Program (SNAP)* were inversely associated with the *number of new HIV diagnoses* for states between 2010-2014

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Background

• The connection between food insecurity and HIV outcomes is well-established

• The Supplemental Nutrition Assistance Program (SNAP), the primary food safety net program in the US, may have collateral impacts on HIV incidence, but the extent to which it does is unknown

• "Broad-based categorical eligibility" for SNAP is a federal policy that provides a mechanism for states to increase the income or asset limits for SNAP eligibility

Methods

• Included all states 2010-2014

• Primary exposure of interest:
  • State income limits for SNAP eligibility
  • State asset limits for SNAP eligibility

• Modelled relationship between SNAP policies and number of new HIV diagnoses using negative binomial regression models

Results

• 203,034 new HIV diagnoses in the US 2010-2014 (Figure 1)

• Eight states increased, and one state decreased, the income limit for SNAP during the Study period

	Income limit for Eligibility	Asset limit for eligibility
Increased	DC, FL, HI, IA, MN, MT, NM, NC	AL, CO, DC, FL, HI, IL, IA, KY, LA, MN, MS, NE, NJ, NM, NC
Decreased	ME	ID, MI, PA

HIV diagnoses within states had a statistically significant inverse association with state income limits, but no association with state asset limits

		Unadjusted		State/year fixed effects		Both policies, fixed effects, and time-varying covariates*	
		IRR	95% CI	IRR	95% CI	IRR	95% CI
Income limit (per increase of 35% FPL)		1.11	1.01-1.23	0.95	0.92-0.98	0.94	0.91-0.98
Asset limit	No change	Ref		Ref		Ref	
	Increased	0.92	0.61-1.39	0.96	0.89-1.04	1.01	0.94-1.09
	Eliminated	1.23	0.99-1.53	0.98	0.94-1.03	1.04	0.99-1.10

*Time-varying covariates: average meal cost in a food secure household, health expenditure per capita, house price index, high school graduation rate, unemployment rate, uninsured rate, state spending on SNAP outreach, total TANF spending, SNAP Policy Stigma Index, Outreach Index, and Transaction Cost Index

Conclusions

• **Proposals to eliminate the use of broad-based categorical eligibility to increase the income limit for SNAP may undercut efforts to end the HIV epidemic in the United States**

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