

Disparities in Hepatitis C Treatment Uptake Among U.S. Medicaid Enrollees in 2018-9

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MAIN FINDING:

HCV treatment receipt within 6 months of diagnosis is lower among younger individuals, black and Hispanic people, and people with comorbid substance use disorders

Background

- Tracking hepatitis C (HCV) elimination requires measuring direct acting antiviral (DAA) treatment uptake disparities.
- The U.S. Medicaid program provides healthcare coverage for low-income individuals, including many people with HCV.
- We examined factors associated with receipt of DAA in the 6-months following a new HCV diagnosis.

Research Methods

- Data from 2017-19 T-MSIS Analytic File, which includes administrative health insurance data from Medicaid enrollees in all 50 states + DC and Puerto Rico
- Individuals aged 18-64 with an RNA test followed by one ICD-10 diagnosis code for HCV within 180 days
- Continuously enrolled for 12 months before and 6 months after their index HCV diagnosis
- Proportion receiving DAA prescription within 6 mos of index HCV diagnosis
- Used logistic regression to determine factors associated with prescription

Participant Characteristics Associated with DAA Treatment

Variable Name	Not treated with DAA (n= 55,940)	Treated with DAA (n= 13,373)	P-value
Age			<0.0001
18-29 years	8,963 (89%)	1,105 (11%)	
30-49 years	23,423 (83%)	4,935 (17%)	
50-65 years	23,554 (76%)	7,323 (24%)	
Race/Ethnicity			<0.0001
Non-Hispanic White	33,541 (81%)	7,898 (19%)	
Non-Hispanic Black	7,775 (79%)	2,048 (21%)	
Hispanic	4,979 (81%)	1,185 (19%)	
Asian	827 (83%)	172 (17%)	
American Indian/Alaska Native	938 (83%)	193 (17%)	
Native Hawaiian / Pac Isl	125 (84%)	23 (15%)	
Multiple	110 (81%)	25 (19%)	
Missing	7,645 (81%)	1,829 (19%)	
Sex			<0.0001
Female	28,950 (83%)	5,783 (17%)	
Male	26,990 (78%)	7,590 (22%)	
Injection Drug Use			<0.0001
No	27,696 (78%)	7,919 (22%)	
Yes	28,244 (84%)	5,454 (16%)	
Cirrhosis			<0.0001
No	52,220 (81%)	12,202 (19%)	
Yes	3,720 (76%)	1,171 (24%)	
Rurality			<0.0001
Metropolitan	42,112 (80%)	10,760 (20%)	
Micropolitan	5,666 (83%)	1,179 (17%)	
Not urban	4,315 (82%)	923 (18%)	

• Significant variables not shown include: alcohol use disorder, mental health diagnosis, HIV, Hepatitis B, Medicaid expansion status
 • Race, ethnicity, and sex are reported as collected in the data file – we acknowledge and regret that this data does not capture the diversity of identity of the populations included.

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Older people with HCV were more likely to be black or Hispanic, and less likely to be white, than younger groups.

Race/Ethnicity	Age 18-29y	Age 30-49y	Age 50-65y
Non-Hispanic White	7,593 (75%)	19,527 (69%)	14,319 (46%)
Non-Hispanic Black	441 (4%)	1,867 (6.6)	7,515 (24%)
Hispanic	594 (6%)	2,208 (7%)	3,362 (10%)

After adjusting for age and other significant variables in multivariate regression, there were significant disparities in treatment by race/ethnicity.

Variable Name ^{0.984}	Odds Ratio (95CI)	P-value
Age		
18-29 years	0.46 (0.43-0.49)	<0.0001
30-49 years	0.76 (0.72-0.79)	<0.0001
50-65 years	ref	
Race/Ethnicity		
Non-Hispanic White	Ref	
Non-Hispanic Black	0.86 (0.81-0.91)	<0.0001
Hispanic	0.80 (0.74-0.85)	<0.0001
Asian	0.62 (0.53-0.74)	<0.0001
American Indian/Alaska Native	0.86 (0.73-1.01)	0.069
Native Hawaiian / Pac Isl	0.60 (0.38-0.94)	0.027
Multiple	1.00 (0.65-1.56)	0.984
Missing	0.85 (0.80-0.90)	<0.0001
Sex		
Female	Ref	
Male	1.31 (1.26-1.37)	<0.0001
Injection Drug Use	0.78 (0.75-0.82)	<0.0001
Alcohol use Disorder	0.85 (0.80-0.90)	<0.0001
Cirrhosis	1.13 (1.05-1.21)	0.001
HIV	0.83 (0.75-0.91)	<0.0001
HBV	0.85 (0.70-1.02)	0.081
Mental Health	0.96 (0.92-0.99)	0.035
Rurality		
Metropolitan	Ref	
Micropolitan	0.86 (0.82-0.96)	0.004
Not urban	0.89 (0.80-0.92)	<0.0001

Conclusions

- Findings show a low overall rate of uptake of direct acting antivirals among newly diagnosed patients with HCV
- There are substantial disparities by age, sex, and race-ethnicity
- There is significantly lower treatment uptake among people with injection drug use-related diagnoses, mental health diagnoses, and alcohol use disorder..
- The lower treatment among younger individuals and those with injection drug use-related diagnoses is concerning for U.S. efforts towards HCV elimination.
- Efforts to increase treatment uptake in these populations are needed.