



Differences in hepatitis C prevalence and treatment initiation between older and younger co-infected HIV-positive individuals in New York City

Katherine Penrose¹, Miranda Moore², Amber Casey¹, and Angelica Bocour²

New York City Department of Health and Mental Hygiene, New York, NY, ¹HIV Care and Treatment Program and ²Viral Hepatitis Program

Background

- Hepatitis C (HCV) progresses more quickly and is a leading cause of premature death among people living with HIV (PLWH).
- With the release of highly effective direct-acting antiviral regimens for HCV, HCV treatment among co-infected PLWH should be prioritized.
- Baseline estimates of coinfection and the relationship between demographics and HIV/HCV care measures are needed in order to tailor intervention efforts.

Results

- As of December 31, 2015, there were **11,461** individuals reported with HCV among the 81,664 PLWH in NYC. This represents 7% of all PLWH <50 and **20% of PLWH 50+**.
- 92% of co-infected individuals were engaged in HIV care in 2015 and **75% had HIV viral suppression**. Though 81% of co-infected individuals had a confirmatory RNA test for HCV, only **28% had initiated HCV treatment (Figure 1)**.
- Blacks** were the largest racial/ethnic group represented among co-infected individuals aged 50+ (44%), while **Latinos** were the largest group represented among co-infected PLWH <50 (49%). Co-infected individuals aged 50+ were more likely to have had a **history of injection drug use (IDU)** at the time of HIV diagnosis (55%) compared to co-infected individuals <50 (35%) (**Table 1**).
- Co-infected PLWH **aged 50+ were more likely to have HIV viral suppression** compared with those <50 (78% vs. 66%, respectively; $p \leq 0.001$). **PLWH aged 50+ were also slightly more likely to have initiated HCV treatment** compared with those <50 (29% vs. 26%, respectively; $p \leq 0.001$).

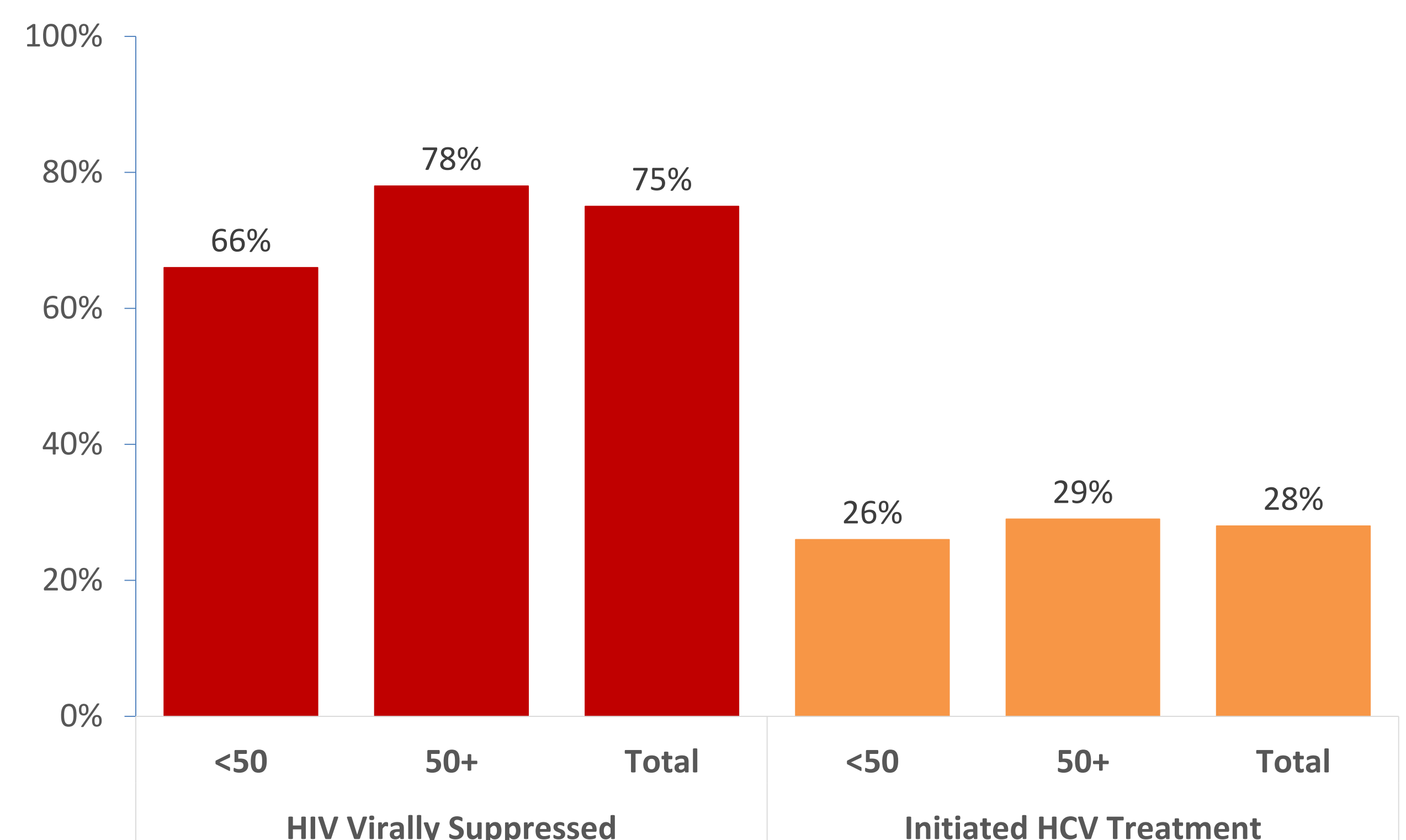
Table 1. Individuals living and reported with HIV and HCV by December 31, 2015 in NYC, by demographic characteristics

	Age group			
	<50		50+	
	N	%	N	%
Total	2,999	100.0	8,462	100.0
Current age (years)				
0-29	203	6.7		
30-39	786	26.2		
40-49	2,010	67.0		
50-59			4,778	56.5
60-69			3,282	38.8
70+			402	4.8
Race/Ethnicity				
Black	881	29.4	3,736	44.2
Latino	1,473	49.1	3,406	40.3
White	562	18.7	1,233	14.6
Other/Unknown	83	2.8	87	1.0
Gender				
Male	2,226	74.2	6,034	71.3
Female	704	23.5	2,382	28.1
Transgender	69	2.3	46	0.5
HIV transmission risk				
Men who have sex with men (MSM)	1,145	38.2	1,199	14.2
Injection drug use history (IDU)	814	27.1	4,161	49.2
MSM-IDU	250	8.3	481	5.7
Heterosexual contact	323	10.8	1,161	13.7
Other/Unknown	467	15.6	1,460	17.3
Current area-based poverty level				
Low poverty (<10% below FPL)	205	6.8	579	6.8
Medium poverty (10 to <20% below FPL)	756	25.2	1,800	21.3
High poverty (20 to <30% below FPL)	700	23.3	2,204	26.0
Very high poverty ($\geq 30\%$ below FPL)	1,261	42.0	3,647	43.1
Area-based poverty level not available	77	2.6	232	2.7

Methods

- A deterministic cross-match of the New York City Department of Health and Mental Hygiene (NYC DOHMH) HIV and HCV surveillance registries was done to identify individuals co-infected with HIV and HCV by December 31, 2015.
- Individuals known to be deceased as of December 31, 2015, as well as those without at least one HIV or HCV lab test reported in 2014 or 2015 were excluded.
- Definitions:**
 - Co-infection – an HIV diagnosis and any positive HCV test reported by December 31, 2015
 - Engagement in HIV care – ≥ 1 viral load (VL) or CD4 count reported in the year
 - HIV viral suppression – most recent VL ≤ 200 copies/ml
 - Confirmed HCV infection – any positive RNA test
 - Initiation of HCV treatment – ≥ 1 negative RNA result preceded by a positive RNA result.
- HIV and HCV care and treatment outcomes for 2015 were compared using reported laboratory data for those <50 and 50+ years old.

Figure 1. 2015 HIV and HCV treatment outcomes for co-infected individuals in NYC, by age group



Conclusions

- One in five PLWH aged 50+ is co-infected with HCV, and those aged 40-49 make up two-thirds of co-infected individuals <50.
- The rate of HCV treatment initiation among co-infected PLWH remains low across age groups, despite the availability of effective, well-tolerated treatments and few remaining insurance-related treatment restrictions in New York State.
- As the majority of co-infected PLWH are engaged in HIV-related care, it is crucial to increase the capacity of HIV providers to address HCV care and treatment in their HIV-positive patients.
- Through Project SUCCEED, a HRSA-funded Special Project of National Significance, NYC DOHMH aims to eliminate HCV among PLWH in NYC and reduce racial/ethnic disparities in access and treatment by:
 - ✓ Promoting HCV screening and diagnostic testing according to guidelines
 - ✓ Educating PLWH about HCV risks and treatment
 - ✓ Increasing HIV clinical and non-clinical provider knowledge of HCV and care management skills
 - ✓ Supporting organizations to identify, return to care, and treat all co-infected patients for HCV
 - ✓ Conducting case investigation and linkage to care for patients who cannot be returned to care by an organization

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