

Population-based estimates of integrated HIV, STI, and hepatitis C testing, Oregon, 2016

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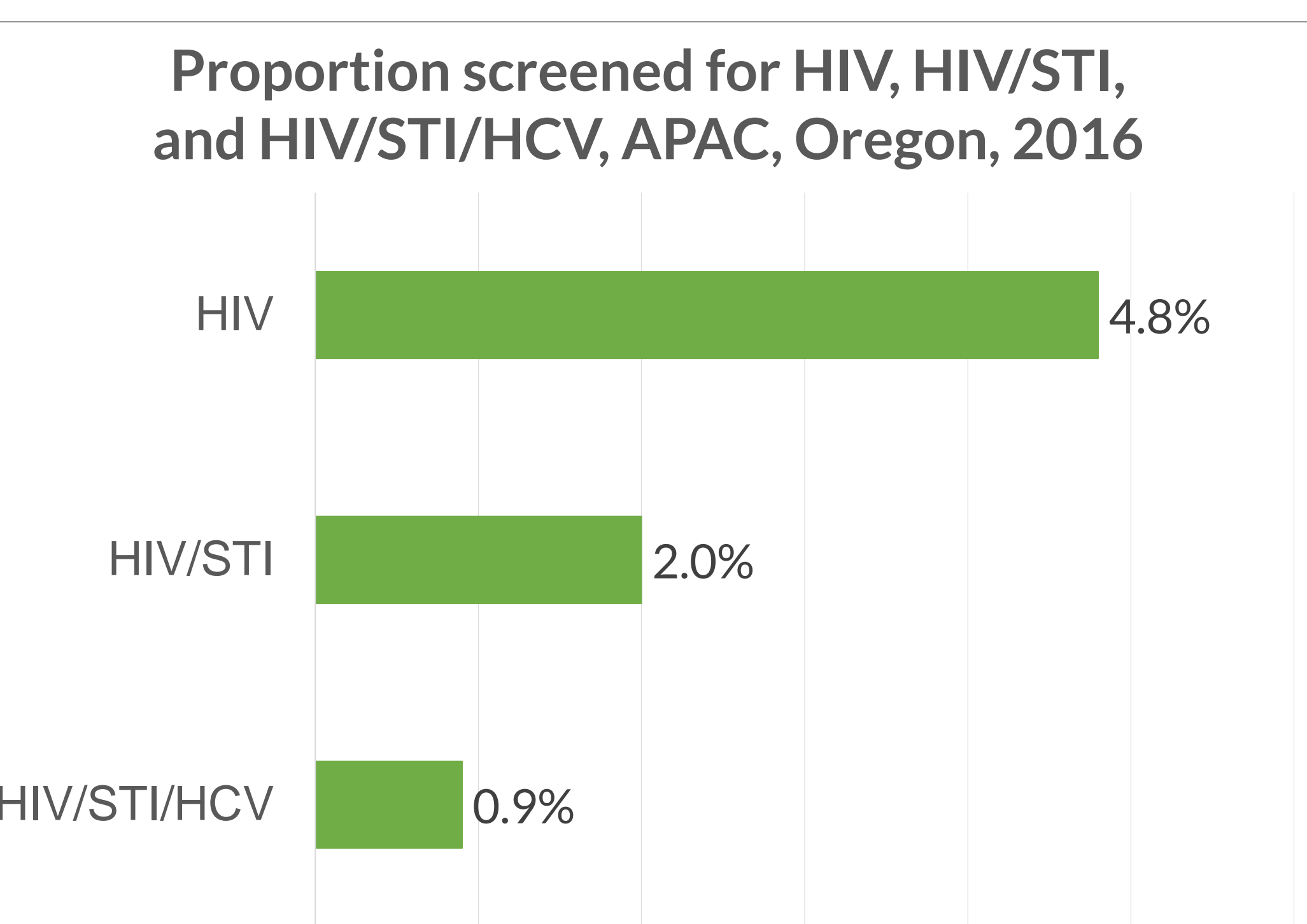
INTRODUCTION



- CDC and USPSTF screening guidelines for HIV, STI, and HCV exist but are not often followed in practice
- There is significant overlap between HIV, STI, and HCV at both the individual (i.e., co-infection) and population levels (i.e., syndemic)
- However, there are no guidelines for the integration of HIV, HCV, and STI screening
- We sought to assess how common integrated testing is as a baseline for interventions to increase such testing in Oregon

METHODS

- We used CPT codes from the 2016 Oregon All Payers All Claims (APAC) database to estimate the proportion of insured Oregon residents who were:
 - Tested for HIV
 - Tested for HIV, syphilis, gonorrhea and chlamydia on the same day (HIV/STI)
 - Tested for HIV, syphilis, gonorrhea, chlamydia, and HCV on the same day (HIV/STI/HCV)
- We examined each outcome by demographic variables and used multivariable logistic regression to identify independent predictors of each outcome
- Included outpatient visits for those 13-64 years of age; excluded inpatient visits, pregnant patients and those with an HIV diagnosis
- Sample size = 1,780,612

RESULTS





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Integrated HIV, STI, and HCV testing is a rare practice that varies by key factors.

Integrated testing was more common among:

- 18-29 year-olds** compared to other age groups
- Women** compared to men
- Black/African Americans and American Indians/Native Americans** compared to whites
- Those on **Medicaid** compared to other insurance plans
- Among **outpatient clinics** compared to ERs/urgent care and mental health and substance use disorder treatment clinics
- People residing in **urban areas** compared to rural or frontier areas

Multivariable analysis of HIV testing, HIV/STI testing, and HIV/STI/HCV testing, APAC, Oregon, 2016

	HIV testing			HIV/STI testing			HIV/STI/HCV testing		
	%	aOR	95% CI	%	aOR	95% CI	%	aOR	95% CI
Age									
13-17	1.7	0.16	0.16, 0.17	0.9	0.18	0.17, 0.19	0.4	0.20	0.18, 0.22
18-29	9.4	REF		4.6	REF		1.8	REF	
30-39	7.2	0.81	0.80, 0.82	3.1	0.71	0.70, 0.73	1.3	0.79	0.76, 0.82
40-49	3.3	0.40	0.38, 0.40	1.1	0.28	0.27, 0.29	0.6	0.43	0.40, 0.45
50-64	2.0	0.24	0.24, 0.25	0.3	0.09	0.09, 0.09	0.2	0.15	0.14, 0.16
Gender									
Women	5.9	REF		2.7	REF		1.1	REF	
Men	3.4	0.62	0.61, 0.63	1.1	0.46	0.45, 0.47	0.6	0.58	0.56, 0.60
Race/ethnicity									
White	5.9	REF		2.3	REF		1.1	REF	
Hispanic, Latino/a/x, any race	6.8	0.99	0.95, 1.02	2.9	0.97	0.92, 1.03	0.9	0.69	0.62, 0.76
Black/African American	9.6	1.60	1.52, 1.68	3.4	1.43	1.34, 1.55	1.7	1.42	1.28, 1.59
American Indian/Alaska Native	5.5	1.33	1.24, 1.42	1.7	1.01	0.90, 1.14	0.7	1.22	1.05, 1.43
Asian	8.0	0.76	0.70, 0.83	2.6	0.60	0.52, 0.69	1.5	0.50	0.41, 0.62
Native Hawaiian/Pacific Islander	6.4	0.84	0.70, 1.00	2.5	0.78	0.59, 1.04	1.0	0.70	0.45, 1.07
Multiracial	5.3	1.10	0.96, 1.28	2.2	1.10	0.89, 1.37	0.6	0.60	0.39, 0.92
Missing	4.3	1.08	1.06, 1.10	1.8	1.15	1.12, 1.18	0.8	1.07	1.03, 1.11
Insurance									
Other	3.0	REF		1.2	REF		0.5	REF	
Medicaid	7.7	2.76	2.71, 2.80	3.2	2.63	2.56, 2.69	1.5	3.02	2.91, 3.14
Place of service									
Clinic, FQHC, outpatient setting	5.5	REF		2.4	REF		1.0	REF	
ER, urgent care	3.7	0.57	0.56, 0.58	1.4	0.49	0.48, 0.50	0.5	0.42	0.40, 0.44
Outpatient mental health, substance use disorder treatment	5.2	0.51	0.48, 0.54	2.2	0.52	0.47, 0.57	1.2	0.60	0.53, 0.68
Other (includes lab, home, pharmacy)	4.0	0.71	0.70, 0.72	1.4	0.61	0.59, 0.63	0.7	0.69	0.66, 0.72
Region									
Urban	5.2	REF		2.1	REF		0.9	REF	
Rural	4.1	0.76	0.75, 0.77	1.8	0.89	0.87, 0.91	0.8	0.85	0.82, 0.88
Frontier	3.7	0.68	0.64, 0.71	1.6	0.78	0.72, 0.85	0.5	0.57	0.50, 0.66

Characteristic	N	%
Age, years		
13-17	184,610	10.4
18-29	381,032	21.4
30-39	339,086	19.1
40-49	318,334	17.9
50-64	556,650	31.3
Gender		
Women	995,017	55.9
Men	785,595	44.1
Race/ethnicity		
White	388,287	21.8
Hispanic, Latino/a/x, any race	48,908	2.7
Black/African American	20,853	1.2
American Indian/Alaska Native	12,731	0.7
Asian	12,027	0.7
Native Hawaiian/Pacific Islander	2,064	0.1
Multiracial	3,985	0.2
Missing	1,291,757	72.5
Insurance		
Other	1,108,137	62.2
Medicaid	672,475	37.8
Place of service		
Clinic, FQHC, outpatient setting	1,000,022	56.2
ER, urgent care	445,871	25.0
Outpatient mental health, substance use disorder treatment	21,628	1.2
Other (includes lab, home, pharmacy)	313,091	17.6
Region		
Urban	1,181,213	66.3
Rural	563,644	31.7
Frontier	35,755	2.0

