

IMPROVING DATA ON THE HIV EPIDEMIC BY IDENTIFYING TRANSGENDER PERSONS IN MEDICAID IN NEW YORK CITY, 2013-2017

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BACKGROUND

- Instituting an “integrated comprehensive approach to transgender healthcare and human rights” as part of the New York Ending the HIV Epidemic Blueprint remains challenging partially due to underascertainment of transgender identity within healthcare and public health systems, the lack of integration of disparate data systems, and barriers to accessing affordable, non-stigmatizing healthcare.
- Matching Medicaid to HIV Registry data could address some of these gaps and lead to better health outcomes among transgender persons.

OBJECTIVES

- Develop an algorithm to identify transgender persons in Medicaid claims data;
- Estimate the prevalence of HIV among transgender persons accessing Medicaid by matching to the HIV Registry; and
- Describe their socio-demographic characteristics.

METHODS

- An algorithm was developed that combined transgender-related diagnosis codes, sex, prescription drugs, and transgender-related restriction and exception (R/E) codes (Validation Steps under Table 1) to identify transgender persons in Medicaid claims from 2013 to 2017.
- Individuals determined to be transgender in Medicaid were matched against the NYC HIV Registry to identify those with HIV, and the Registry was utilized to find additional transgender persons not identified by the algorithm.
- Numbers enrolled over time and socio-demographic characteristics were assessed descriptively from transgender persons’ Medicaid enrollment data.

Results

- 6,335 unique transgender persons** accessing Medicaid in 2013-2017 were identified, 95% ascertained through the algorithm and 5% additionally identified through the Registry (Figure 1).
- 1764 (28%) were diagnosed with HIV.** 21% of transgender persons with HIV identified by the algorithm were misclassified as cisgender in the Registry. More PWH were older, resided in the Bronx, were Black, had male sex on their Medicaid card, were deceased, and had been enrolled longer in Medicaid than those not living with HIV (Table 2).
- The 6,335 were .1% of Medicaid enrollees and **over the 5 years there was a 35% increase in transgender enrollees (Figure 2).** **79% of transgender persons in the Registry used Medicaid.**

TABLES AND FIGURES

TABLE 1: Criteria to identify transgender persons in Medicaid claims, NYC 2013-2017.

Validation Steps		Alternate Criteria Specific to Transgender Subpopulations	
Step	Description	Subgroup	Alternate Criteria ^{a,b}
1.	Diagnoses meeting the primary criterion standard were ICD-10 F64.0, F64.1, F64.2, F64.8, F64.9, F65.1, Z87.890 and ICD-9 302.3, 302.50, 302.51, 302.52, 302.53, 302.6, and 302.85. If a person had any of these diagnosis codes in 2013-2017 they were considered validated as transgender.	Trans Men	Female + testosterone + Endocrine disorder unspecified diagnosis* Male + testosterone + Endocrine disorder unspecified diagnosis G2 Female-to-Male restriction/exception code*
		Trans Youth Taking Puberty Suppressants	Puberty suppressant + age of 10-16 + no diagnosis of precocious puberty
2.	Individuals not meeting the primary criterion, but who met any alternate criteria in Table 1 with an * were also validated.	Trans Women	Male + estrogen Male + progestin Male + Lupron + estrogen estrogen Female + 5-alpha reductase inhibitor + estrogen Male + spironolactone + estrogen* Male + flutamide + estrogen G1 Male-to-Female restriction/exception code*
3.	Those meeting alternate criteria without an * went through further validation, including assessing if they met more than 1 alternate criterion or individual review.		

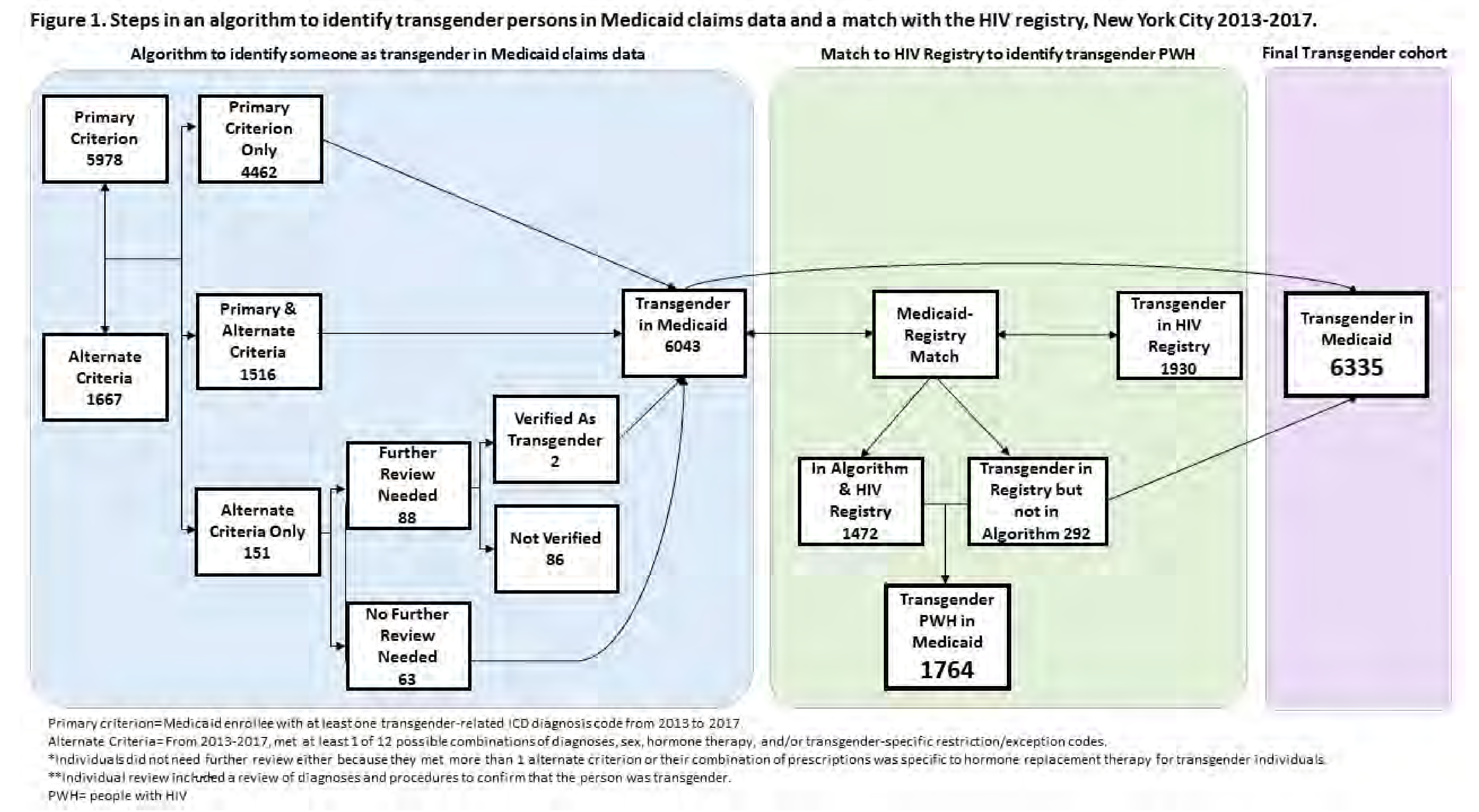
^aSex was taken from the binary sex variable in Medicaid. Current gender identity is not available through Medicaid.
^bFor any criterion that includes more than 1 drug, the drugs must have claims with the same date in Medicaid.
*After matching to transgender-related diagnosis codes, no further validation done.

TABLE 2: Characteristics of transgender persons in Medicaid by HIV status, NYC 2013-2017.

Beneficiary Characteristics	Total		Non-PWH		PWH	
	N	%	N	%	N	%
TOTAL	6335	100.0	4571	100.0	1764	100.0
Age						
0 - 12	139	2.2	139	3.0	0	0.0
13 - 19	497	7.8	489	10.7	8	0.5
20 - 29	2279	36.0	1846	40.4	433	24.5
30 - 39	1563	24.7	988	21.6	575	32.6
40 - 49	840	13.3	466	10.2	374	21.2
50 - 59	662	10.4	366	8.0	296	16.8
60+	355	5.6	277	6.1	78	4.4
Borough						
Bronx	1687	26.6	984	21.5	703	39.9
Brooklyn	1684	26.6	1249	27.3	435	24.7
Manhattan	1415	22.3	1067	23.3	348	19.7
Queens	1270	20.0	1063	23.3	207	11.7
Staten Island	191	3.0	143	3.1	48	2.7
Unknown	88	1.4	65	1.4	23	1.3
Race/ethnicity						
American Indian	8	0.1	6	0.1	2	0.1
Asian or Pacific Islander	426	6.7	415	9.1	11	0.6
Black	1922	30.3	1022	22.4	900	51.0
Latino/Hispanic	2159	34.1	1565	34.2	594	33.7
Multiple Races	529	8.4	406	8.9	123	7.0
White	887	14.0	793	17.3	94	5.3
Unknown	404	6.4	364	8.0	40	2.3
Sex on Insurance Card						
Female	3088	48.7	2443	53.4	645	36.6
Male	3247	51.3	2128	46.6	1119	63.4
Alive or Dead						
Alive	6171	97.4	4493	98.3	1678	95.1
Dead	164	2.6	78	1.7	86	4.9
Also In Medicare						
Medicare	593	9.4	381	8.3	212	12.0
Not Medicare	5742	90.6	4190	91.7	1552	88.0
Enrollment Length in Months						
Median (IQR)	31 (10, 83)		26 (8, 66)		50 (16, 116)	

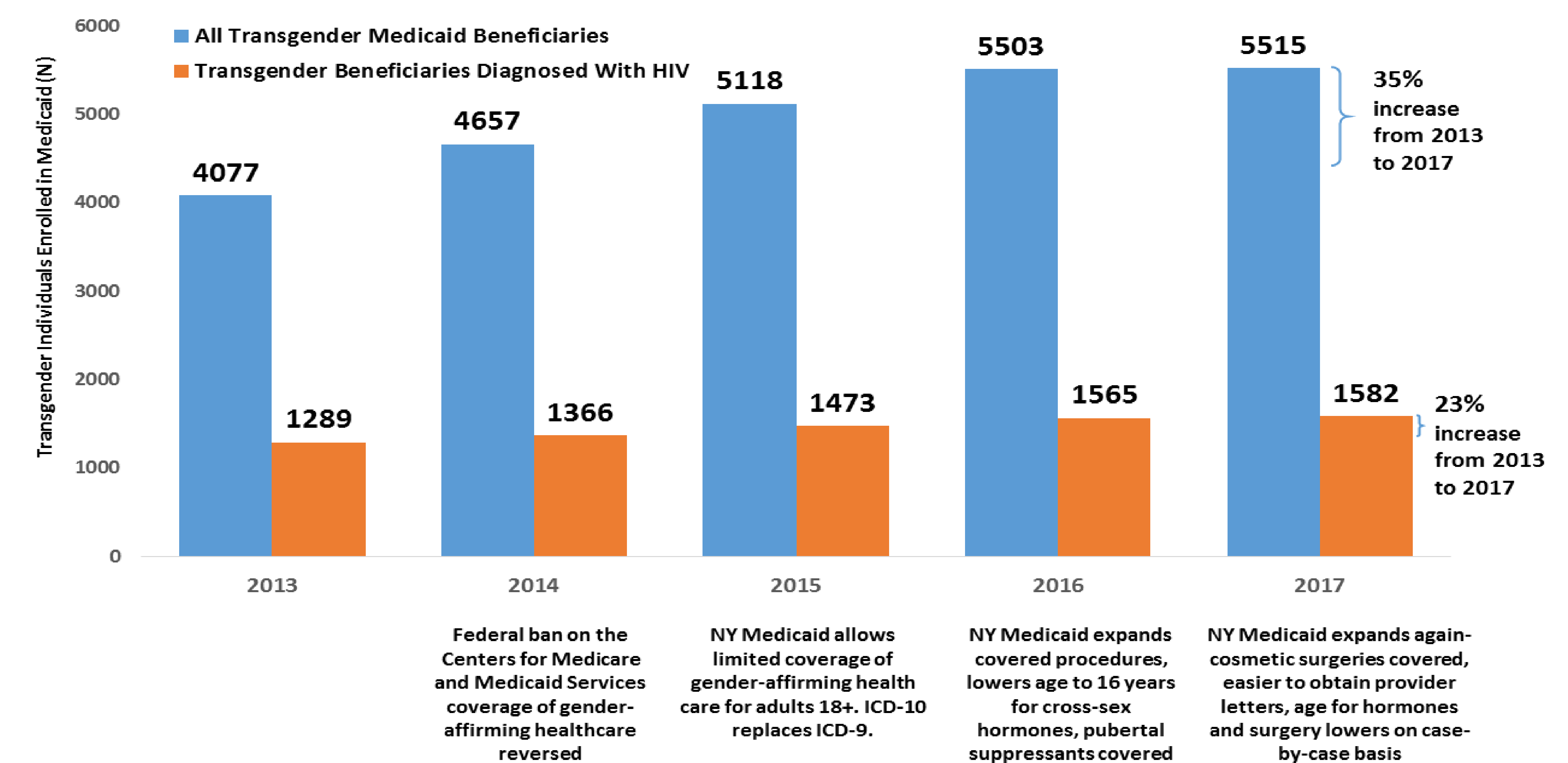
*Estimates are based on a beneficiary's last enrollment record.

FIGURE 1: Steps in an algorithm to identify transgender persons in Medicaid claims data and a match with the HIV registry, NYC 2013-2017.



In total 79% of transgender PWH in the HIV Registry were found to be in Medicaid; 1764 trans PWH in Medicaid/(1930 trans in Registry + 304 misclassified as cisgender in Registry).

FIGURE 2: Transgender persons enrolled in Medicaid by year, all enrollees and enrollees living with HIV, NYC 2013-2017



CONCLUSION

We identified a large number of transgender persons accessing Medicaid in NYC, with that number increasing substantially in recent years. Almost 30% were diagnosed with HIV. This analysis highlights the value of combining Medicaid and HIV surveillance data in order to enable more holistic assessment of the health needs of transgender persons and that Medicaid is a critical safety net program for this population in NYC.