

Access to HIV Care: Lack of Insurance Among Patients in a Large Public Health System

Kathleen Brady, MD; Coleman Terrell; Marlene Matosky, MPH, RN; Gary D Klein, PhD
Philadelphia Department of Public Health

Philadelphia EMA Ryan White Part A Program

- A large public health system providing HIV medical care to over 6200 individuals in a nine county region
 - This study involves 19 provider agencies (some with multiple locations) in the 5 PA counties
 - Philadelphia DPH Ambulatory Health Services
 - 18 contracted provider agencies (ASOs, FQHCs, Hospital-based HIV clinics)

**To what extent do we provide
equal access to quality care for
Ryan White HIV Treatment
Modernization Act target
populations?**

Methods

- Study Design: retrospective cohort
- Population: HIV+ patients meeting EMA CQI inclusion criteria during 3/1/2005 – 2/28/2006, >12 yrs old, followed at 19 provider agencies
- Outcome: receipt of 3 viral load tests in year
- Variables: insurance status, gender, race/ethnicity, risk, age, provider characteristics
- Analysis: Univariate analysis, multivariate logistic regression

Methods - continued

- EMA QM Inclusion Criteria
 - At least three medical visits for new patients in study period (3/1/2005 – 2/28/2006)
 - At least one medical visit in the period for established patients (patients whose initial visit precedes study period)

Quality Defined as 3 Viral Loads

- PHS guidelines recommend testing q 3-4 months
- VL data is the basis for evaluating many clinical quality indicators
- Data quality not likely to be related to patient factors
- Receipt of 3 VL needs improvement: only 25% of patients meet indicator

Patient Demographics (N=6290)

White	1051(17%)	Male	4021(64%)
Black	4301(69%)	Female	2215(35%)
Latino	783(13%)	Transgender	54(1%)
Other	113(2%)	13-24	169(3%)
MSM, Non-IDU	1670(27%)	25-44	3382(54%)
IDU	1372(22%)	45+	2736(44%)
Hetero, Non-IDU	2914(47%)	Insured	5236(84%)
Other/Unknown	294(5%)	No Insurance	994(16%)

Provider Characteristics

	# Agencies	# Pts.	% of Pop.
Other Providers	18	5392	86%
Phila. DPH	1	898	14%
Pt. Pop.: 0-200	11	731	12%
Pt. Pop.: 201-500	4	1687	27%
Pt. Pop.: 501-1000	2	1592	25%
Pt. Pop.: >1000	2	2280	36%

Logistic Analysis 3 VL (a)

	Adjusted Odds Ratio (AOR)	95% Confidence Interval (CI) Low	95% Confidence Interval (CI) Upper
Male	1.000	ref	
Female	0.985	0.853	1.138
Transgender	0.588	0.272	1.272
White	1.000	ref	
Black, p<.05	1.230	1.025	1.477
Latino, p<.001	1.588	1.254	2.011
Other	1.050	0.644	1.712

Logistic Analysis 3 VL (b)

	AOR	95% CI Low	95% CI Upper
MSM, Non-IDU	1.000	ref	
IDU	0.938	0.778	1.130
Hetero, Non-IDU	1.009	0.842	1.208
<i>Other/Unk., p<.001</i>	<i>0.570</i>	<i>0.410</i>	<i>0.792</i>
13-24	1.000	ref	
25-44	1.037	0.705	1.525
<i>45+, p<.05</i>	<i>1.515</i>	<i>1.026</i>	<i>2.236</i>

Logistic Analysis 3 VL (c)

	AOR	95% CI Low	95% CI Upper
Insured	1.000	ref	
<i>No Insurance, p<.001</i>	<i>0.686</i>	<i>0.570</i>	<i>0.826</i>

Logistic Analysis 3 VL (d)

	AOR	95% CI Low	95% CI Upper
Other Providers	1.000	ref	
Phila DPH	1.030	0.971	1.093
<i>Pt. Pop 0-200, p<.001</i>	2.078	1.688	2.559
<i>Pt. Pop 201-500 , p<.001</i>	2.839	2.421	3.329
<i>Pt. Pop 501-1000 , p<.001</i>	1.990	1.665	2.378
Pt. Pop >1000	1.000	ref	

Factors Associated with 3 VL

- Increased likelihood to have 3 VL
 - Black ($p < .05$)
 - Hispanic ($p < .001$)
 - Age 45+ ($p < .05$)
 - Care at sites with < 1000 patients ($p < .001$)
- Decreased likelihood to have 3 VL
 - Other/Unk. Risk (not MSM, IDU, Hetero) ($p < .001$)
 - No insurance ($p < .001$)

Limitations

- Used the number of viral loads in a 12-month period regardless of the time interval between them. Per PHS guidelines VL's should be q 3-4 months.
- Inclusion criteria
 - 10% of patients don't meet inclusion criteria (new patients with <3 visits in study period).

Summary

- Relatively equal quality based on
 - Race/ethnicity
 - Gender
 - Risk
- Lower quality for uninsured patients

Staff Involved

- Kathleen A Brady, MD
 - Gary Klein, PhD
 - Marlene Matosky, MPH, RN
 - Ethan Schofer
 - Coleman Terrell
-
- Philadelphia EMA Ryan White Part A
Primary Care Providers