Using the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model to address risky substance use in New York City STD clinics: Are we in the right neighborhoods?

Margaret Wolff¹, Raffaella Espinoza¹, Meighan Rogers¹, John Yu³, Brett Harris³, Louis Cuoco⁴, Susan Blank^{1,5}

ivialigatet vvoili, ivaliaciia Espirioza , ivicigilati regets , botti i a , bietti i atris , Eduis duded , dusan bianti

BACKGROUND

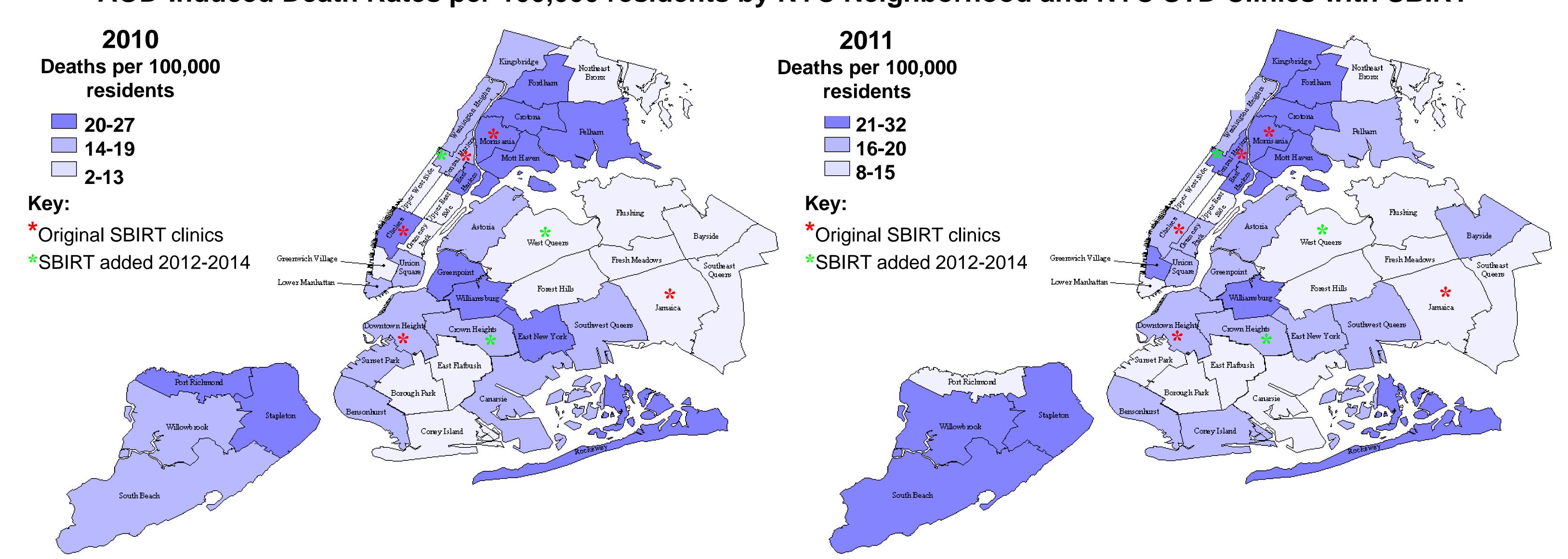
- Alcohol/other drug use (AOD) is associated with high risk sexual behavior, sexually transmitted disease (STD)/HIV transmission,^{1, 2} and excess mortality.^{3,4}
- New York City Department of Health and Mental Hygiene (NYC DOHMH) STD clinics: Approximately 90,000 patient visits per year, at 8 clinics throughout NYC. 51% STD clinic patients uninsured; 42% unemployed.
- SBIRT implemented in 3 NYC DOHMH STD clinics in 2008, expanded to 5 clinics in 2010:
- Screening: Self-administered survey used to identify AOD use (CAGE-AID) distributed to all patients in waiting room
- Brief Intervention (BI): 10-15 min motivational interviewing session to positive-screened patients
- Referral to Treatment: Referral to substance abuse treatment provided as needed
- Goal: Early intervention for risky AOD use; improved linkages to treatment
- Low-income neighborhoods: lower rates of heavy alcohol use; greater alcohol-related mortality. 6 2010-2011: 55%-56% of drug overdose deaths in neighborhoods with high poverty. Overdose death rates highest in the very high poverty neighborhoods as compared to wealthiest neighborhoods (11 vs. 5/100,000 (2010); 13 vs. 9/100,000 (2011)).3

METHODS

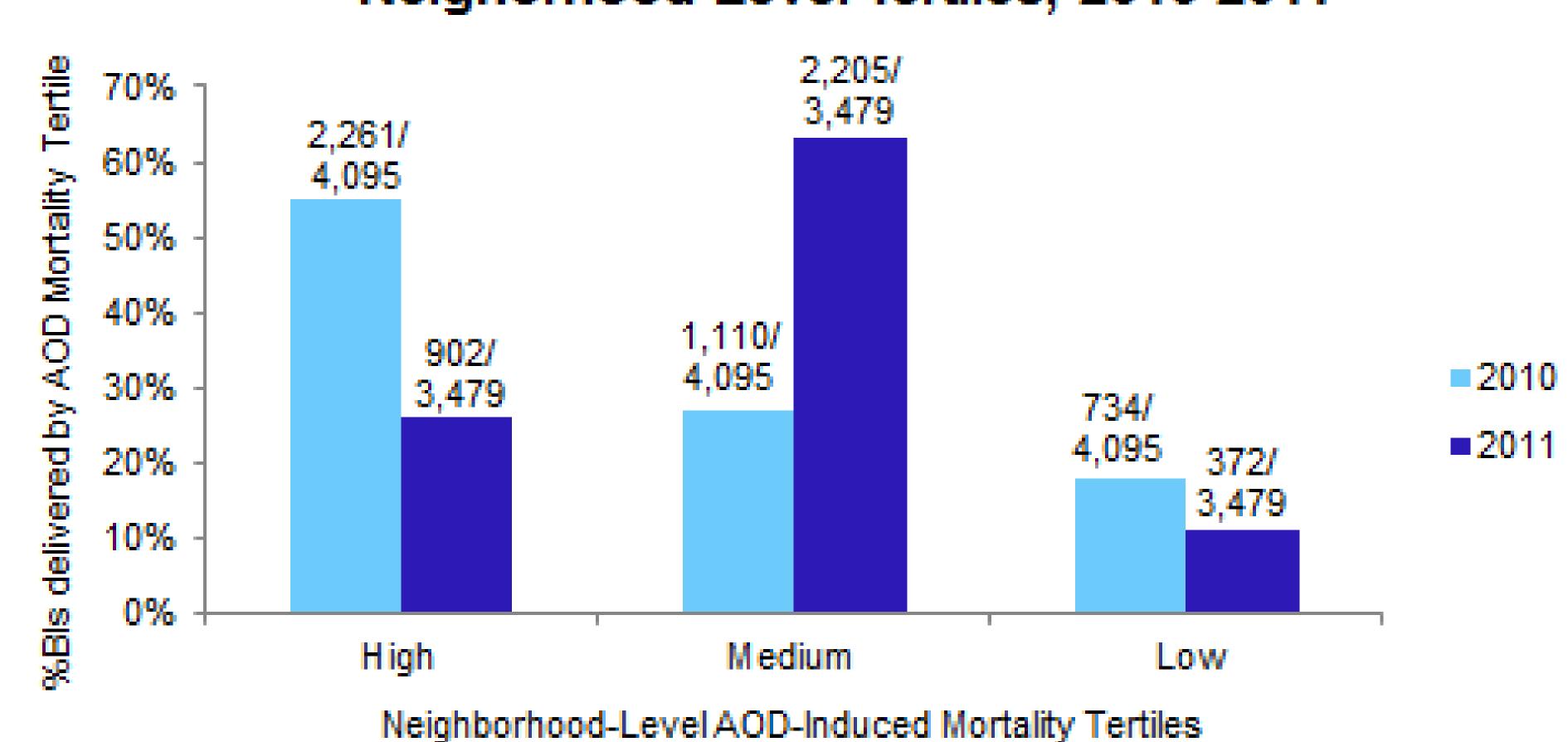
- Objective: Determine if SBIRT served highest-need populations based on AOD-induced mortality.
 Calculated total number of Bls conducted from January 2010-December 2011 and examined NYC Vital Statistics data for 2010-2011 alcohol- and drug-induced mortality rates.
- Utilized CDC definition of alcohol- and drug-induced mortality: ICD-10 codes indicating acute intoxication, withdrawal, poisoning (overdose) or physical diseases as a direct result of use (i.e. alcoholic liver disease; drug-induced anemia, etc.).⁷
- Alcohol and drug induced mortality data combined to produce AOD-induced mortality rates across the 42 NYC neighborhoods, which were then grouped by neighborhood-level tertiles of high, medium, and low AOD-induced mortality rates.
- Neighborhood-level AOD-induced mortality rates correlated with total number of BIs conducted by NYC STD clinic locations within neighborhood-level AOD-induced mortality tertiles.

RESULTS

AOD-Induced Death Rates per 100,000 residents by NYC Neighborhood and NYC STD Clinics with SBIRT



Percent of SBIRT Brief Interventions by AOD-Induced Mortality Neighorhood-Level Tertiles, 2010-2011



CONCLUSIONS

- 2010 and 2011: 4 of 5 NYC STD clinics with SBIRT located in high or middle AOD-induced mortality neighborhoods.
- AOD-induced mortality rates varied across neighborhoods from year to year.
- From 2010-2011, Chelsea shifted from the high to middle mortality group. Chelsea is highest volume STD clinic; therefore, fewer SBIRT BIs done in high AOD-induced mortality neighborhoods in 2011.
- NYC DOHMH STD clinic locations will not change; as of March 2014, SBIRT expanded to all 8 STD clinics.

NEXT STEPS

- DOHMH could attempt to partner with community organizations and primary care clinics in additional neighborhoods with high AOD-induced mortality to expand SBIRT beyond NYC DOHMH STD clinics.
- DOHMH will consider alternate funding opportunities to sustain services beyond current grant period.
- Important to consider other indicators for AOD-related health disparities since AOD-induced mortality varies over time.



Health

3. New York City Department of Health and Mental Hygiene. Unintentional drug poisoning (overdose) deaths in New York City, 2010-2012. Epi Data Brief Epi Data Tables. 201 4. New York City Department of Health and Mental Hygiene. Health consequences of alcohol use in New York City. NYC Vital Signs.. 2010;9(5):1-4.

7. Xu JQ, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: Final data for 2007. National vital statistics reports; 58(19). Hyattsville, MD: National Center for Health Statistics. 2010.

5. Washburn K, Goodwin C, Pathela P, Blank S. Insurance and billing concerns among patients seeking free and confidential sexually transmitted disease care: New York City sexually transmitted disease clinics 2012. Sexually Transmitted Diseases. 2014; 41:463-466.

6. New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System. Community Health Survey 2010. Accessed October 14, 2014. http://nyc.gov/health/epiquery

Substance Abuse and Mental Health Services Administration

SAINHSA