

Preventable Emergency Department Visit Hotspots and Associations with Health in New York City

As the foundation of the health care system, primary care is essential in improving health outcomes and reducing cost growth across the United States (US).¹⁻⁴

Potentially preventable emergency department visits (PPVs) measure the rate of emergency department (ED) visits that may have been avoidable or treatable in other health care settings, such as primary care. High PPV rates can indicate primary care need, and may be used to identify areas where primary care services are limited, culturally incompetent for the local population, or entirely unavailable.^{5,6} These high-need regions provide opportunities to reduce unnecessary spending and support health system cost controls while improving community health.

Associating PPV rates, socioeconomic position, and health status by location can provide context to understand where improved primary care access might mitigate disparities in access, support cost control initiatives, and improve health outcomes.

To better understand primary care access disparities across New York City (NYC), Primary Care Development Corporation identified PPV hotspots and explored the relationship between PPV hotspots, socioeconomic indicators, and health factors in various NYC neighborhoods.

Key Findings

Comparing PPV hotspots and NYC averages highlights the stark regional disparities in health status, socioeconomic factors, and access to needed care:

- The average PPV rate in hotspots is **45.7 visits per 100 adults**— more than double the NYC average of **22.7 visits per 100 adults**
- The average health status in PPV hotspots was worse than the NYC average in terms of adult diabetes prevalence (**13.8% vs. 10.5%**), asthma prevalence (**11.7% vs. 9.9%**), high blood pressure (**32.1% vs. 28.3%**), and adults reporting fair or poor mental health (**16.0% vs. 12.5%**)
- Compared with the NYC average, PPV hotspots tend to have a higher proportion of Black, non-Hispanic residents (**40.5% vs. 22.4%**) and Hispanic and Latino residents (**50.3% vs. 26.2%**), and a lower median household income by almost half (**\$33,188 vs. \$62,342**)

Key PPV Hotspots Identified

PPV hotspots were identified in Northern Manhattan, the majority of the Bronx, and along the border of Eastern Brooklyn (Figure 1).

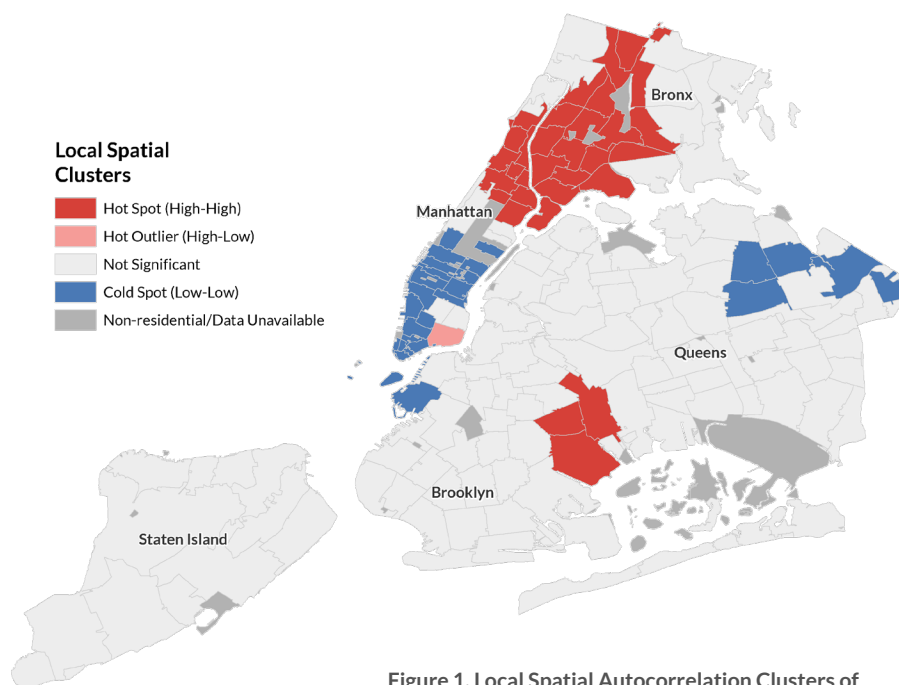


Figure 1. Local Spatial Autocorrelation Clusters of Potentially Preventable ED Visits (PPVs) in New York City by ZIP Code Tabulated Area (ZCTA), 2016. Data Source: Statewide Planning and Research Cooperative System (SPARCS)

- A data brief series examining all aspects of primary care access

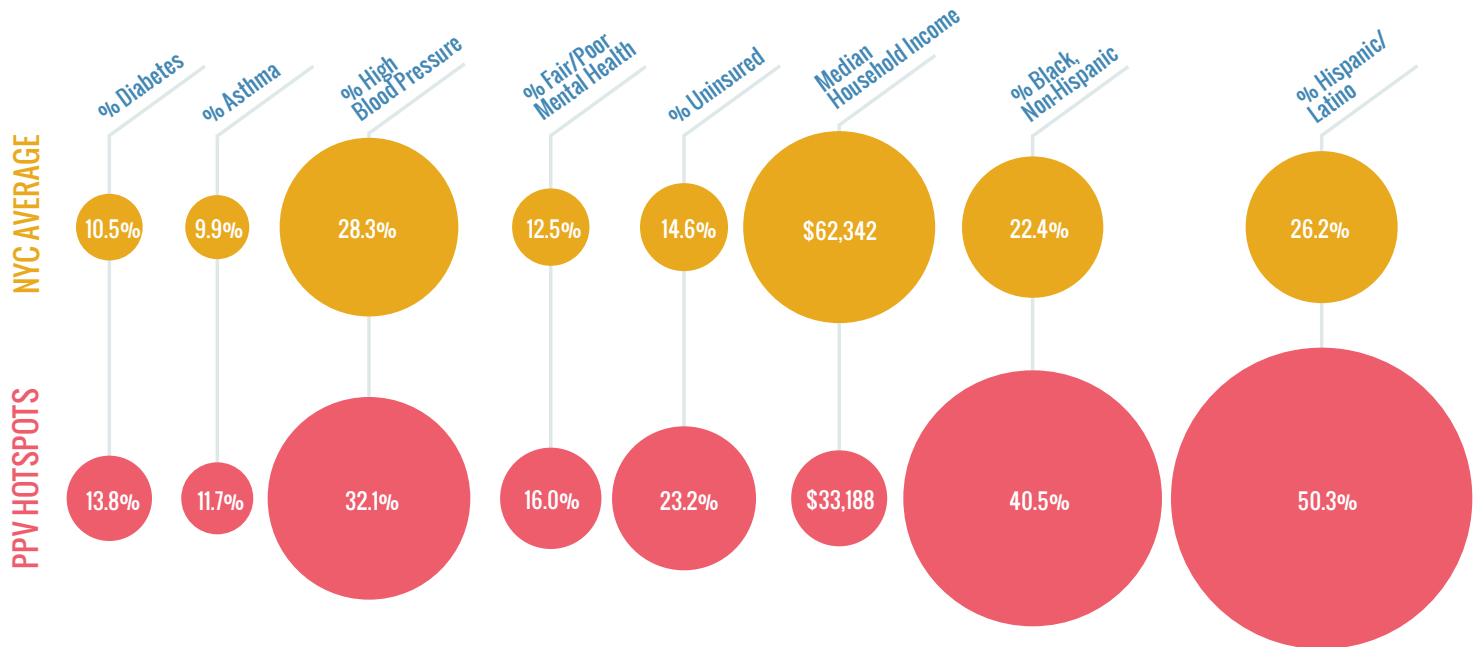


Figure 2. Comparison of 2015 Health and Socioeconomic Factors by 2016 Hotspot Status in NYC.
 Data Sources: 500 Cities Project via the Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System, 2015; US Census via the American Community Survey, 2015 5-year estimates; Statewide Planning and Research Cooperative System (SPARCS)

Turning Data into Action

Examining PPV hotspots across NYC highlights the regional need for primary care, illustrated by health and socioeconomic disparities, especially when compared with NYC averages.



Tracking local PPV trends is one method of continually monitoring the need for interventions to improve access to primary care. PPV trends not only indicate the local availability of ambulatory care, but also may help estimate and find ways to increase cost savings over time.



Future place-based studies can include practice and individual-level data. These data will help evaluate the capacity of local primary care facilities to support the community's care needs and develop tailored initiatives to address them, such as more culturally and linguistically appropriate services, longer office hours, or closed-loop referral systems.

Suggested citation: Weisbeck, K., Ford, M.M., Cohen, L. (2020) Identifying Preventable Emergency Department Visit Hotspots and Associations with Health. Points on Care. Primary Care Development Corporation.

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Primary Care Development Corporation (PCDC) is a nationally recognized nonprofit that catalyzes excellence in primary care through strategic community investment, capacity building, and policy initiatives to achieve health equity. For more information about PCDC, visit pcdc.org.