PRIMARY CARE DEVELOPMENT CORPORATION

PRIMARY CARE ACCESS IN NEW YORK CITY

2019 REPORT

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CONTENTS

NEW YORK CITY COUNCIL DISTRICTS & PRIMARY CARE ACCESS

SECTION 1.0

1.1 INTRODUCTION

Primary care is the foundation of the health care system and a cornerstone of healthy, thriving communities. Increasing primary care access across New York City, as in other major cities, creates healthy communities, ensures health equity, and reduces health care costs.

Primary care is often the first point of contact with the health care system and can prevent, identify, and treat illnesses as well as promote wellness. Effective primary care means that providers and services are accessible, affordable, comprehensive, ongoing, and coordinated.

Inequalities in primary care access and delivery alike are largely driven by economics, including insurance coverage, reimbursement, and social determinants of health. Geographic, demographic, and socioeconomic characteristics impact where primary care providers (PCPs) are located, and even in communities where providers are available, disparities in access may remain.

1.2 NEW YORK CITY COUNCIL DISTRICTS & PRIMARY CARE

FIG 1.
Map of New York City Council Districts

The **Primary Care Development Corporation (PCDC)** has identified key measures of primary care access. This report utilizes existing data to identify primary care facilities and services in NYC to contrast measurable elements of access to quality primary care across Council Districts (CDs). By examining multiple dimensions of primary care access at the District-level, we hope to further our understanding of primary care access for constituents while presenting content to help identify gaps in access, support advocacy for additional primary care services, and inform siting of new primary care facilities.

PRIMARY CARE ACCESS MEASURES

SECTION 2.0

2.1 ACCESS OVERVIEW

Primary care access is when a person is able to receive the needed primary care services that are timely, affordable, and in a geographically proximate location. Such qualities are largely dependent on factors including the availability of health care practitioners and facilities that provide primary care, the quality of these services, and whether providers accept a patient's health insurance or provide care without regard to ability to pay.

2.2 PRIMARY CARE PROVIDER AVAILABILITY

FIG 2a.
Primary Care Providers (PCPs) per 10,000 adult residents (18+ years) by New York City Council District, 2016-2017

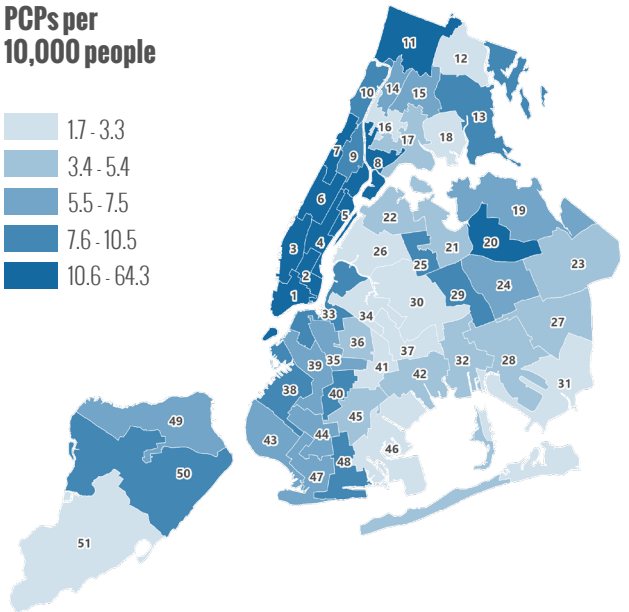

FIG 2b.
PCP Availability Ranking

Districts with the most PCPs per 10,000 people

1.	District 2	64.3
2.	District 1	42.6
3.	District 4	41.5
4.	District 11	37.7
5.	District 6	28.7

Districts with the fewest PCPs per 10,000 people

1.	District 34	1.7
2.	District 37	2.2
3.	District 51	2.4
4.	District 41	2.6
5.	District 30	2.7

Availability of primary care providers (PCPs) within communities has been associated with positive health outcomes and increases in health care service utilization.[1,2] People who live in areas with fewer primary care providers may have to travel farther or wait longer to be able to access primary care services.[3]

2.3 HEALTH INSURANCE COVERAGE

FIG 3a.
Percent of Insured adult residents (18+ years) by New York City Council District, 2012-2016

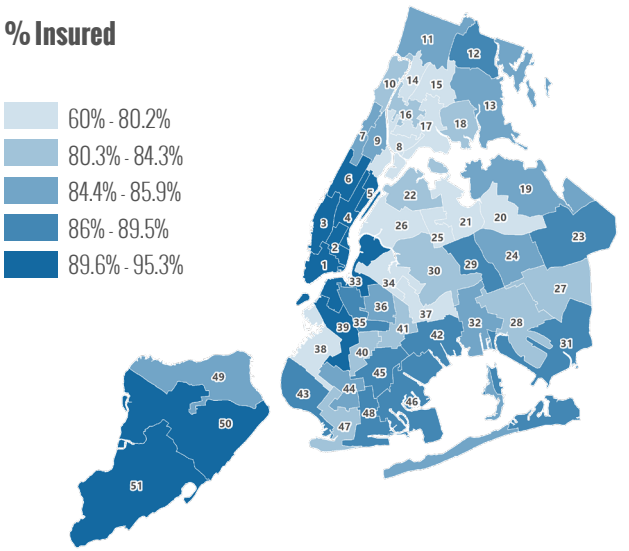

FIG 3b.
Health Coverage Ranking

Districts with the highest insured rates*

1.	District 4	95.3%
2.	District 51	94.2%
3.	District 5	94.0%
4.	District 6	94.0%
5.	District 3	93.6%

Districts with the lowest insured rates*

1.	District 21	60.0%
2.	District 20	69.2%
3.	District 25	73.0%
4.	District 38	75.3%
5.	District 34	76.9%

**Rates reflect the percent of persons with health insurance coverage*

Health insurance coverage is essential to the ability to access primary care. Persons who are uninsured are often sicker,[4] spend a greater proportion of their income on out-of-pocket health care costs, have greater difficulty accessing services,[5,6] and are more likely to lack a usual source of care than their insured counterparts.[7]

2.4 PUBLIC INSURANCE ACCEPTANCE

FIG 4a.
Percent of PCPs Accepting Medicaid by New York City Council District, 2016-2017

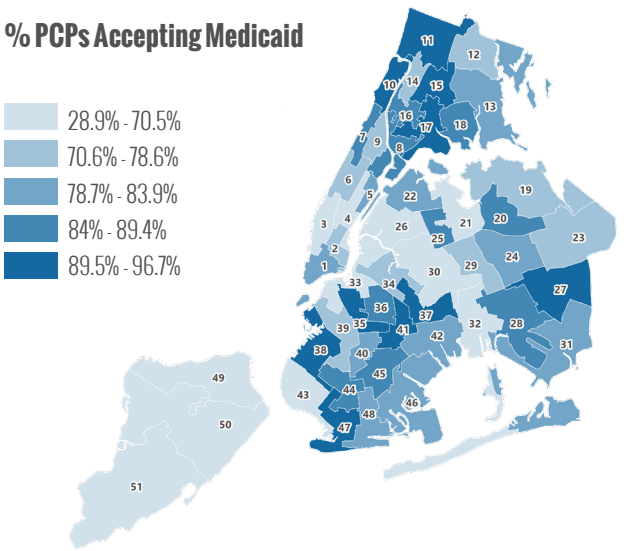

FIG 4b.
Medicaid Acceptance Ranking

Districts with the most PCPs Accepting Medicaid

1.	District 17	96.7%
2.	District 38	93.9%
3.	District 11	93.1%
4.	District 15	91.8%
5.	District 37	91.7%

Districts with the fewest PCPs Accepting Medicaid

1.	District 51	28.9%
2.	District 4	45.5%
3.	District 32	61.4%
4.	District 43	62.9%
5.	District 50	64.9%

Medicaid acceptance measures the proportion of primary care providers that accept patients on Medicaid, a public insurance program for low-income people. For low-income communities with large Medicaid-insured populations, an insufficient supply of neighborhood-based providers accepting Medicaid presents a barrier to care, and may result in poorer health outcomes.

FIG 5a.
Percent of PCPs Accepting Medicare by New York City Council District, 2016-2017

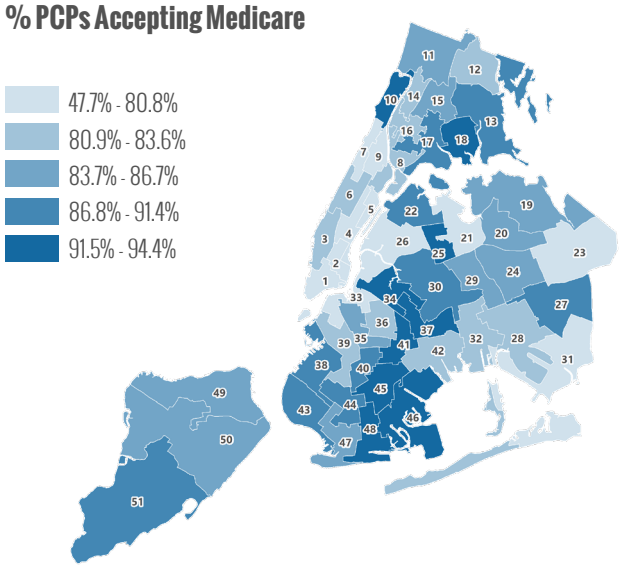

FIG 5b.
Medicare Acceptance Ranking

Districts with the most PCPs Accepting Medicare

1.	District 37	94.4%
2.	District 46	94.2%
3.	District 48	94.0%
4.	District 18	93.3%
5.	District 34	92.9%

Districts with the fewest PCPs Accepting Medicare

1.	District 5	47.7%
2.	District 4	69.4%
3.	District 21	72.9%
4.	District 9	73.0%
5.	District 33	74.8%

Medicare acceptance measures the proportion of primary care providers that accept patients on Medicare, which includes people who are ages 65+ and certain younger persons with disabilities. This population is growing annually, particularly with the aging of the Baby Boomer generation. Primary care is particularly important for Medicare beneficiaries, as older adults are more likely to be living with and managing multiple chronic conditions.[8] Neighborhood-based primary care services are essential for older adults, as greater mobility issues are experienced by the Medicare population.

2.5 PATIENT-CENTERED CARE

FIG 6a.
Percent of PCP Access Points with PCMH Recognition by New York City Council District, 2016-2017

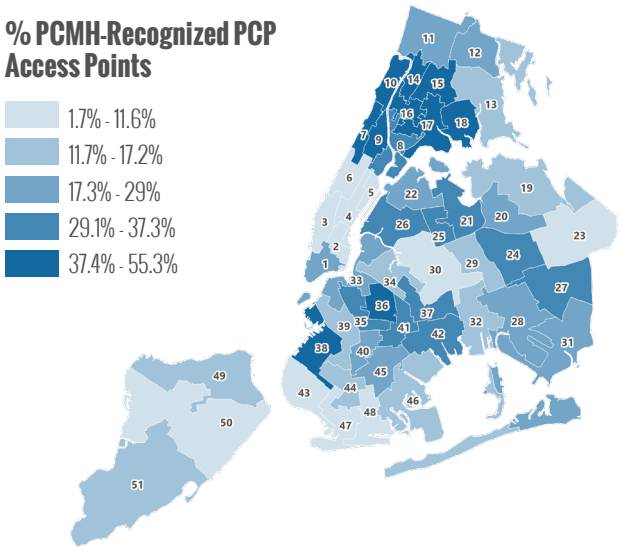

FIG 6b.
PCMH-Recognition Ranking

Districts with the most PCMH-Recognized PCP Access Points

1.	District 14	55.3%
2.	District 15	49.0%
3.	District 10	48.4%
4.	District 17	47.1%
5.	District 9	41.2%

Districts with the fewest PCMH-Recognized PCP Access Points

1.	District 4	1.7%
2.	District 3	5.1%
3.	District 6	5.7%
4.	District 48	6.1%
5.	District 2	7.1%

The Patient-Centered Medical Home (PCMH) is a care model aimed at transforming the delivery of primary care through a commitment to quality improvement and a patient-centered care approach.[9] In New York State's Medicaid program, PCMH-enabled primary care practices receive additional reimbursement.

HEALTH STATUS MEASURES

SECTION 3.0

3.1 HEALTH STATUS OVERVIEW

The health status of a district indicates health care needs of the population and factors that impact the district population's health. Examining multiple measures of population health provides insight into the need experienced by residents as well as burdens placed on primary care providers and facilities. The health status of a population should inform the primary care services required to address the health care needs of residents.

3.2 DIABETES PREVALENCE

FIG 7a.
Percent of adult residents (18+ years) that report having been diagnosed with Diabetes by New York City Council District, 2015

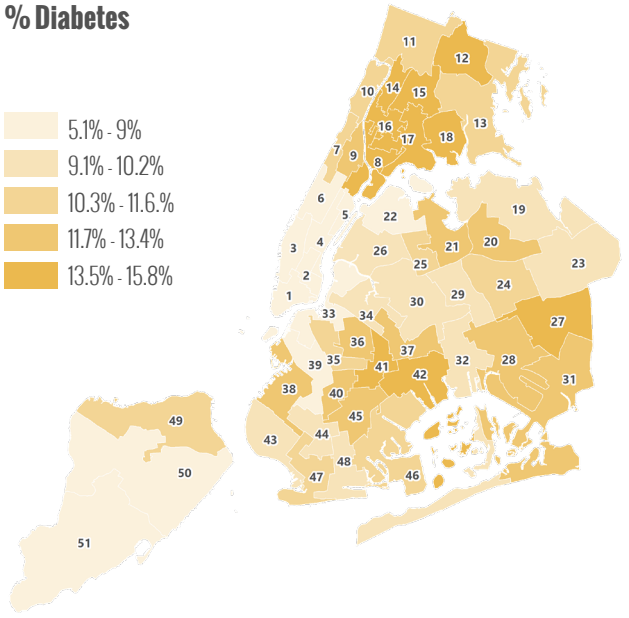

FIG7b.
Diabetes Prevalence Ranking

Districts with the highest prevalence of Diabetes

1.	District 16	15.8%
2.	District 17	15.7%
3.	District 41	15.2%
4.	District 42	15.2%
5.	District 8	14.8%

Districts with the lowest prevalence of Diabetes

1.	District 5	5.1%
2.	District 3	5.4%
3.	District 4	5.7%
4.	District 2	6.0%
5.	District 6	6.3%

Diabetes serves as a measure of chronic disease burden, reflecting the percent of residents that report ever being told by a doctor, nurse, or health professional that they have diabetes. Primary care plays an important role in mitigating the chronic disease burden within populations, and helps reduce unnecessary hospitalizations and mortality due to poorly managed chronic conditions.[10] Furthermore, diabetes disproportionately affects individuals with lower socioeconomic status, and is indicative of overlapping factors related to increased primary care need.

3.3 IMMUNIZATION COVERAGE

FIG 8a.
Percent of adult residents (18+) without a flu immunization by New York City Council District, 2009-2013

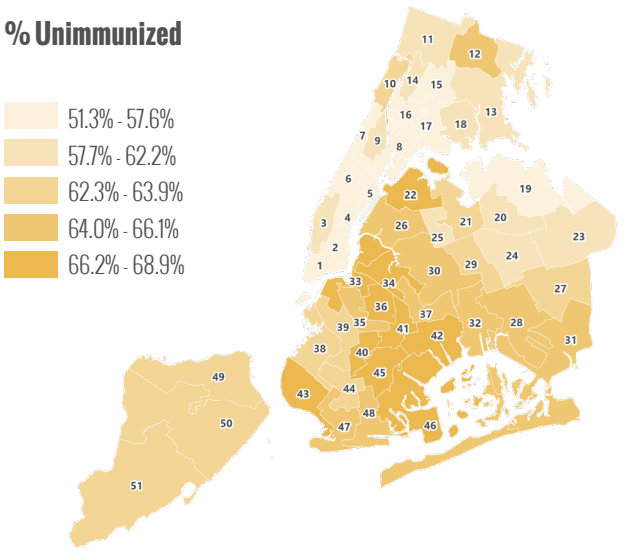

FIG 8b.
Immunization Ranking

Districts with the highest percent of unimmunized people

1.	District 45	68.9%
2.	District 40	68.8%
3.	District 34	68.5%
4.	District 46	67.9%
5.	District 36	67.8%

Districts with the lowest percent of unimmunized people

1.	District 6	51.3%
2.	District 5	51.7%
3.	District 1	52.1%
4.	District 4	55.6%
5.	District 15	56.8%

The estimated percentage of residents without a flu **immunization** serves as a proxy for preventive health care utilization. Preventive care is foundational to primary care, and in the case of influenza vaccinations in New York City, is associated with reduced preventable hospital visits[11] and therefore better overall health outcomes and reduced health care costs.

3.4 HEART DISEASE MORTALITY

FIG 9a.
Heart Disease Mortality Rate per 100,000 residents by New York City Council District, 2011-2013

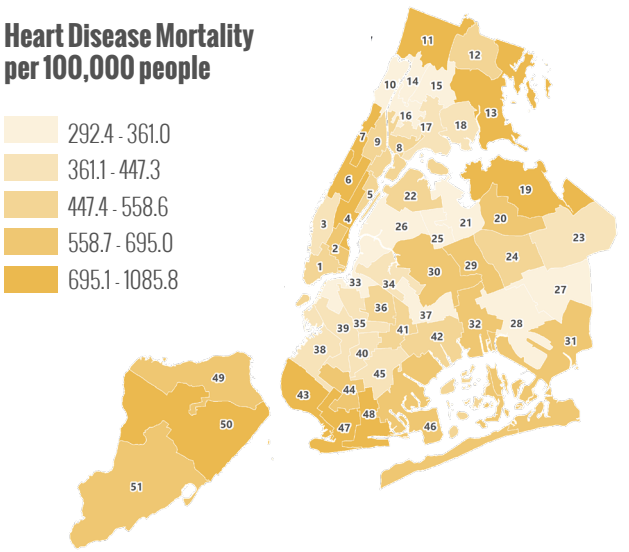

FIG 9b.
Heart Disease Mortality Ranking

Districts with the highest heart disease mortality rate per 100,000 people

1.	District 50	1085.8
2.	District 11	1031.1
3.	District 48	1008.0
4.	District 47	898.9
5.	District 13	866.1

Districts with the lowest heart disease mortality rate per 100,000 people

1.	District 21	292.4
2.	District 10	304.4
3.	District 16	315.6
4.	District 33	317.5
5.	District 37	318.2

Heart disease is the leading cause of death nationwide.[12] Heart disease mortality rates are a measure of chronic-disease related, potentially preventable mortality. Key components of high-quality primary care, including team-based and patient-centered approaches, can help to reduce the risk of cardiovascular disease or slow its progress when detected early.[13,14]

3.5 POTENTIALLY PREVENTABLE ED VISITS

FIG 10a.
Potentially Preventable Emergency Department (ED) Visits per 100 persons by New York City Council District, 2016

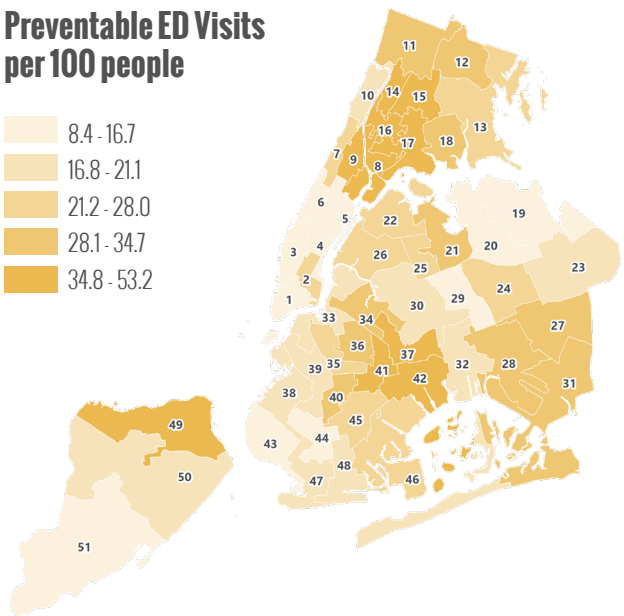

FIG 10b.
Potentially Preventable ED Visit Rate Ranking

Districts with the highest preventable ED visit rates*

1.	District 8	53.2
2.	District 16	48.1
3.	District 17	47.3
4.	District 9	41.4
5.	District 42	40.8

Districts with the lowest preventable ED visit rates*

1.	District 6	8.4
2.	District 5	10.6
3.	District 19	12.3
4.	District 3	13.9
5.	District 51	14.2

**The rate of potentially preventable emergency department visits per 100 people*

Preventable emergency department (ED) visit rates are widely used to measure need for additional primary care access, or higher quality and more comprehensive care that appropriately addresses the health needs of local residents. High rates of preventable ED visits may indicate a strain on health care system costs and resources.[15]

SOCIOECONOMIC POSITION MEASURES

SECTION 4.0

4.1 SOCIOECONOMIC POSITION OVERVIEW

Understanding the relationship between socioeconomic position (SEP) and primary care is essential in evaluating factors that determine access to primary care. SEP refers to the social and economic factors that influence a person's position within a larger, socially stratified population and significantly contribute to existing disparities in the quality of available primary care and level of care continuity provided.[16,17] By evaluating the specific vulnerabilities each population experiences, PCDC has created a multidimensional lens to evaluate access to primary care.

4.2 RACE AND ETHNICITY

FIG 11a.
Percent of Black, non-Hispanic (NH) residents (all ages) by New York City Council District, 2012-2016

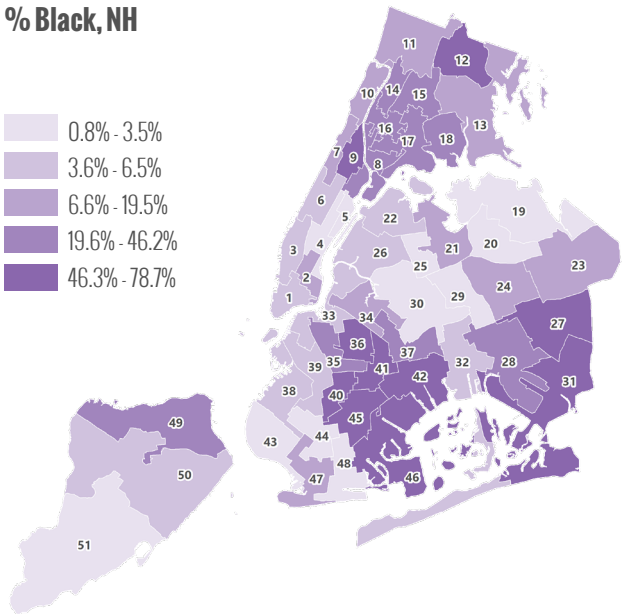

FIG 11b.
% Black, NH Population Ranking

Districts with the highest percent of Black, NH residents

1.	District 41	78.7%
2.	District 42	73.9%
3.	District 27	70.5%
4.	District 31	68.3%
5.	District 12	67.3%

Districts with the lowest percent of Black, NH residents

1.	District 51	0.8%
2.	District 19	1.1%
3.	District 44	1.3%
4.	District 30	1.3%
5.	District 43	1.4%

The proportion of **Black, non-Hispanic residents** is one measure of the racial and ethnic composition of a community. While challenging to measure and describe the dynamic racial and ethnic composition of each district in NYC, primary care practices are well-position to respond to the unique cultural needs of their patient populations[18] and thereby reduce inequities in health outcomes.[19]

4.3 UNEMPLOYMENT

FIG 12a.
Percent of unemployed adult residents (20-64 years) by New York City Council District, 2012-2016

% Unemployed

- 3% - 4.7%
- 4.8% - 5.9%
- 6.0% - 7.5%
- 7.6% - 9.0%
- 9.1% - 11.6%

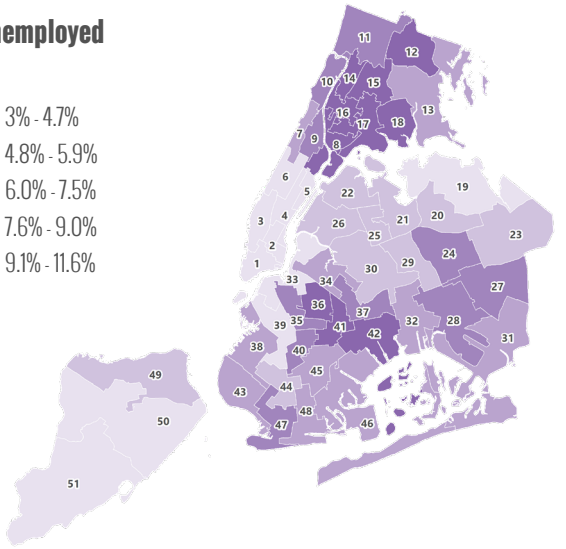

FIG 12b.
Unemployment Ranking

Districts with the highest unemployment

1.	District 15	11.6%
2.	District 18	10.1%
3.	District 42	10.0%
4.	District 8	9.8%
5.	District 36	9.8%

Districts with the lowest unemployment

1.	District 4	3.0%
2.	District 5	3.4%
3.	District 6	3.7%
4.	District 50	4.2%
5.	District 1	4.3%

Unemployment, measured by the percent of unemployed residents ages 20-64, often is a barrier to necessary health care, income stability, and social support, and can also be detrimental to an individual's physical and mental well-being.[20-22] This measure provides insight as to the economic strain experienced by a population.

4.4 POVERTY

FIG 13a.
Percent of adult residents (18+ years) living at or below 100% of the Federal Poverty Level (FPL) by New York City Council District, 2012-2016

% At or Below the Federal Poverty Level

- 7.1% - 10.6%
- 10.7% - 14.7%
- 14.8% - 18.5%
- 18.6% - 25.2%
- 25.3% - 35.3%

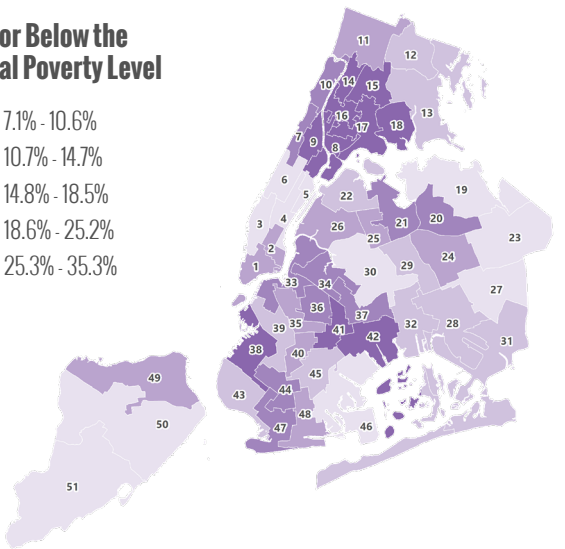

FIG 13b.
Poverty Rate Ranking

Districts with the highest poverty rates

1.	District 16	35.3%
2.	District 8	35.0%
3.	District 17	34.7%
4.	District 15	33.1%
5.	District 14	32.2%

Districts with the lowest poverty rates

1.	District 5	7.1%
2.	District 51	7.3%
3.	District 4	7.7%
4.	District 19	8.2%
5.	District 23	8.3%

Poverty is measured by the percent of residents at or below the Federal Poverty Line, and is a key component of access. Beyond the correlation between poverty and many health and quality of life measures, poverty is indicative of the level of need for affordable primary care services, especially for low-income, uninsured, or under-insured residents.[23,24]

4.5 OLDER ADULTS

FIG 14a.
Percent of population over 64 years of age by New York City Council District, 2012-2016

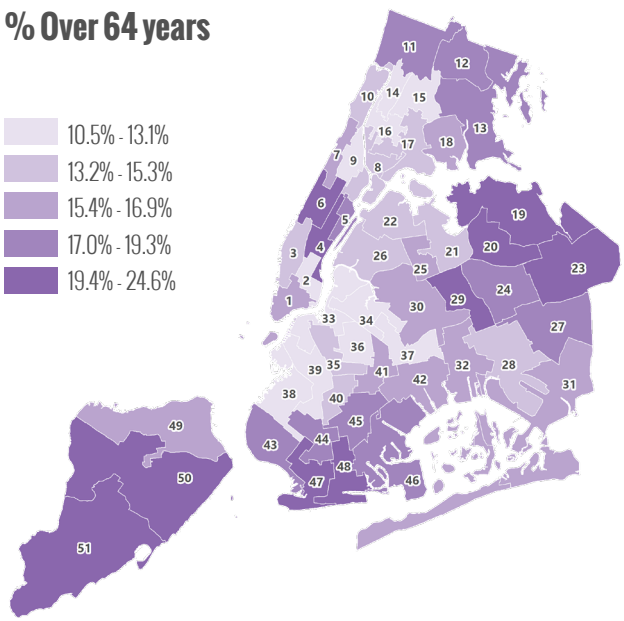

FIG 14b.
Older Adult Population Ranking

Districts with the highest percent of adults over 64 years

1.	District 5	24.6%
2.	District 48	24.4%
3.	District 19	23.8%
4.	District 47	21.6%
5.	District 50	21.3%

Districts with the lowest percent of adults over 64 years

1.	District 37	10.5%
2.	District 34	11.0%
3.	District 33	11.0%
4.	District 14	11.1%
5.	District 16	12.0%

Older residents and those with disabilities represent vulnerable populations that often benefit most from continuous primary care. These same populations experience more challenges to accessing needed care, most notably for city-dwelling older adults with chronic conditions or mobility challenges, and those living in public housing.[25-27] Improved access for this population can reduce the burden of chronic diseases and related complications, and reduce rates of preventable emergency department visits.[25]

PRIMARY CARE POLICY IN NEW YORK CITY

SECTION 5.0

Recommendations for Primary Care Advocates and Policymakers in New York City:

+ Ensure adequate supply of PCPs in every district.

+ Take measures such as PCP-to-population ratio into account when siting and providing capital for primary care facilities.

+ Work toward primary care access parity for districts with relatively low socioeconomic position.

+ Encourage high-quality primary care provision and access through reimbursement models that reward proven quality programs (such as Patient-Centered medical Home) and targeted capital grants and loans.

ACKNOWLEDGEMENTS

SECTION 6.0

Thank you to the New York City Council for supporting our efforts to improve primary care and health equity for City residents.

The New York City Council in New York City Hall

TECHNICAL NOTES & METHODS

SECTION 7.0

Primary Care Provider Definition :

In this profile, Primary Care Provider (PCP) is defined as a physician (MD or DO) with a primary specialty of Internal Medicine, General Medicine, or Family Medicine.

Methods

The Primary Care Profiles are comprised of primary care access, health status, and sociodemographic position data, aggregated and presented at the Council District level. The concept of access to care is multidimensional in nature and is determined by factors such as provider availability, proximity to providers and characteristics of primary care practices.

Access to care is also influenced by the health status, demographic, and socioeconomic position (SEP) characteristics of a community.

Primary care access measures included in the Profiles represent provider availability (PCPs per 10,000 persons), affordability of services (uninsured rates and percentages of PCPs accepting Medicaid and Medicare), and quality of care (proportion of PCP access points with PCMH recognition). Together, these measures help evaluate how primary care access varies across NYC and can help identify Districts and areas with poor access to care.

In addition to primary care access measures, we included health status and SEP measures to provide information on the potential need for primary care access, by District. Health status measures, such as diabetes prevalence and heart disease-related mortality, are indicators for the chronic disease burden of a community. The potentially preventable emergency department (PPED) visit rate is indicative of both poor health status and health conditions that could be managed in a primary care setting. Immunization rates serve as a proxy for preventive health care usage. The set of SEP measures were selected through careful review of literature to identify social and demographic factors closely linked to both health care access, status, and equity. SEP measures included the percent of Black, Non-Hispanic residents, percent of residents below 100% of the Federal Poverty Level (FPL), percent of unemployed residents ages 20-64, and the percent of residents 65 years or older.

Given that none of the data presented in the Profiles was available at the Council District level, we collected data at either the ZIP Code or census tract level and calculated District-level estimates. To do this, data available at the ZIP Code level were first cross-walked to modified ZIP Code Tabulation Areas (ZCTA) in NYC. For all data, a spatial overlay was used to calculate proportion of data in each ZCTA or CT that was within a Council District, and the proportion (or count) of data was then assigned to the District and summed to create totals for each District. Descriptive statistics, graphs, and choropleth maps were produced for all measures by NYC Council District, borough, and citywide.

Ratio of primary care providers per 10,000 persons ages 18 years and older

- Number of PCPs with a practice location in the Council District multiplied by 10,000, and then divided by the population of persons 18 years of age and older residing in a District
  - NOTE: This measure is intended to allow for comparison between Districts, and does not establish a threshold for adequate PCP availability among adults
- PCPs with multiple practice locations in one District were counted once within the District

Percent of persons ages 18–64 who are uninsured, 2012–2016

- Number of persons ages 18-64 in the District with no insurance divided by the total number of persons ages 18-64 residing in the District

Percent of primary care providers that accept Medicaid

- Number of PCPs in the District that accept Medicaid divided by the total number of PCPs in the District

Percent of primary care providers that accept Medicare

- Number of PCPs in the District that accept Medicare divided by the total number of PCPs in the District

Percent of primary care sites that are recognized as Patient-Centered Medical Homes

- Number of PCP sites identified as PCMH-recognized divided by the total number of PCP sites in each District

Note on Primary Care Access Measures:

Each measure presented in the profile serves to compare access between Council Districts in New York City. These comparisons do not establish a threshold for adequate access for the measures.

DATA SOURCES

Figure 1. Map of New York City Council Districts

New York State Civil Boundaries, New York State GIS Data, 2018.
New York State Streets, New York State GIS Data, 2019.

Figure 2. Primary Care Provider (PCP) Availability

Specialized Knowledge & Applications (SKA), 2016-2017.
Provider Network Data System (PNDS), 2017.
National Plan and Provider Enumeration System (NPPES), 2017.

Figure 3. % Insured

United States Census via the American Community Survey, 2016 Five-Year estimate, ID: S2701

Figure 4-5. % PCPs Accepting Medicaid, Medicare

Specialized Knowledge & Applications (SKA), 2016-2017.
Provider Network Data System (PNDS), 2017.
National Plan and Provider Enumeration System (NPPES), 2017.

Figure 6. % PCMH-Recognized PCP Access Points

Specialized Knowledge & Applications (SKA), 2016-2017.
Provider Network Data System (PNDS), 2017.
National Plan and Provider Enumeration System (NPPES), 2017.
National Committee for Quality Assurance (NCQA), 2017.

Figure 7. % Diabetes Prevalence

Behavioral Risk Factors Surveillance System (BRFSS) via Centers for Disease Control and Prevention (CDC) 500 Cities estimates, 2015

Figure 8. % Unimmunized

NYC Community Health Survey, 2009-2013

Figure 9. Heart Disease Mortality

NYC Department of Health and Mental Hygiene's Vital Statistics, 2011-2013

Figure 10. Potentially Preventable ED Visits

Statewide Planning and Research Cooperative System (SPARCS), 2016.

Figure 11. % Black, NH

United States Census via the American Community Survey, 2016 Five-Year Estimate, ID: DP05

Figure 12. % Unemployed

United States Census via the American Community Survey, 2016 Five-Year Estimate, ID: S2301

Figure 13. % At or Below the Federal Poverty Level

United States Census via the American Community Survey, 2016 Five-Year Estimate, ID: S1701

Figure 14 . % Over 64 years

United States Census via the American Community Survey, 2016 Five-Year Estimate, ID: B01003

CITATIONS

SECTION 8.0

CITATIONS

Primary Care Access Measures

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