STAYING healthy

ACCESS TO PRIMARY CARE IN PHILADELPHIA

Department of Public Health
CITY OF PHILADELPHIA
Primary care providers serve as the front line of the city’s health care system, helping people stay healthy and preventing hospitalizations. Yet, some Philadelphians lack adequate access to primary care services. Access to care largely depends on having health insurance coverage, being able to afford healthcare costs, and having adequate availability and accessibility of healthcare providers and facilities.
This report summarizes recent data on primary care access in Philadelphia. Key findings include:

- **Overall supply of primary care providers (PCPs) continues to rise** — there is approximately one primary care provider for every 1,243 residents. While the total number of PCPs continues to rise, the percent of PCPs accepting Medicaid has declined in recent years.

- **There is significant variation in supply of PCPs across the city.** Communities with the lowest supply of PCPs are more commonly low-income and have high proportions of racial/ethnic minorities.

- **Clusters of neighborhoods in the Northeast and Southwest regions had significantly lower supply of PCPs** — some areas even reaching the threshold for designation as a primary care shortage area. In these same areas, availability for primary care appointments was lowest.

- **Availability of primary care appointments is lower and wait times are longer for people with Medicaid compared to those who are privately insured.**

- **Philadelphia has 46 community health centers — only one is in the Northeastern region.**

- **Rates of uninsured adults and children have declined significantly after the implementation of the Medicaid expansion.** Overall, 12 percent of adults are uninsured, yet, in some communities — particularly in the Northeast and Southwest regions — rates of uninsured adults are nearly 40 percent.

- **Uninsured rates are highest among younger adults, men, racial ethnic minorities, those just above the federal poverty line, and the unemployed.**

- **Nearly 40 percent of non-citizen immigrants are uninsured** — over four times the rate of the general population.

- **Approximately 1 in 6 adults reported not having a primary care provider** — they were more likely to be younger, men, low-income, and uninsured.

- **The number of hospitalizations that are potentially preventable with timely access to primary care continues to decline; however, rates are more than twice as high among non-Hispanic blacks and Hispanics.**

The findings of this report highlight several opportunities for organizations — particularly health care providers, payers, and government — and people to improve primary care access throughout Philadelphia. Notably, addressing the gaps in access in communities in Northeast and Southwest Philadelphia should be a high priority for stakeholders.
Many of the leading causes of premature death in Philadelphia can be prevented or delayed with high-quality primary care. Done well, primary care helps people maintain healthy lifestyles, identifies disease early, helps patients manage chronic conditions, coordinates care for patients with more than one problem, and avoids costly complications and hospitalizations. Adequate access to primary care has been shown to improve health outcomes and reduce overall health care costs. It is an essential building block of a high functioning health care system and population health.
The Affordable Care Act included several provisions to improve access to primary care through provision of comprehensive health insurance. In Philadelphia, this resulted in expanded access to Medicaid for many low-income families and affordable comprehensive insurance through the exchanges for many others. Concerns about the capacity of the primary care workforce to handle increases in healthcare coverage have been noted nationally. Because of higher reimbursement rates for Medicare and private insurance, some providers limit their practices to only those patients. As such, primary care access concerns are even greater for those covered by Medicaid and the uninsured.

Although primary care is largely delivered by private providers, it plays such an essential role in health that monitoring access to primary care is an important function of public health departments. In 2014, the Philadelphia Department of Public Health, in collaboration with the Leonard Davis Institute at the University of Pennsylvania began developing methods for routinely monitoring access to primary care in Philadelphia. This new report provides comprehensive information on access to primary care and can be used to inform decisions on where to direct additional primary care services.

Access to primary care is a complex issue to measure, involving not just enrollment in health insurance, but also structural factors, like availability of quality providers within a reasonable distance of a patient’s home, and a host of social, economic and behavioral patient factors.

This report focuses on four important areas of access to care in Philadelphia:

1. Availability and capacity of primary care providers
2. Health insurance coverage
3. Utilization of preventive healthcare services
4. Adverse outcomes from inadequate primary care

Definitions of the measures in this report are included in the Appendix.
One important measure of primary care access is the supply of primary care providers. Overall, Philadelphia has a large supply of primary care providers — *approximately one primary care provider for every 1,243 residents* — similar to the national average of one primary care provider for every 1,320 people. The Health Services and Resources Administration (HRSA) designates geographic areas with more than 3,500 residents for every primary care provider as a primary care health professional shortage area (HPSA). Overall, Philadelphia fares well against this threshold, but there is significant variation across the city and some areas meet the criteria as primary care HPSA.

Several clusters of areas have lower access to primary care, as measured by provider to population ratios. As shown in Figure 1, there are large clusters of census tracts with significantly lower provider to population ratios in the Northeast, Southwest, and parts of South Philadelphia.

The census tracts highlighted in Figure 2 have a provider to population ratio greater than 3,500 above the HRSA threshold for primary care shortage areas.
Medicaid PCP to Medicaid Population Ratios by Census Tract, 2016

Source: Leonard Davis Institute of Health Economics, University of Pennsylvania

Not all primary care providers accept patients with Medicaid. Figure 3 presents ratios of Medicaid-accepting providers to the number of residents enrolled in Medicaid by census tract. Similarly, there is significant variation in provider supply across the city and some clusters of lower access are apparent, including areas in west, southwest, and northeast.


Source: Leonard Davis Institute of Health Economics, University of Pennsylvania

Overall the supply of primary care providers in Philadelphia has been increasing in the past decade. However, the proportion of primary care providers that accept patients with Medicaid has declined over the past few years.

Areas with lower supply of PCPs did not differ by age or percent of adults without insurance from areas with higher supply. However, areas with lower access to primary care had higher concentrations of non-Hispanic blacks and a lower median household income, compared to areas of higher access to primary care.

**Characteristics of Areas with Lower Supply of PCPs**

**Race/Ethnicity of Lower Access Areas**

<table>
<thead>
<tr>
<th></th>
<th>WHITE Non-Hispanic</th>
<th>BLACK Non-Hispanic</th>
<th>HISPANIC</th>
<th>ASIAN</th>
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<tr>
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<td></td>
<td>26.0%</td>
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<td>5.9%</td>
<td>17.5%</td>
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<tr>
<td>Higher Access</td>
<td></td>
<td>8.4%</td>
<td>11.4%</td>
<td>43.0%</td>
</tr>
</tbody>
</table>

Source: Race/Ethnicity– American Community Survey, U.S. Census Bureau

**Availability of Primary Care Providers**

While provider-to-population ratio is an important measure of supply, it does not fully represent availability of primary care providers to provide care. Based on a survey conducted of over 400 primary care providers in Philadelphia during 2014 – 2016 period, availability of existing primary care providers for non-urgent health care appointments varies throughout Philadelphia. Citywide, of the providers surveyed, 85 percent had an appointment available for a patient with private insurance and 66 percent had an appointment available for a patient with Medicaid — a notable difference. Appointment availability also varied by planning district differently for private insurance and Medicaid patients (Figures 8 and 9).

**Relationship between median income and supply of PCPs**

Source: Average Median Income - American Community Survey, U.S. Census Bureau

**Planning Districts**

Despite the large sample of primary care providers surveyed, some planning districts had too few providers to produce reliable estimates. Some planning districts were merged as shown here to account for this difference.
Availability of Primary Care Providers (continued)

**FIGURE 5**

Appointment Availability for Privately Insured Patients among Surveyed PCPs by Planning District

Source: Leonard Davis Institute of Health Economics, University of Pennsylvania

Primary care appointment availability for the privately insured was significantly lower in the Lower Northeast than in other planning districts. In many planning districts, nearly all providers had appointments available for patients with private insurance.

**FIGURE 6**

Appointment availability for Medicaid Patients by Planning District, 2014–2016

Source: Leonard Davis Institute of Health Economics, University of Pennsylvania

Primary care appointment availability for patients with Medicaid coverage was lowest in the central planning district. This suggests while supply of providers who receive Medicaid reimbursement may be high in this area, fewer providers have real-time availability to accept new patients on Medicaid. Medicaid appointment availability was also low in the South/Lower South region.

**FIGURE 7**

Non-urgent appointment availability for Medicaid and private insurance: Philadelphia and select major cities

Private insurance and Medicaid appointment availability in Philadelphia was similar and in many cases better than other major U.S. cities. Of note, some cities, like Pittsburgh, PA and Atlanta, GA, did not have as great a disparity in overall availability between private insurance and Medicaid.

Source: Primary Care Access in Philadelphia, Leonard Davis Institute of Health Economics, University of Pennsylvania
Another important component of availability of primary care providers is the amount of time a patient has to wait for an appointment. Based on the same study, of providers surveyed, average wait times for a new patient appointment in Philadelphia were approximately 9 and 16 days for privately insured and Medicaid patients, respectively. Wait times varied across major U.S. cities.

**FIGURE 11**

Wait time in days for Medicaid and Privately-insured: Philadelphia and select major cities

Community Health Centers

Community health centers are an essential component of the health care safety net in Philadelphia. Community health centers provide health care service to the most vulnerable populations, particularly individuals without insurance or U.S. citizenship. These centers are often located in areas of the city with high proportions of these at-risk populations and lack of access to other affordable options. Figure 14 shows the location of the eight city-operated community health centers and the other 46 community health centers. These centers tend to be clustered in the central parts of Philadelphia. Of note, areas in the Northeast have low access and only one community health center.

Acute Care Hospitals

Philadelphia has 37 hospitals that provide acute and long-term acute care. Many of these hospitals are part of health systems that provide primary care in co-located outpatient practices.
Uninsured in Philadelphia

Individuals are more likely to avoid primary care if they do not have health insurance. Approximately 12 percent of adults ages 18-64 in Philadelphia are without health insurance.

**FIGURE 4**

**Trends in Uninsured and Medicaid, Adults (18–64) 2009–2016**

Rates of uninsured adults declined significantly as Medicaid enrollment increased as a result of ACA Medicaid expansion. Approximately 21 percent of adults ages 18-64 are enrolled in Medicaid.

**FIGURE 5**

**Trends in Uninsured and Medicaid, Children (ages <18) 2009–2016**

Less than 4 percent of children (less than 18 years old) are without health insurance in Philadelphia. This has declined in recent years as Medicaid enrollment has increased. Over half of Philadelphia’s children are enrolled in Medicaid.
Uninsurance Rates in Subpopulations 2016

Uninsured rates vary by demographics and geography. Some notable trends are highlighted below. Uninsured rates are higher among:

- Younger adults (ages 18-44)
- Males
- Racial/ethnic minorities
- Foreign-born non-citizens
- Individuals just above 138 percent of federal poverty threshold
- The unemployed
- Individuals with less than a high school diploma

Source: American Community Survey, U.S. Census Bureau
Uninsured in Philadelphia
(continued)

Several areas within North, Northeast, West and South Philadelphia have significantly higher uninsured populations. Many of these same areas have high rates of Medicaid enrollment. Many of these are the same areas that have shortages of primary care providers.

Percent uninsured by census tract, ACS 5-yr, 2016

Source: American Community Survey, U.S. Census Bureau

Percent Medicaid by census tract, ACS 5-yr, 2016

Source: American Community Survey, U.S. Census Bureau

Percent uninsured adults (18–24) and children (<18) in major U.S. cities

Rates of uninsured adults and children in Philadelphia are mostly comparable but in some cases significantly lower than other major U.S. cities. U.S. cities with the highest uninsured rates also have high rates of undocumented immigrants and are in states that did not expand Medicaid.

Source: American Community Survey, U.S. Census Bureau
Beyond availability of primary care providers and health insurance coverage, individuals must actually use primary care services regularly. Determining use of primary care services at the population level can be challenging as distinguishing between preventive and urgent/acute visits to primary care providers is complex. Population-based surveys provide some insight into utilization of preventive services.

**Characteristics of Adults without a Primary Healthcare Provider, Philadelphia 2016**

In 2016, 18 percent of adults reported not having a primary care provider. Adults without a primary care provider were more likely to be men, younger, low-income and without health insurance.

Source: PA BRFSS, PA Department of Health
Utilization of Primary Care Services

FIGURE 21

Characteristics of Adults Who Usually Receive Care at an Emergency Room, Philadelphia 2014

Approximately 10 percent of adults reported the emergency room as their usual source of care. Adults who usually receive care in the emergency room were more likely to be men, younger, low-income and without health insurance.

FIGURE 22

Adults Avoiding Needed Care Due to Cost in Philadelphia, 2011 - 2016

There are several potential barriers to accessing preventive and other health care. For uninsured and low-income, cost is commonly the primary driver. In 2016, approximately 16 percent of adults reported not accessing care due to cost, a slight decrease from previous years. Among adults without health insurance, 48 percent reported avoiding care due to cost, compared to only 13 percent among adults with health insurance.

Preventive Screenings

Based on 2016 results from the Pennsylvania Behavioral Risk Factor Surveillance System (PA BRFSS), in Philadelphia:

- 80 percent of women ages 50 to 74 reported having a mammogram within the previous 2 years
- 75 percent of men over the age of 50 reported ever having a prostate cancer screening
- 68 percent of adults over the age of 50 reported ever having a colon cancer screening
Adverse Outcomes from Inadequate Primary Care

When chronic health conditions like asthma, diabetes, and hypertension are managed adequately in primary care settings, patients can avoid many hospitalizations for complications. For this reason, rates of hospitalizations for these “ambulatory care-sensitive conditions” (ACSCs), are used as an indicator for access to and quality of primary care.

**FIGURE 2**

**Hospitalizations for Ambulatory Care Sensistive Conditions, 2005–2016**

In Philadelphia, rates of hospitalizations due to ACSCs have declined steadily over the last decade.

**Adverse Outcomes**

**Hospitalizations for Ambulatory Care Sensitve Conditions by Race/Ethnicity, 2005–2016**

However, rates are nearly 2.5 times higher among non-Hispanic blacks and 2 times higher among Hispanics than non-Hispanic whites.

![Bar chart showing hospitalization rates by race/ethnicity](chart)

*Non-Hispanic


**Ambulatory Care Sensitve Hospitalization Rates per 100,000 by zip code, 2016**

Rates are also higher among residents from North and West Philadelphia.

![Map showing hospitalization rates by zip code](map)

AGE-ADJUSTED RATE
- 1967-3369
- 1516-1966
- 1047-1515
- 790-1046
- 241-789
- Non-residential area

What Can Be Done

Primary care can be improved in ways to benefit the health of people in Philadelphia if organizations and individuals take these steps:

The Department of Public Health will:

- Continue to provide primary care to all patients, including those who are uninsured, through eight health centers
- Expand services in Northeast Philadelphia where the need for primary care is high and the number of primary care providers is inadequate
- Encourage health systems and other providers to locate primary care facilities in underserved areas, particularly in Northeast and West/Southwest Philadelphia
- Continue to convert its health centers from Federally Qualified Health Center (FQHC) “look-alike” status to Section 330 FQHCs as funding becomes available to permit expansion of services to underserved parts of Philadelphia

Health systems can:

- Expand primary care services to underserved areas, particularly in Northeast and West/Southwest Philadelphia
- Accept patients who are on Medicaid Managed Care Plans or are uninsured as part of community benefit services and assure that appointments are available for these patients
- Develop or expand collaborative relationships with primary care providers to reduce hospitalizations by improving the utilization and quality of primary care for chronic conditions such as diabetes, hypertension, asthma, and chronic heart or lung disease

Federally-qualified health centers and other outpatient primary care providers can:

- Expand primary care services to underserved areas, particularly in Northeast and Southwest Philadelphia
- Accept not only patients who are on Medicaid, but also patients who are uninsured, and assure that appointments are available to these patients
- Develop or expand collaborative relationships with health systems to reduce hospitalizations by improving the utilization and quality of primary care for chronic conditions such as diabetes, hypertension, asthma, and chronic heart or lung disease

Managed Care Organizations can:

- Negotiate with health systems so that members can easily access primary care
- Encourage members with chronic conditions to use consistent primary care providers to prevent complications
- Require provider networks to provide full access to any Medicaid patient seeking to receive primary care from one of their provider practices
- Develop value-based reimbursement strategies with outpatient practices that reward successful management of chronic health conditions in the outpatient setting

People can:

- Use primary care providers consistently to improve management of chronic conditions and prevent complications
Measures and Definitions

Supply of Primary Care Providers (PCP)

Number of PCPs - The number of primary care providers are estimated using a combination of data sources, including a proprietary list of providers from SK&A™, local provider network directories, and the PDPH directory of community health centers. The directories are filtered to the following specialties: certified registered nurse practitioner (CRNP); family practice (FP); general practice (GP); pediatrics (PED); internal medicine (IM); nurse practitioner (NP); osteopathic medicine (DOP); and geriatrics (GER).

Percent of PCPs Accepting Medicaid – Medicaid acceptance was based on reports to SK&A™ or via telephone survey. As most providers do not exclusively serve Medicaid patients, an adjustment factor was applied to reflect only a portion of the provider’s time serving Medicaid patients.

Overall PCP to Population Ratio – Ratio of primary care provider to number of individuals living in the census tract, based on American Community Survey 5-year population estimates.

Medicaid PCP to Medicaid Population Ratio - Ratio of primary care providers that accept Medicaid, to adults (age 18-64) with public/means-tested insurance living in the census tract, based on American Community Survey 5-year population estimates.

Primary Care Shortage Area – A census tract with an overall PCP to population ratio greater than 1:3,500.

Characteristic of Lower PCP Supply Areas

Low, Medium and High Supply Areas – Designations assigned based on tertiles of overall PCP to population ratios.

Area Characteristics (e.g. Race/Ethnicity and Median Income) – Demographic and socio-economic data were obtained from the American Community Survey 5-year estimates.

Availability of PCPs

Appointment Availability – Appointment availability was obtained from a survey of a large sample of PCP practices in the Philadelphia region. This study was conducted in coordination with a larger effort to produce similar estimates for other major U.S. cities, hence allowing for the city-to-city comparison. PCPs were surveyed via telephone and asked about availability of an appointment at that time for a non-urgent patient with private and Medicaid insurance separately.

Appointment Wait Time – Appointment wait time was obtained from a survey of a large sample of PCP practices in the Philadelphia region. This study was conducted in coordination with a larger effort to produce similar estimates for other major U.S. cities, hence allowing for the city-to-city comparison. PCPs were surveyed via telephone and asked for the date of the next available appointment for a non-urgent patient with private and Medicaid insurance separately.

Health Insurance Coverage

Uninsured Adults and Children – Insurance status was obtained from American Community Survey 1-year estimates.

Adults without a PCP – Self-reported by Philadelphia residents surveyed as a part of the PA Department of Health Behavioral Risk Factor Surveillance System.

Adults with Emergency Room as Usual Source of Care - Self-reported by Philadelphia residents surveyed as a part of the PA Department of Health Behavioral Risk Factor Surveillance System.

Adults Avoiding Care Due to Cost - Self-reported by Philadelphia residents surveyed as a part of the PA Department of Health Behavioral Risk Factor Surveillance System.

Adverse Outcomes from Inadequate Primary Care

Hospitalizations for Ambulatory Care Sensitive Conditions – Age-adjusted rate of hospitalizations for conditions where ambulatory care prevents or reduces the need for admission to the hospital for adults under 75 years of age, based on the Agency for Healthcare Research and Quality Prevention Quality Indicators composite acute and chronic condition measures.

Acknowledgements

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