Barriers to Health Equity: Place-based Disparities in Clinical Care

Partnership for Access to Health Care

Contact: Marc Solomon

October 2017
# Table of Contents

Executive Summary ................................................................. p.3
Population Health Context ......................................................... p.5
Analytic Approach ........................................................................ p.7
Clinical Care Pathway ..................................................................... p.8
  - Insurance ............................................................................... p.8
  - Preventive / Primary Care ......................................................... p.12
  - Chronic Condition Case Study: Asthma ................................. p.14
    - Prevalence ......................................................................... p.14
    - Preventive / Primary Care .................................................... p.16
    - Specialized Care .................................................................. p.18
    - Medication ......................................................................... p.22
Conclusion ..................................................................................... p.25
Appendix ....................................................................................... p.29
Executive Summary

Background & Approach

Research has shown that large disparities in health outcomes are driven by income, education, race and other socioeconomic factors. And many of these factors are combined and magnified within particular geographies – creating areas with especially good or bad health conditions and outcomes.

Perhaps the simplest way to highlight these disparities is through life expectancy. In Monroe County, a child born in Pittsford’s 14534 ZIP code is expected to live 81.8 years, a full decade longer than a child born in Rochester’s 14608 ZIP code.¹

To better understand what lies behind such disparity, this paper compares access to and utilization of clinical care across targeted geographic areas in Monroe County and the Finger Lakes region.

Methods

Our analyses used a variety of datasets segmented by population at the census tract and ZIP code levels. We examined patterns of clinical care access and utilization and health outcomes. As a case study in care of chronic conditions, we analyzed two years of medical and pharmacy claims for asthma patients.

The investigation used the following data sets: targeted local surveys and interviews, national surveys with localized estimates, NYS Vital Statistics, SPARCS utilization data and the Common Ground Health Aggregated Claims database.

¹ Monroe County Health Profile, Finger Lakes Health Systems Agency, 2017.
Key Findings

- In the Finger Lakes region, disparities in health care and outcomes are only partially explained by lack of insurance.
  - Residents of lower-income neighborhoods report other obstacles to getting the care they need, including finding transportation and juggling schedules for work and dependent care.
  - Specialists can be particularly difficult to access, as indicated by the following representative experience: "I’m disabled so I can’t use the bus system, and some of my doctors are kind of far away, like my cardiologist on South Clinton. He’s the most important one, and I didn’t see him for almost a whole year. People in my world all work, so they couldn’t drive me."^2

- Multiple data sources showed comparable levels of basic engagement with primary care, regardless of location. However, patients in lower-income areas were significantly less likely to access crucial follow-up care.

- Despite having health coverage, insured individuals with asthma from poorer neighborhoods had lower use of specialist care and control medications, a pattern that is correlated with a much higher rate of ED visits than residents of more affluent areas.

- The disparities in outcomes cannot be fully explained by variations in clinical care. Other factors, such as behaviors and the physical environment likely have even larger impacts on health trajectories.

Considerations and next steps

- This analysis of clinical care patterns does not include the uninsured and others with limited engagement with the health care system, because such data are unavailable. However, these populations are important to consider for any program or policy planning given the particular barriers they face in accessing care.

- To enhance understanding, follow-up investigation is planned:
  - Clinical care utilization analysis for other diagnoses to determine if the patterns observed in asthma care hold true across other conditions.
  - Deeper analysis of Medicaid population.
  - Qualitative research on how people prioritize and manage different types of care.

---

Population Health Context

Historically, lack of insurance was often viewed as the primary barrier to health care. While insurance coverage is important and remains a critical obstacle for many people, other issues also prevent covered individuals from getting the care they want and need.

Even as insurance coverage expanded over the last few years with the Patient Protection and Affordable Care Act (ACA), cost remains an important consideration. As the use of higher cost-sharing insurance plans has proliferated, the affordability of deductibles and co-payments for doctor visits and prescriptions can be a significant barrier.³

Beyond costs, the logistical challenges of scheduling appointments and making transportation arrangements can be burdensome. Low-income populations often have less flexibility to see doctors and pick up prescriptions given work and caregiving commitments, and greater dependence on public transit.⁴

More broadly, when assessing health disparities, it’s critical to recognize that many of the drivers of health outcomes are outside the health care system. The model below was developed by the University of Wisconsin’s Population Health Institute (UWPHI), and provides a good framework for understanding the key influences on health outcomes. Note that clinical care accounts for only 20 percent of the impact in this model.

The research that follows is primarily focused on clinical care – providing a deeper look at ‘access to care’ and ‘quality of care’, and how they vary across Monroe County and the Finger Lakes region. In particular, much of the analysis is focused on patients with a chronic condition. The pathway model below is used to assess the type and amount of care utilized and enables comparisons between populations in different areas.

**Clinical Care Pathway for Chronic Conditions**
While the analysis that follows is focused on clinical care, our findings should be considered within the broader context of population health. Reducing disparities in health – even those found within the clinical health care system – requires addressing health behaviors, the physical environment, and social and economic factors.

**Analytic Approach**

The analysis that follows is based on a variety of survey, clinical and claims data sets at census tract or ZIP code level. This analysis enables an in-depth look at a focus area within the City of Rochester that has particularly low socioeconomic characteristics and poor health outcomes. The appendix includes a table of demographics comparing the focus area with the rest of Monroe County and to the other counties in the region.  

Map of Focus Area within City of Rochester

---

5 The Focus Area includes the following ZIP codes: 14605, 14608, 14611, 14613, and 14621. The other counties include: Chemung, Genesee, Livingston, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming, and Yates.
Within the focus area, health outcomes are generally significantly worse than the rest of the county and region. Years of Potential Life Lost (YPLL) is an overall indicator of health troubles, and as the following graph shows, the rate within the focus area is more than double the rest of the county.

### Years of Potential Life Lost (All Causes)

![Years of Potential Life Lost Graph]

Throughout this paper, a variety of more detailed health metrics are compared across these three areas, to help identify aspects of access and care that have the largest disparities.

## Clinical Care Pathway

### Insurance Coverage

Health insurance is clearly an important component of access to care. While coverage doesn’t ensure access or care, it is foundational to providing people with options.

Across the state, the number of uninsured residents has sharply declined over the last few years. The American Community Survey (ACS) estimates that in Monroe County, the uninsured rate (ages 18-64) fell from 10.8 percent in 2011 to 5.7 percent in 2015. This decrease was driven in large part by the ACA which

---

expanded the availability of Medicaid and added income-based subsidies to support purchase of private individual policies. The following chart shows the recent expansion in Medicaid coverage across the Finger Lakes region, with a notable uptick in the growth rate in 2014/2015.

In addition to the expansion of Medicaid coverage, more residents have purchased policies through the NYS marketplace. Every county in the region saw an increase in individual marketplace policies issued from 2014 to 2015, and from 2015 to 2016.

While the overall recent trend is fairly clear, robust data on insurance coverage at the census tract level is not readily available. Several approaches and datasets were therefore used to triangulate the extent to which lack of insurance is a significant issue in particular areas.
Primary research was done in three targeted neighborhoods within the focus area: Bullshead, Marketview Heights and Lake Avenue/Jones Park. During the summer of 2016, 260 street-level intercept interviews were conducted to better understand issues around access to health care.\(^7\)

Of those interviewed, 92 percent said they had some form of health insurance coverage.

**Street-Level Intercept Survey Results:**

**Do you currently have any form of health insurance coverage?**

- **Yes** 92%
- **No** 8%

Source: Common Ground Health Micro-Targeting Neighborhood Resident Intercept Interviews, Fall 2016

Given the locations of the research within some of the most disadvantaged neighborhoods in Monroe County, an 8 percent uninsured rate is lower than expected, even when considering the coverage-expanding impact of ACA. For most of those without coverage, the lack of insurance was a significant concern, with 48 percent saying they are very concerned and another 31 percent somewhat concerned. And as highlighted later in this paper, having insurance doesn’t necessarily guarantee access to care.

Given the limited scale and geographically focused scope of these targeted intercept interviews, we also looked at broader datasets to assess the comparative uninsured rates across the county and region. Through their 500 Cities project, the CDC recently developed census tract-level estimates of Behavioral Risk Factor Surveillance System (BRFSS) survey results. The data for Rochester provides a significantly different perspective on insurance coverage than our neighborhood street interviews.

---

For the City of Rochester overall, the CDC estimates a 22 percent uninsured rate among 18-64 year olds based on 2014 survey results. Within the focus area tracts, the estimated rate is 27 percent compared to 14 percent for the rest of the city. The following map shows the variance across tracts.

Another set of geography-based estimates is provided by the American Community Survey (ACS). For the period 2011-2015, the ACS estimates the uninsured rate within the focus area to be more than double the rate in the rest of the county.


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates
Outside of Monroe County, estimated insurance coverage varies widely, with higher uninsured rates in most of the other counties in the Finger Lakes region.

Uninsured Rate by County (ACS 2011-2015)

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yates</td>
<td>20.5%</td>
</tr>
<tr>
<td>Schuyler</td>
<td>14.7%</td>
</tr>
<tr>
<td>Seneca</td>
<td>12.9%</td>
</tr>
<tr>
<td>Steuben</td>
<td>12.2%</td>
</tr>
<tr>
<td>Orleans</td>
<td>11.7%</td>
</tr>
<tr>
<td>Wayne</td>
<td>11.1%</td>
</tr>
<tr>
<td>Genesee</td>
<td>11.0%</td>
</tr>
<tr>
<td>Chemung</td>
<td>9.9%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>9.7%</td>
</tr>
<tr>
<td>Ontario</td>
<td>9.3%</td>
</tr>
<tr>
<td>Monroe</td>
<td>8.5%</td>
</tr>
<tr>
<td>Livingston</td>
<td>7.8%</td>
</tr>
</tbody>
</table>

Despite varying estimates, all data sources point to lower rates of insurance coverage in the urban focus area within Rochester and most of the rural counties. And as the street-level intercept survey showed, lack of health insurance is a significant concern for those people who do not have coverage.

Given the importance of health coverage and the current uncertainty about the ACA or replacement legislation at the federal and state levels, insurance coverage remains a key component of access to care.

Primary/Preventive Care

Use of primary care is a key component and indicator of a population’s ability to monitor health and to identify and manage issues before they become more serious. In this section, we look at a few datasets that provide perspective on the overall use of primary care across different geographies in the region.

Within the same targeted street-level intercept research described earlier, participants were asked if they have a regular doctor, and if they’ve seen that doctor recently. Of those who indicated they had insurance, 85 percent said they had an appointment in the past year, and another 4 percent said they have a
doctor but hadn’t visited in past year. Among those without insurance, only 33 percent said they have seen their doctor in the past year, and another 10 percent said they had a doctor but hadn’t been seen in the past year. Not surprisingly, insurance coverage status is strongly correlated with access to primary care.

Street-Level Intercept Survey Results: Primary Care

<table>
<thead>
<tr>
<th>Do you have a doctor you think of as your doctor?</th>
<th>Have you seen your doctor within the past year?</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image-url" alt="Graph" /></td>
<td><img src="image-url" alt="Graph" /></td>
</tr>
</tbody>
</table>

The CDC 500 Cities project provides estimates of how use of primary and preventive care varies across census tracts within Rochester. The data suggest little disparity in the likelihood of having routine checkups. Residents in the focus area actually reported having checkups at a slightly higher rate than residents in the rest of the city, 70 versus 67 percent. As this next map shows, checkup rates do not vary widely across census tracts.

Visits to Doctor for Routine Checkup

![Map](image-url)

However, disparity becomes more apparent when looking at a more rigorous standard of preventive care. The 500 Cities project also estimated the tract-level rates of adherence to a set of core preventive services. As seen in the next map, the percentage of older women who had an up-to-date flu shot, PPV shot, colorectal cancer screening and mammogram was significantly lower within the focus area (24 percent) compared to the other city tracts (32 percent). A map showing a very similar pattern of disparity for older men can be found in the appendix.

**Core Preventive Service Utilization (Older Women)**

![Map showing core preventive service utilization for older women.](source: CDC 500 Cities Project: CDC BRFSS 2014, US Census Bureau 2010 census, ACS 2010-2014.)

**Chronic Condition Case Study: Asthma**

For the purpose of studying variations in care for chronic conditions, this analysis includes a focus on patients with asthma. This respiratory illness was selected because the condition is fairly common and known to occur more frequently in certain areas. While clinical care utilization may differ for each chronic condition, our expectation is that a focused look at asthma will provide valid directional findings to help understand gaps in the treatment of chronic disease.

**Prevalence: Asthma**

The map of CDC estimates below shows significantly higher rates of adult asthma in the focus area tracts, compared to the rest of the city of Rochester. On average,
the prevalence of adult asthma is estimated to be nearly 30 percent higher in the focus area compared to the rest of the city.

**Prevalence of Adult Asthma by Census Tract**

Even more striking is the difference in the rate of asthma-driven emergency department (ED) visits. Analysis of hospital data from 2008-2013 showed the rate within the focus area was nearly three times higher than the rest of the city.

**Rate of Asthma-Driven ED Visits by Census Tract**
The large disparity in asthma-driven ED visits is likely driven by several factors including a higher prevalence of people with asthma within the focus area and a lower likelihood that the condition is controlled through ongoing clinical care and medication. The latter is presumably a particular challenge for the population that doesn’t have insurance coverage and therefore has limited access to clinical care and medication.

However, the chart below shows that having insurance is clearly not the only factor driving disparities. Analysis of insurance claims data shows that within the focus area, a much higher percentage of insured asthma patients wind up in the ED due to asthma.

![Chart showing % with ED Visit (Asthma-driven)]

The high rate of ED visits underscores the need for the following analysis, which provides a comparative look at the utilization of different aspects of clinical care (primary/preventive, specialty, medications) across different geographic areas.

Two years of claims data (2014-2015) were analyzed for children and adults with asthma. The population was identified by presence of an asthma diagnosis on any claim during the two-year period. This approach provides a broad sample, with a few gaps that are important to note. The following populations are not included in the data: uninsured; Medicaid/Medicare fee-for-service; anyone who did not have a single medical or pharmacy claim related to asthma.

**Primary/Preventive Care: Asthma**

The claims analysis of the insured asthmatic population mirrors what was seen in the general primary care data shared above – fairly consistent levels of primary care provider visitation across geographies. Among children, the likelihood of
having a primary care office visit within the two-year period was uniformly high: 95-97 percent. Among adults, the rates are generally lower, but the focus area is not dramatically below the rest of Monroe County or the other counties.

The claims data also enabled a look to see if there were differences in the likelihood of visiting a primary care provider based on the type of insurance. As the chart below shows, for children with asthma, no meaningful difference exists between those with Medicaid and those with commercial insurance in any of the areas.
In summary, the data from the three different sources and populations consistently point to the high use of primary care services at a very basic level, regardless of geography. However, when probing more deeply, disparities become clearer and greater, as demonstrated by the large variations in core preventive service utilization rates from CDC shown above and the next section on more specialized care.

**Specialized Care: Asthma**

The claims data analysis allows a look at the type of care utilized by the population with asthma. In general, there is a clear pattern of less specialized care within the focus area compared to the rest of Monroe County. The other counties typically show a slightly lower level relative to Monroe.

The chart below shows the percentage of the asthma population that had any office visit with a primary diagnosis of asthma during the two-year period. In contrast with the more basic metric above (% with any primary care provider visit), there is a clear gap between the focus area and rest of region. This gap doesn’t necessarily mean that patients within the focus area are less likely to speak with a doctor about their asthma, but it does suggest that they are less likely to have office visits primarily focused on asthma.

![% with Office Visit (Asthma-driven)](chart)

<table>
<thead>
<tr>
<th></th>
<th>Focus Area</th>
<th>Rest of Monroe County</th>
<th>Other Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>40%</td>
<td>49%</td>
<td>42%</td>
</tr>
<tr>
<td>Adults</td>
<td>32%</td>
<td>42%</td>
<td>39%</td>
</tr>
</tbody>
</table>

When probing to see if patients had visits with relevant specialists (allergist or immunologist), the disparity is even greater. Compared to the focus area, children in the rest of the county were 3.5 times as likely to see a specialist; and adults were 2.5 times as likely. Utilization of specialists in the other counties is lower than Monroe County, but much higher than the focus area.
The same pattern is seen when looking at the prevalence of immunotherapy as a treatment. The data show a nearly 3.5 times higher rate of immunotherapy in Monroe County outside the focus area for both children and adults.

In this case, there are two factors – the number of patients who begin immunotherapy, and the portion of those who are able to persist with the demanding schedule of recurring injections which is necessary for treatment efficacy. Of those with any claims, only 64 percent within the focus area received at least 12 injections, compared to 79 percent in the rest of Monroe County.

The disparity in utilization of more focused specialty care is consistent with other research which identifies a variety of barriers to care that are more challenging for lower income populations. A study sponsored by the Robert Wood Johnson Foundation.
Foundation assessed the prevalence of reasons for unmet need or delayed care. While affordability is the single most commonly cited reason, the non-financial reasons combine to be even more common.

Prevalence of Reasons for Unmet Needs and Delayed Care

<table>
<thead>
<tr>
<th>Affordability (18.5%)</th>
<th>Availability (8.4%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worried about the cost</td>
<td>Couldn’t get appointment soon enough</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accommodation (17.5%)</th>
<th>Accessibility (4.4%)</th>
<th>Acceptability (4.0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Busy with work or other commitments</td>
<td>Took too long to get to the doctor’s office or clinic</td>
<td>Doctor or hospital wouldn’t accept health insurance</td>
</tr>
</tbody>
</table>


Our street-level intercept interviews provided a very localized opportunity to understand the barriers to care, and the responses generally aligned with the findings above. Respondents were asked for the reasons they could/did not get medical care at a time they needed it. The most common barriers were driven by cost, transportation, non-acceptance of insurance and availability of appointments.

---

Following are some sample verbatim responses:

- "Got the care needed, but could not afford the medication so did not get the medication."
- "My very nice, very good dentist didn't accept our insurance any more. So now my kids and I have no dentist, and we're not getting the care we need."
- "I'm disabled so I can't use the bus system, and some of my doctors are kind of far away, like my cardiologist on South Clinton. He's the most important one, and I didn't see him for almost a whole year. People in my world all work, so they couldn't drive me."
- "I went to the dentist to have them look at the abscess, but never went back for the procedure I needed. I had no child care for my children when I needed care for myself, and they said I couldn't drive after the treatment, and I had no one to drive me."

The claims analysis enables a sub-segmentation by type of insurance, and the data is consistent with the findings from the interviews above. Across all three areas, the likelihood of seeing an allergist was much lower for children on Medicaid. While there are likely a number of factors that explain the disparity for the Medicaid population, it is probable that non-acceptance of insurance and limited availability of appointments are significantly larger obstacles than for the commercially insured.

### % of Children with Allergist Visit

<table>
<thead>
<tr>
<th></th>
<th>Medicaid</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Area</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Rest of Monroe County</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Other Counties</td>
<td>30%</td>
<td>19%</td>
</tr>
</tbody>
</table>

All insurance-based differences are statistically significant (p<0.01)

Source: Common Ground Health Analysis of claims for asthma patients from 2014-2015

---

Even among the insured population, it’s clear that a variety of barriers are combining to generate significant disparities in the level of specialized care utilized within the focus area.

In another study, researchers in Oregon conducted in-depth interviews with low-income families to understand the obstacles they faced. One of the key findings of this research was the importance of a continuous relationship with a health care provider given the challenges to navigate the system and overcome the various barriers to accessing care. “Having a trusted provider or clinic site was instrumental in helping many low-income parents overcome affordability and availability barriers.”

**Medication: Asthma**

Analysis of pharmacy claims for the same population provides additional insight to variations in care patterns between different geographies and types of insurance.

When looking at claims for medications aimed at controlling asthma and preventing symptom flare-ups, there are lower rates in the focus area. For control inhalers, the rate is just a bit lower than Monroe County and roughly the same as the other counties. For oral corticosteroids, there is a more significant gap from the rest of the county, particularly for children. And interestingly, use of corticosteroids appears even higher in the other counties.

![% with Control Inhaler Claim](chart.png)

Location-based differences are statistically significant (p<0.01) except pairs A & B (not significant).

Source: Common Ground Health Analysis of claims for asthma patients from 2014-2015

---

10Understanding how low-income families prioritize elements of healthcare access for their children via the optimal care model. Angier, Gregg, et.al. 2014. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4240836/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4240836/)
In contrast with control medications, there is a higher rate of rescue inhaler claims in the focus area compared to the other areas. A hypothesis to explain the difference is that the control medications may be viewed as more discretionary, and therefore deprioritized among families that need to make tough choices about spending limited resources (time and money) on prescriptions.

When the populations are sub-segmented by type of insurance, the data show a generally higher rate of pharmacy claims for those on Medicaid. The charts show the same pattern for both control and rescue inhalers, which is the opposite of what was found for specialist visits, where Medicaid patients had significantly less utilization. This pattern is likely driven by the low co-pays for Medicaid patients.
% of Children with Control Inhaler Claim

- Medicaid: 47%, 38%
- Commercial: 49%, 51%

Focus Area: 47%, 38%
Rest of Monroe County: 49%, 51%
Other Counties: 45%, 45%

*The difference for Focus Area is statistically significant (p<0.01); the other differences are not significant*

Source: Common Ground Health Analysis of claims for asthma patients from 2014-2015

% of Children with Rescue Inhaler Claim

- Medicaid: 83%, 67%
- Commercial: 83%, 76%
- Other Counties: 80%, 73%

Focus Area: 83%, 67%
Rest of Monroe County: 83%, 76%
Other Counties: 80%, 73%

*All insurance-based differences are statistically significant (p<0.01)*

Source: Common Ground Health Analysis of claims for asthma patients from 2014-2015
Conclusion

It is clear that geographic-based disparities exist across the health care pathway – insurance coverage, clinical care and medication. Among the population with asthma, the biggest disparity is in the use of specialized care which is particularly low among those insured by Medicaid.

However, while these disparities in clinical care are significant and important, they do not appear to be large enough to explain the much larger disparities in outcomes such as the rate of asthma-driven ED visits, which is nearly quadrupled for focus area residents.

Such disparity points to the broader context in which health is impacted and managed. As the UWPHI County Health Rankings model illustrates, clinical care only explains 20 percent of health outcomes. Social and economic factors, health behaviors and the physical environment make up the difference, exerting a much greater influence on health outcomes and explaining critical aspects of place-based disparities.

Analysis of tract-level data for the City of Rochester confirms the strong correlation between behavioral and environmental factors and health outcomes. The charts below show the clear relationship that smoking rates and the Health Housing Index\(^\text{11}\) have with ED visit rate. (The appendix includes additional charts showing similar patterns for physical activity rate and felony crime.)

---

\(^{11}\) The Healthy Housing Index is a metric derived from the prevalence of housing violations among rental properties.
ED Visits vs. Smoking Rate (by Tract)

Each data point represents one census tract within the City of Rochester

R² = 0.7527

Source: Common Ground Health Analysis.
Smoking Rate Data from CDC 500 Cities Project. CDC BRFSS 2014, US Census Bureau 2010 Census, ACS 2010-2014.
ED Visit Data from NYS SPARCS 2008-2013.

ED Visits vs. Healthy Housing Index (by Tract)

Each data point represents one census tract within the City of Rochester

R² = 0.5066

Source: Common Ground Health Analysis.
Healthy Housing Data from City of Rochester Certificate of Occupancy Inspection Violation Data 2008-2013.
ED Visit Data from NYS SPARCS 2008-2013.
And while less tangible than the components captured in the County Health Rankings model, health prioritization/engagement is an important concept and driving force behind both health behaviors and clinical care. There are variations in the extent to which individuals and families make health a priority and are able to proactively engage in taking care themselves. In disadvantaged neighborhoods – such as those within the focus area – a focus on health is both less likely and more necessary.

Health Pathway for Chronic Conditions

With the additional life stressors in those communities, people often have more pressing concerns than taking care of their health. However, the barriers to care explained earlier (e.g., affordability, availability, accessibility) are often larger for these same people, which necessitates a higher level of proactive commitment to get the needed care. As cited above, research has shown the importance of having an ongoing and trusted health provider to help navigate the challenges.

Given these challenges and needs, it is particularly important to make sure the uninsured and non-utilizers are not overlooked. The detailed analysis of clinical care was based on insured patients that had at least one asthma diagnosis captured by any medical claim over the two-year period. While this analysis could not assess the population without any claims, it is safe to assume they are disproportionately within the focus area, and are likely the people who need the most help accessing care.

Several local initiatives have the potential to reduce the disparities discussed in this report. Some of the efforts focus directly on addressing health care issues, including ReThink Health Ventures, Invest Health and the Medicaid DSRIP program, managed by Finger Lakes Performing Provider System. Others programs, like the Rochester-Monroe Anti-Poverty Initiative (RMAPI), are addressing a broader set of social determinants which likely will have an effect on health care and outcomes.

Additionally, changes in government policies and programs at federal, state, and local levels can have significant impacts – positive and negative. Given the constantly evolving environment, it is important to maintain ongoing efforts to analyze and understand health care gaps and disparities.

Further analysis is already planned to provide both broader and deeper perspectives on access and utilization of care. The same claims-based analysis...
framework will be applied to other conditions to see if the results mirror those found for asthma. Of particular interest are mental health and dental care. A more focused look at Medicaid enrollees is also planned.

Another round of qualitative research is being designed, which will help explain some of the results of the analysis, and fill in data gaps. Some topics of particular interest include:

- Barriers to utilizing different types of doctors and medications
- Prioritization of different aspects of care (e.g., preventive vs. acute; primary care provider vs. specialist; medications)
- Populations without insurance coverage, or who are not engaged with the health care system

The findings of this upcoming research are expected to highlight new issues to pursue with further quantitative analysis. This cycle of research and analysis will be guided by the Partnership for Access to Health Care, which works to expand access to care. The partnership’s objective will be to identify high leverage opportunities for influencing programs and policy.
## APPENDIX

### Demographics of Analyzed Areas

<table>
<thead>
<tr>
<th></th>
<th>Focus Area</th>
<th>Other Monroe County</th>
<th>Other Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>142,600</td>
<td>606,756</td>
<td>675,190</td>
</tr>
<tr>
<td>% under 18 yrs old</td>
<td>30%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>% 65+ yrs old</td>
<td>9%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% White</td>
<td>20%</td>
<td>84%</td>
<td>91%</td>
</tr>
<tr>
<td>% African American / Black</td>
<td>50%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>22%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>% Other</td>
<td>7%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>% of Households with Income &lt;$25K</td>
<td>47%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>% of Households with Food Stamp / SNAP benefits</td>
<td>44%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Educational Attainment (ages 25+)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No High School Diploma</td>
<td>25%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>32%</td>
<td>24%</td>
<td>35%</td>
</tr>
<tr>
<td>Some College or Associate’s Degree</td>
<td>30%</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>Bachelor’s or Graduate/Professional Degrees</td>
<td>14%</td>
<td>41%</td>
<td>22%</td>
</tr>
<tr>
<td>% without health insurance (ages 18-64)</td>
<td>15%</td>
<td>7%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Notes:**
Focus Area includes following ZIP codes: 14605, 14608, 14611, 14613, and 14621
Other Counties include: Chemung, Genesee, Livingston, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming, and Yates.

*Source: 2011-2015 American Community Survey 5-Year Estimates*

### Core Preventive Service Utilization (Older Men)

![Map of Older adult men aged 65+ who are up to date on a core set of clinical preventive services](source)

ED Visits vs. Lack of Physical Activity (by Tract)

Each data point represents one census tract within the City of Rochester

R² = 0.7961

Source: Common Ground Health Analysis.
Physical Activity Rate Data from CDC 500 Cities Project. CDC BRFSS 2014, US Census Bureau 2010 Census, ACS 2010-2014.
ED Visit Data from NYS SPARCS 2008-2013.

ED Visits vs. Serious Crime (by Tract)

Each data point represents one census tract within the City of Rochester

R² = 0.451

Source: Common Ground Health Analysis.
Crime Data from Rochester Police Department 2011-2016.
ED Visit Data from NYS SPARCS 2008-2013.