Central New York
Primary Care Assessment

February 2014

Submitted to:
Health Foundation
for Western and Central New York
726 Exchange Street, Suite 518
Buffalo, New York 14210-1485

Submitted by:
John Snow, Inc.
44 Farnsworth Street
Boston, MA 02210-1211

I am pleased to present the final report of the Central New York Primary Care Safety-Net Assessment. This report is the culmination of a collaborative effort on behalf of more than 100 stakeholders from throughout the region and around the state.

Since its inception, the Health Foundation has focused on improving the health and health care of two of the most vulnerable and underserved populations in our regions: frail elders and young children. However, we recognize that the health of frail elders and children in poverty cannot improve without building community capacity and strengthening the health care systems that serve them.

It is with this in mind that we hired John Snow Inc. to conduct an objective assessment of the central New York primary care system and its primary care safety net. The project engaged health care providers, social service agencies, health departments, academic institutions, advocacy and planning organizations, and foundations as well as community members. Dozens of these collaborators provided their expertise, guidance, and perspective through interviews. Other collaborators provided support related to data management and analysis, consumer survey data collection, and website development. Still others allowed us to conduct site visits at their clinics or generously shared their technical reports and research efforts. This ambitious initiative could not have happened without the support of all of these partners.

Our health care system is facing unprecedented change. This change is transforming how health care, public health, and social service organizations are delivering services, how service providers are being paid, and how consumers are engaging in care. Many of these changes and reforms will not succeed without a stronger, more integrated, more patient-centered primary care system capable of providing the highest quality care to everyone in our communities. We hope this initiative will guide regional, collaborative efforts to expand and strengthen the region's primary care system and ultimately improve the health of our communities.

On behalf of the Health Foundation's staff and Board of Trustees, as well as the project team at John Snow, Inc., I want to express my deepest appreciation to everyone who was involved in this project. If you have any questions, or need more information, please feel free to contact me at amonroe@hfwcny.org.

Best Regards,

Ann F. Monroe

Main Office: Larkin at Exchange, Suite 518, 726 Exchange Street, Buffalo, NY 14210-1485 • (716) 852-3030
Syracuse Office: 431 E. Fayette Street, Suite 250, Syracuse, NY 13202-3302 • (315) 671-0057
www.hfwcny.org

John Snow, Inc. (JSI)

PROJECT TEAM

Alec McKinney, Project Director
Hallie Tuchman, Research Assistant
Natalie Trusdell, Lead Analyst
Brianne Fennessy, Research Assistant
Julie Ray, Editor

For additional information, contact Aslichta@chfwcny.org or amckinney@jsi.com

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I. EXECUTIVE SUMMARY

A. Purpose and Rationale

The purpose of this assessment was to collect information from quantitative and qualitative sources to help the HFWCNY and regional primary care stakeholders better understand community need as well as primary care safety-net strength and capacity.

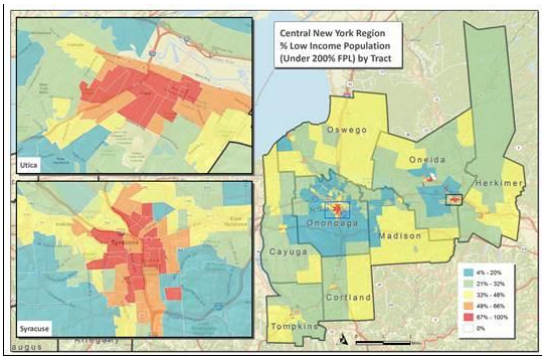
More specifically, the primary objectives of this project were to:

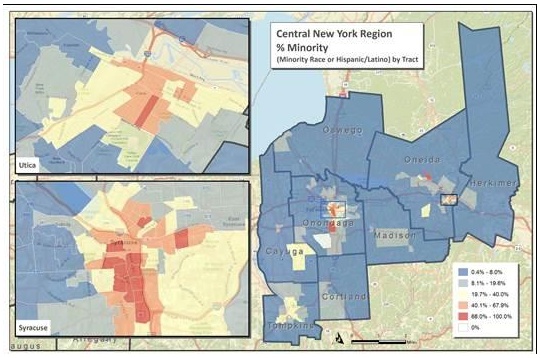
1. Describe and assess the **underlying demand for primary care services,** including the identification of at-risk populations, priority health issues, service gaps, and barriers to access.
2. Describe and assess the existing **supply of primary care system** with respect to capacity, quality, and strength.
3. Assess **consumer experience** with primary care.
4. Assess the **impact and consequence of health care reform** with respect to internal operations and external collaboration.

B. Key Findings

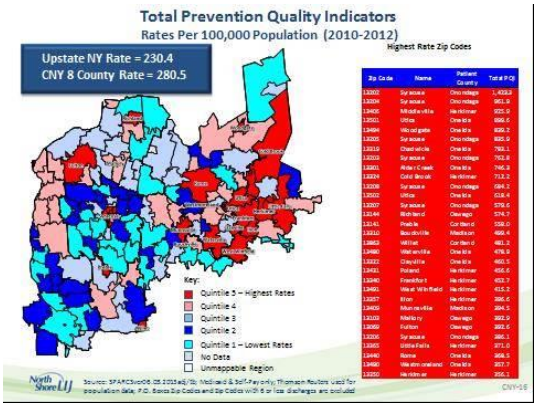
1. Primary Care Demand and Community Need

- Large numbers and percentages of low-income, racial/ethnic minority, and refugee/immigrant populations throughout the region struggle with access to health care and disparities in outcomes, particularly in the region's urban areas but also throughout rural areas.



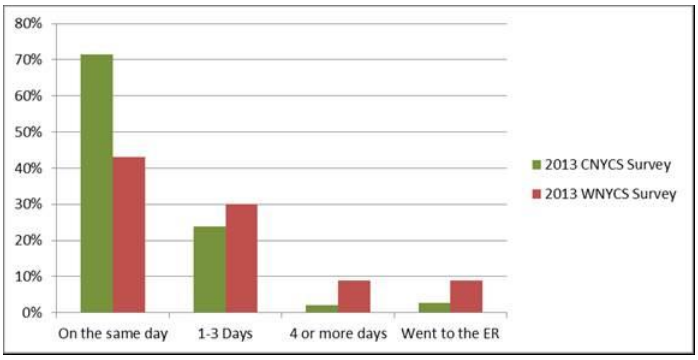


- Large numbers of uninsured populations throughout the region who lack access to health care and will continue to lack access even after the implementation of the ACA.
- High rates of morbidity for the leading health conditions throughout the central New York region, particularly in Syracuse and Utica.
- High rates of preventable inpatient service utilization throughout the region indicate gaps in primary care capacity.

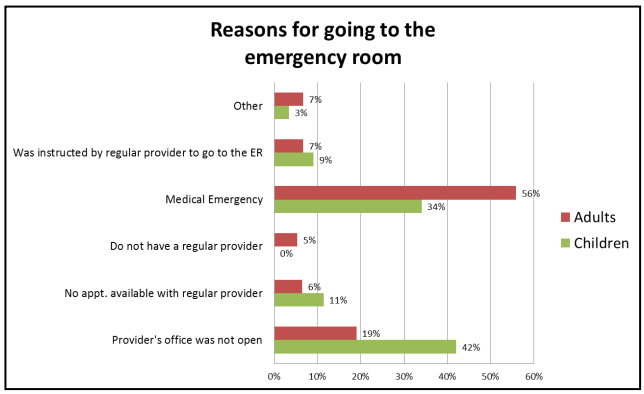


2. Consumer Input and Barriers to Access

- The majority of parents (71%) reported that they were able to get an appointment to see a provider the same day that their child was sick. In comparison to the WNYCS survey, access to acute care visits is much higher in central New York, with more families able to access same-day appointments and fewer families choosing the emergency room.

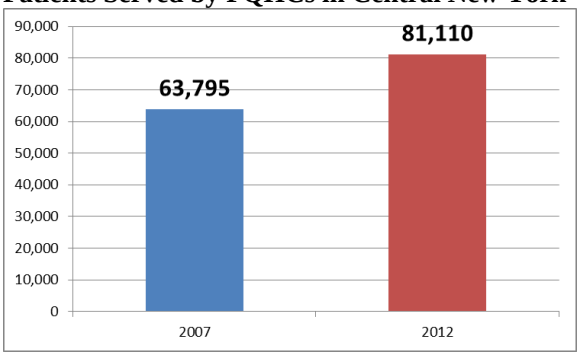


- The rate of emergency room utilization for adults surveyed 39% compared to 28% nationally in 2012. Of those who did visit the emergency room, only 56% did so for an emergent medical emergency.



- When asked about ability to access provider over the phone, 43% of adults said that if they called their provider responded the same day. Compared to the national CAHPS survey, which found that 63% of adults were able to get a response from their provider the same day, central New York patients experienced poorer phone access.
- Children had much higher rates of dental access than adults, as 75% children received all the preventive dental care they needed, compared to 55% of adults.
- Forty percent (40%) of parents said their child did not need specialty care in the last year.

Patients Served by FQHCs in Central New York

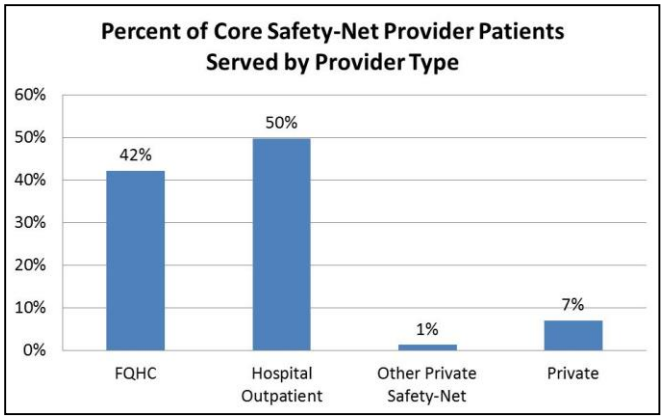


. Of the 60% of respondents who said their child did needed specialty care, 30% reported some problem accessing a specialty provider.

3. Primary Care Structure, Supply, Capacity

- FQHCs play a major role in the region, particularly in Syracuse. Since 2007, the number of patients served by FQHCs in central New York has increased by more than 25%, from approximately 60,000 patients in 2007 to more than 80,000 patients in 2012.
- Private, hospital-affiliated, and independent primary care providers play a major role in the safety-net in most communities in the region and are often the leading primary care providers in their market areas. With the implementation of ACA, the hospital based practices are becoming more integral to hospital service delivery and business strategy to develop

integrated delivery systems that are offered incentives to keep patients and communities healthy rather than to provide certain scope of services.



- Despite the dramatic growth in core safety-net provider organizations, there is still substantial unmet need in the region, particularly among low-income segments of the population. In some communities, the safety-net's penetration into the low-income population may be as low as 20-30%.
- Urgent care clinics are evolving in many markets as a way of expanding capacity to provide more timely care while simultaneously reducing the burden that non-emergent, emergency department utilization has on hospitals and patients. Many people think this is positive but others feel that it threatens "core" safety-net providers, whose goal and financial position is often dependent on promoting a more stable "medical home."

4. Primary Care Internal Operational Strengths and Weaknesses

	Strengths	Weaknesses
Outreach, Eligibility/Enrollment, and Primary Care Engagement	• FQHCs and other core safety-net providers are conducting extensive outreach, insurance eligibility screening, and insurance enrollment efforts. • In some cases, these efforts are being accomplished with outreach workers who are going to underserved communities and/or working with other community partners.	• Need for greater outreach, insurance eligibility screening, and enrollment efforts particularly among non-FQHC providers. • Lack of primary care engagement, particularly for people with chronic illness or with risk-factors. • Emergency department diversion programs to promote engagement in more appropriate primary care.
Patient-Centered Medical Home	• Most primary care safety-net practices have embraced patient-centered medical home (PCMH) principles, such as: ○ Implementation of EHR ○ Tracking of quality indicators ○ Implementation of quality systems ○ Case and care management services ○ External referral systems	• Need to invest resources to bridge gap between theory and practice and promote the full implementation and practice of PCMH principles, such as: ○ Population-based panel management of preventive services and chronic disease ○ Provider communication ○ Information transfer between specialists
Utilization of Interdisciplinary	• Specialty care and mental health integration through co-located and enhanced referral mechanisms.	• Team-based approaches to providing primary care that involve physicians as well as nurse practitioners,

Teams	• Some level of case and care management services is provided at most safety-net practice sites. • Appointment reminder calls and specialty care referral scheduling.	physician assistants, and other mid-level providers have shown to be very effective and efficient, yet there is limited evidence of these models being applied in the region.
Health Information Technology (HIT) and Quality Improvement	• Most safety-net practices are using robust electronic medical record systems. • Most are tracking quality indicators and many have applied quality improvement protocols.	• Most practice sites lack the time, resources, and understanding to train providers to fully use their medical record systems to identify those at-risk, manage follow-up, communicate with other providers, and coordinate care.
Administrative Operations and Procedures		• One of the most significant barriers to safety-net growth is primary care provider recruitment, especially in rural areas. • Many practices struggle with coding, billing, and other financial procedures.

5. Primary Care External Partnerships and Collaboration

- The central New York region, as most in the nation, has struggled to coordinate and integrate its primary care system and safety-net. The Affordable Care Act has supported collaboration, through encouraging preventive care and new collaborations across providers through accountable care organizations. Continued efforts must be made to remove barriers to collaboration so that health and social service providers can explore how to enhance the quality of clinical care, better integrate and coordinate services, improve patient experience, and reduce inefficiencies.

D. Recommendations

The findings above highlight the fact that there is a strong, diverse group of safety-net providers operating throughout the region. While no county in central New York is completely lacking in safety-net capacity, there is still dramatic unmet need and limited capacity throughout the region. There is also considerable room for safety-net providers to improve the quality and efficiency of operations. The following recommendations from the JSI project team are intended to guide how primary care safety-net providers and other stakeholders in the region should work individually and collectively to strengthen and build the capacity of the safety-net and continue to respond to ACA and other current and emerging health service delivery and payment reform trends.

Strengthen and Expand the Capacity of the Primary Care Safety-net

This assessment highlights the need to strengthen primary care operations and expand the capacity of the primary care safety to address unmet needs, fill capacity gaps, and improve the overall quality and efficiency of the care provided.

1. **Focus on operational improvement**

Primary care safety-net strengthening efforts should focus initially on enhancing internal clinical and administrative operations and systems. The goal of these efforts should be to create patient-centered, coordinated, integrated, service delivery approaches that improve quality, safety, and access.

The following are the leading areas that need to be addressed:

- *Internal clinical and administrative procedures*
- *Quality and performance improvement*
- *Chronic disease management*

2. **Expand primary care capacity**

Despite progress in the past five years, efforts still need to be made to increase primary care safety-net capacity. This should be accomplished through a multi-pronged strategy that focuses first on maximizing existing primary care capacity and then on adding providers or practice sites across the spectrum of "core," "essential," and "contributing" safety-net categories, as appropriate.

- *Prioritize expanding access through current providers*: Explore how to address unmet need by refining patient flow, developing primary care pods, creating interdisciplinary teams, and other ways that increase productivity and maximize existing capacity.
- *Take a multi-pronged approach to expansion:* Primary care expansion should include supporting not only core but also essential and contributing providers in their ability to serve the safety-net.

3. **Support primary care provider recruitment and retention**

Almost all safety-net providers in the region struggle to recruit physicians and fill gaps in their clinical staffing. This issue is not unique to central New York and its safety-net providers but is an issue for safety-net providers throughout the nation particularly in rural areas.

- *Support regional approach to recruitment and retention*: Utilize the expertise of agencies and organizations that are closely involved in provider training and development in the state and nationally, such as CHCANYS, Area Health Education Centers (AHEC), NYS Primary Care Office, and the National Health Service Corps (NHSC), to develop a regional strategy to primary care providers. This could include development of a toolkit or resource center that works on behalf of the region's safety-net.

Promote Population-based Approaches to Community Health and Consumer Engagement in a Patient-Centered Medical Home

There is growing appreciation in the health care field that communities must act collectively to reduce health care disparities and improve their overall health and well-being. To do so, communities should develop a shared agenda and implement targeted, well-integrated efforts that

build on existing programs or assets. They also need shared evaluative metrics and a community infrastructure that guides and monitors these activities.[1]

1. **Promote population-based approaches to community health**

Support the development of population based-approaches to health by developing well-integrated systems of care and working collaboratively on preventive health initiatives. The University of Wisconsin's Population Health Institute has demonstrated the importance of taking action at the community-level to improve health status and reduce mortality. Communities that have achieved the most promising results are taking a two-fold approach:

- *Continuum of care:* Communities ensure that residents have access to a well-intergated contiuum of care.
- *Address social determinants of health:* Communities and integrated delivery systems that include primary care are working collaboratively to improve physical environments, address social/economic factors, and implement targeted community health programs.

1. **Promote consumer/primary care engagement in a patient-centered medical home**

Communities and primary care practice sites need to collaborate to reach the community at-large including people with chronic conditions in more targeted ways to:

- *Promote healthy behaviors*
- *Provide education and support*
- *Promote primary care engagement*

2. **Support the development of registries and other HIT tools to identify and promote primary care engagement and chronic disease management**

- *Improve use of EHRs to support chronic disease management*: Safety-net practices in the region would benefit from support that allowed them to share information and explore how to use EHRs to ensure that patients are fully engaged in their care and receive tailored follow-up and case/care management services.
- *Leverage EHRs to improve care management*: Practice sites would also benefit from the formal implementation of primary care engagement and care management protocols/interventions that allow EHRs to identify and manage chronic disease management patients.

[1] Hanleybrown, F., Kania, J., Kramer, M. Channeling Change: Making Collective Impact Work. Stanford Social Innovation Review. 2012

Promote Collaboration and Communication across the Safety-net and a Broad, Collective Understanding of Health Reform/Health System Trends

ACA and the opportunities that are part of the bill have facilitated collaboration by encouraging community organizations to respond to various grant opportunities or to integrate their services to better position themselves for potential changes in payment practices. Despite these positive steps, there is still need to promote greater collaboration and educate provider about various facets of health reform, important trends in health care service delivery and payment, and/or issues related to primary care clinical and administrative operations. These efforts will promote communication and partnership generally as well as encourage services integration, care coordination, and joint planning.

The following are recommendations related to collaboration.

1. **Facilitate information sharing and collaboration by supporting the development of market-level, primary care-specific or broader community coalitions.**

- *Market level coalitions:* Regional stakeholders should support the development of market-level coalitions that focus on information sharing and strengthen ability to respond to opportunities. This kind of work is happening at some of the region's rural health networks and this should continue to be supported.

2. **Raise awareness and understanding of current mechanisms and tools associated with health service delivery and payment reform.**

    - *Regional Education on ACA:* Regional stakeholders should ensure that all safety-net providers (core, essential, and contributing) have an understanding of current mechanisms and tools associated with health reform and the development of integrated delivery systems so that practice sites can take advantage of opportunities. Payment reform has the potential to offer new flexibility, investment, and aligned incentives to achieve the Triple Aim. If providers are informed of payment reform concepts, they can participate in shaping payment reform efforts to protect and sustain the safety-net.

3. **Continue to support HIT infrastructure development and health information exchange.**

    - *RHIO Investment:* Investment in efforts that support the development of the central New York RHIO and the involvement of core safety-net providers would reduce the "digital divide" that is already apparent in the region. Access to total health system utilization data is the first critical step in assuming accountability and eventually increased payment for achieving Triple Aim goals.

II. PURPOSE AND RATIONALE

The Health Foundation for Western and Central New York (HFWCNY) is committed to improving the health and health care of the people and communities of western and central New York. HFWCNY focuses on two of the most vulnerable and underserved populations: frail elders and young children living in poverty. HFWCNY recognizes that the health and health care of frail elders and children in poverty cannot improve without bolstering the communities in which they live and the health care systems that serve them. As a result, the foundation invests in strengthening community health capacity—particularly primary care—to ensure that people and communities have what they need to make informed health decisions and are supported by high-quality appropriate health care. To that end, HFWCNY invests in:

- **Quality improvement** efforts that ensure that health and social service organization staff understand the fundamentals of quality and performance improvement and have the skills and internal culture to implement effective quality improvement efforts.
- **Health care safety-net strengthening** initiatives that enable primary care providers to access safety-net services to better serve at-risk families, children, and elders through collaborative efforts that improve access and quality of care, increase revenue, and foster efficiencies.
- **Community leadership and collaborations** that expand the network of skilled leaders and teach them to lead collaboratively within and outside their organizations and become advocates for improved health care delivery.
- **Organizational capacity-building** efforts that help health and human services organizations overcome challenges in their environment, particularly related to financing and sustainability.

In the spring of 2013, the foundation hired John Snow, Inc., a nationally recognized public health and health care planning firm, to conduct a primary care safety-net assessment to support HFWCNY' s community health strengthening efforts. The assessment was designed to collect baseline data and information about the safety-net's current state with respect to access, quality of care, consumer experience, and health information technology.

To support this effort and promote collaboration, HFWCNY convened stakeholders in central New York to a kick-off meeting comprised of senior representatives from the region's health and social service providers, hospitals, local and state health departments, as well as planning, research, philanthropic, and advocacy organizations. Stakeholders were involved at key junctures throughout the assessment process and helped to guide the implementation of the assessment. The stakeholders will be the primary recipient of this report.

Figure 1: CNY Primary Care Partners

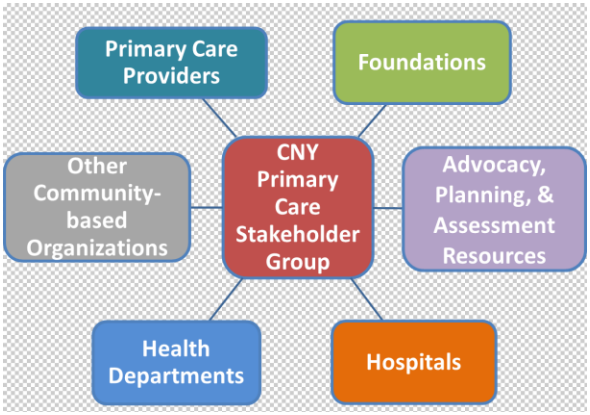


Figure 2: HFWCNY's Central New York Region

North Shore- Long Island Jewish Health System (NS-LIJ) contributed considerable analytic data support. In 2012, NS-LIJ analyzed data from two large New York state health-related datasets, New York State's Hospital Discharge Dataset and New York State's Medicaid dataset (SPARCS) for HFWCNY's primary care assessment for western New York. In 2013, NS-LIJ made the same contribution to the foundation's central New York assessment. Specifically, they provided extensive data tables and maps that: 1) summarized the characteristics of central New York's Medicaid population on a county-by-county basis; 2) analyzed overall health status; and 3) identified geographic "hotspots" where there were relatively higher morbidity/mortality, particularly for conditions typically seen in the primary care realm, in order to assess primary care strength.

The emphasis of this assessment is on the primary care safety-net in the eight counties that make up HFWCNY's central New York region: Cayuga, Cortland, Herkimer, Madison, Oneida, Onondaga, Oswego, and Tompkins.

In conducting its assessment, JSI drew from the Agency for Healthcare Research and Quality's (AHRQ) view of the safety-net, which it defines as:

> "...variety of providers delivering care to low-income and other vulnerable populations, including the uninsured and those covered by Medicaid. Many of these providers have either a legal mandate or an explicit policy to provide services regardless of a patient's ability to pay. Major safety-net providers include public hospitals and community health centers as well as teaching and community hospitals, private physicians, and other providers who deliver a substantial amount of care to these populations."

In light of the Patient Protection and Affordable Care Act (ACA), JSI took an even broader view of the safety net by including private solo and group practices and hospital-based primary care practices that are taking steps to serve those who are newly insured through Medicaid Expansion or the plans offered and subsidized through the New York State Health Insurance Exchange (NY State of Health The Official Health Plan Marketplace). One of the major goals of ACA is to promote the importance and emphasis on primary-care medical care as a way of promoting prevention, disease management, primary care engagement, and wellness rather than the treatment of illness. As a result, numerous components of ACA are aimed at either promoting consumer engagement in primary care or encouraging providers to increase primary care capacity. This has led to the expansion of the safety-net, and the assessment's approach reflects this change.

Finally, the JSI took a holistic view of health as conveyed in the definition of primary care from the Institute of Medicine (IOM):

> "Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community."

For the purposes of this assessment, the safety-net was defined to include primary medical, oral, and behavioral health services. The specific services included in primary medical care are generally considered those offered by family medicine, pediatrics, internal medicine, and OB/GYN practitioners. Behavioral health care includes mental health and substance abuse services. Despite this broad definition, JSI was only able to compile quantitative data on community need and primary care capacity for medical conditions and primary care medical services. The assessment's interviews and site visits did capture qualitative information on medical specialty care, dental, mental health, and substance abuse services, which augmented JSI's understanding of community need, barriers to care, and service capacity. However, in order to reduce the burden of additional data collection, JSI opted not to request quantitative data for other non-medical services.

The JSI project team drew from the IOM's core competencies for 21st-century health care to clarify and guide its primary care operational assessment. The following core competencies describe the approach that providers should take in providing care. The basic tenets of this approach are:

- Design of patient-centered care
- Utilization of interdisciplinary teams
- Utilization of informatics
- Application of quality improvement strategies
- Employment of evidence-based practices

The ultimate goal of this assessment and planning effort was to collect vital information from key health and social service providers, other stakeholder organizations, and consumers that would guide their collective efforts to strengthen the region's primary care system, with an emphasis on the safety-net. The hope is that the finding and recommendations from this assessment ultimately will guide the efforts of HFWCNY and its partners to develop and implement projects that will expand primary care capacity, address existing provider needs, improve the quality of services, and strengthen the region's primary care system.

Finally, this project was meant to provide baseline data to enable HFWCNY and its partners to evaluate the impact and effectiveness of their efforts. With this in mind, the report highlights population characteristics and other data points relative to assessing primary care capacity and strength. These data points will be used to track the impact of future efforts.

The primary objectives of this project were to:

1. Describe and assess the **underlying demand for primary care services,** including the identification of at-risk populations, priority health issues, service gaps, and barriers to access.
2. Describe and assess the existing **supply of primary care systems** with respect to capacity, quality, and strength.
3. Assess **consumer experience** with primary care.
4. Assess the **impact and consequence of health care reform** with respect to internal operations and external collaboration.

III. APPROACH AND METHODS

At the outset of the project, the JSI project team worked with HFWCNY to develop an overall approach, set of methods, and a workplan that was responsive to the needs of the Foundation and that would allow the project to achieve its goals and objectives. This approach was presented to stakeholders in Central New York at the project's initial kick-off meeting on May 16, 2013, and the JSI project team included their feedback as the project was implemented. The following is a review of the major components of JSI's approach.

A. Primary Care Demand, Supply, Capacity, and Strength

With respect to access, JSI identified and described the primary care safety-net and assessed its ability to provide adequate, accessible, high-quality services to low-income, underserved children and their families. In identifying the safety-net, JSI made significant efforts to isolate the primary medical health care providers that serve substantial numbers of low-income, uninsured, underserved, and otherwise vulnerable segments of the population. More specifically JSI worked to identify community health centers, hospital outpatient clinics, residency clinics, public health department clinics, hospital emergency rooms, urgent care centers, and private physicians who served significant numbers of Medicaid-[2]insured and low-income, uninsured, and underinsured populations. The overall assessment was not designed to facilitate a full primary care safety-net inventory but rather to identify key players and describe the safety-net's basic structure and strengths. While the JSI project team is confident that it has captured the major safety-net providers, it is possible that the team's efforts have not uncovered all of the primary care providers who play an important role in the safety-net.

1. Categories of safety-net providers

JSI worked with HFWCNY staff to identify and categorize key safety-net providers to assist in describing the central New York safety-net. These efforts began during the initial round of key informant interviews and were continued throughout the project. Ultimately, organizations and providers were grouped in three categories: core safety-net providers, essential safety-net contributors, and other contributing providers. These categories distinguish how each provider participates in the region's health care safety-net. However, as will be discussed in more detail later in this report, all providers and organizations in central New York that serve low-income children and their families are critical to assuring access to care in the region.

The following are descriptions of the safety-net provider categories that are being used in this assessment.

- **Core safety-net providers.** A core safety-net provider is either a health care organization that provides comprehensive primary medical care services or an organization that provides comprehensive outpatient mental health, substance abuse, or dental services.

[2] In this report, 'Medicaid' refers to both Medicaid and SCHIP programs including Child Health Plus and Family Health Plus.

Core primary medical care providers strive to serve as a patient's medical home, which in the Commonwealth Fund's[3] definition is characterized by:

- A regular doctor or source of care
- Easy access to the provider by telephone
- Easy access to health advice on evenings and weekends or whenever the provider is closed
- Visits with the provider that occur conveniently for patients, are on time and are efficient

Core safety-net providers must also be guided by an explicit funding policy, a public policy mandate, or some intractable mission to serve low-income, Medicaid, and uninsured populations. Core providers do not limit the proportion of Medicaid patients they serve and have explicit policies to serve people without regard for their ability to pay. Policies related to the uninsured/underinsured typically include a sliding fee scale that defines specific discounts based on household income and family size. Some core safety-net providers may have a policy to provide free care to low-income uninsured patients. Furthermore, core providers actively promote these policies and make efforts to reduce barriers to access for those with limited or no means to pay for services.

- **Essential safety-net contributors**. An essential safety-net contributor is a health care organization or provider of primary medical care, oral, or behavioral health services to large proportions and/or large numbers of people insured by Medicaid, as well as some uninsured/underinsured patients. These organizations may provide services at a discount to people who are uninsured on an individual basis without any explicit mandate or mission. These providers often put caps on the proportion of Medicaid or uninsured patients they serve, and many do not have sliding fee scales that are applied across the board without exception. This category also includes organizations that meet the definition of "core" above in terms of mission and policies on the uninsured, but provide services on a limited part-time basis.

- **Other contributing providers.** Organizations and providers in this category are important contributors to the safety-net but typically provide only a small amount of services to people insured by Medicaid, and an even smaller portion to people who are low-income and uninsured. These organizations are usually private providers who simply do not have the infrastructure or financial means to serve large numbers of low-income, uninsured, or Medicaid patients. They often put caps on the proportions of patients they serve in these groups, do not have a formal sliding fee scale, and do not self-identify as a safety-net provider.

One of the main objectives of this categorization process was to identify providers in central New York that are key to preserving and strengthening the safety-net. The categorization is not meant to diminish the importance or impact that providers across all of the categories have on low-income children and their families. The unfortunate reality is that organizations and providers that do not receive outside grants or otherwise have access to financial resources specifically dedicated to providing uncompensated care are limited in their ability to serve

[3] There are various definitions of the term "medical home." JSI selected the Commonwealth Fund's for this project.

uninsured, underinsured, and Medicaid-insured patients. As a result, their participation in the safety-net is fragile and may be dependent on the good will or financial support of another organization—such as a hospital or parent agency—that may be reduced or withdrawn at any time.

B. Approach to Data Collection

In order to focus the project's resources, JSI concentrated on identifying and collecting information from providers and organizations that are part of the core safety-net. Secondarily, the JSI project team worked to define the role of the other types of providers that contribute to the safety-net. As will be discussed later in this report, the western New York safety-net relies heavily on providers that are not among the core of the safety-net as defined above.

JSI developed a multi-pronged approach to collecting data to assess provider capacity and consumer demand and barriers to care. This assessment was an effort among several organizations interested in the safety-net in central New York. The goal was to include the expertise, insights, and initiatives of organizations working on primary care capacity. JSI held several meetings with Long Island Jewish Health System, and HealtheConnections to include their expertise and knowledge in the report. The specific roles of these organizations are outlined in the report.

1. **Provider capacity.** In conducting this work HFWCNY was interested in better understanding the role and the current capacity of core, essential and other contributing safety-net providers in central New York. Several datasets were used to assess this capacity: 1) provider survey of the leading safety-net providers conducted by JSI; 2) analysis of the National Provider Identifier (NPI) dataset; and 3) analysis of Federally Qualified Health Center Uniform Data Set (UDS) data available through the UDS Mapper. Details on each of these data sources are provided below.

    - **Provider survey:** A survey was distributed to providers throughout the eight counties of the assessment in central New York who were identified as core and essential providers by the key-informant interviews and site visits of the project. This list was developed with the assistance of staff from HFWCNY and verified and vetted with HeatheConnections. The survey was developed to further understand the capacity of these providers, including the total FTE of primary care providers, total patients served, and the distribution of patients by insurance type. To preserve confidentiality this data is reported on the county level and only in cases where there were more than three respondents. Respondents provided data on 17 organizations and 42 clinical sites throughout the region.

    - **National Provider Identifier (NPI) dataset:** The NPI list is a comprehensive list of all providers registered with the CMS National Plan and Provider Enumeration System (NPPES) as primary care providers. Each provider has a unique identifier that is required for financial transactions with CMS. This data set was drawn in November 2013. The list is inclusive of primary care providers including MDs, DOs, NPs, PAs, and specialty providers.

For the purpose of this project, the list of providers was reviewed to create a summary of the total of providers who list each of the following specialties: internal medicine, pediatrics, general practice, family medicine, and OB/GYN. Pediatrics, general practitioners, and family medicine were grouped together as "PCP's" and OBGYN and internists were reported separately. For each county, JSI totaled the number of providers by specialty, and provider type (MD/DOs, NPs, PAs, and certified nurse midwives [CNMs]). These totals include both core and non-core providers, and indicate the total number of providers in the county. There are, however, several limitations to this NPI data. These data may include providers who primarily spend their time in research or other non-clinical activities. In addition, the list, although recent, is an overestimate of the total providers in the county because it includes providers who have retired, providers who have left the county to practice elsewhere, and providers who may provide limited amount of care in that county. Therefore, the number of providers on the NPI list is larger than the actual number of provider full-time equivalents (FTEs) who are practicing in the county.

- **HRSA Federally Qualified Health Center UDS Dataset:** The Health Services and Resources Administration collects the total number of patients served at each of the clinical service sites of FQHCs annually. These data were used to calculate the percentage of the low-income population (below 200% FPL) that is served by FQHC providers.

2. **Primary care demand.** The demand for primary care is based on the total population and the demographics and characteristics of that population. To more deeply understand the demand for primary care and particular "hot spots" where one would expect to see increased demand for care, the project team reviewed data on: 1) demographic and socio-economic characteristics; 2) health care utilization; 3) morbidity and mortality; and 4) estimates of insurance coverage after full implementation of the Affordable Care Act.

    - **Demographics and socioeconomic characteristics:** Data from the 2010 Biennial Census was reviewed and mapped at the census tract level for the following characteristics:
        - Age
        - Minority race
        - Foreign born status
        - Ratio of poverty (< 100%, <200%, <150%, 150-400%, and 400+%)
        - Uninsured population
        - Estimates of remaining uninsured after ACA
        - Estimates of newly insured due to ACA

    - **Health care utilization:** North Shore LIJ analyzed the Statewide Planning and Research Cooperative System (SPARCS) dataset to calculate the rate of prevention quality indicators (PQIs). The PQIs are markers of high-quality community-based primary care. Using hospital discharge data, the PQI rate is the number of hospital discharges that are "ambulatory care sensitive," meaning that they are hospital

admissions for which high-quality primary care can prevent complications or later-stage disease. The use of PQIs allows a community-by-community comparison of quality primary care access, and can help pinpoint those communities that have the highest need for primary care.

As a measure of Medicaid utilization, North Shore LIJ provided the total number of Medicaid enrollees, and the total number of Medicaid recipients receiving services in each county. This data is from the New York state -Salient Medicaid Data Version 6.4. This includes claims and encounters through Cycle - Medicaid Enrollees, Recipients & Safety-net Recipients 7/2011 – 6/2012.

- **Morbidity and mortality:** Data on morbidity and mortality and health risk behaviors were compiled from a number of data sources in order to provide a snapshot of the health status of each county in the central New York region. The data sources for the morbidity and mortality data include: the Center for Disease Control Behavioral Risk Surveillance System (2007), New York state vital statistics, New York Community Health Indicators (2012) and County Health Rankings (2013).

- **Primary care demand by visits of the newly insured:** With the implementation of the ACA, a number of new individuals will have access to health coverage and as a result better access to primary care. The total number of uninsured individuals by age and income were identified at the census tract-level and then aggregated to the county level by applying rates at larger geographies to smaller (tract) geographies. Rates by insurance status (insured and uninsured) were calculated across 21 different age and ratio-to-poverty categories at the county and state level using ACS 1-year estimates (ACS 2010 1 year, Table B27016). These rates were then applied to census tracts using the same age and ratio-to-poverty categories (Table B17024, ACS 2010 5-year estimates). County-level insurance rates were applied where 1-year estimates were available. Where county level rates were not available (pop < 65,000), a rate from the remainder of the state was used (all counties in each state with less than 66,000 in population).

  The total number of uninsured people was identified by ratio of poverty 0-150%, 150-400%, and 400+%. Newly insured persons were estimated by applying statewide transition metrics from the Urban Institute's Health Insurance Policy Simulation Model (ACS-HIPSM).

  Using this data, the number of projected visits of the newly insured population after implementation of ACA were calculated by insurance status, age, and income using national primary care visit rates from the national Medical Expenditure Panel Survey (MEPS). Added visits for estimated newly insured persons were calculated by applying the difference in utilization between insured and uninsured and among each age, and income group. Visits among insured, newly insured, and remaining uninsured was then aggregated to county levels to produce a total annual visit demand estimate.

B. Primary Care System Strengths and Weaknesses.

Beyond the number of providers available, a critical part of the assessment was to understand the operational strengths and weaknesses of the primary care safety-net. This portion of the assessment included both the internal operations of providers and their relationships with other providers in the community. Collaboration across providers was assessed by the ability for safety-net providers to connect their patients to complimentary services, share information, and work collaboratively in order to keep pace in the dynamic health care environment. Guiding this assessment was the use of the Institute of Medicine's framework of core competencies for 21st-century health care. These core competencies were developed more than ten years ago in the IOM report, "Addressing the Quality Chasm," and include provide patient-centered care, work in interdisciplinary teams, employ evidence-based practices, apply quality improvement, and utilize informatics.[4] Today these core competencies are used to frame most publicly reported measures of quality and have guided changes to the curriculum of health professions.[5]

Key informant interviews. JSI conducted 30 key informant interviews with providers, social services, regional health planning organizations, and health departments. The list of interviewees of core, essential, and non-core providers was developed with HFWCNY. These interviews were less comprehensive than the site visit interviews but helped the JSI project team to further define the safety-net, understand the environmental and political context of the region, and gain a better understanding of the role that these provider organizations play in the safety-net. Finally, these interviews continued the engagement of key stakeholders in the work to improve the regional safety-net.

Site visits with safety-net providers. JSI conducted site visits with a selection of primary medical care providers that fell within the category of core and essential safety-net providers. Efforts were made to select sites that were geographically representative of the eight-county region, were newly or expanding federally qualified health centers, and were representative of the different types of providers that comprise the area's safety-net. A list of the seven provider organizations visited is included in Appendix A.

Site visits included a series of interviews with key administrative and clinical staff and a clinic walk-through. The purpose of these visits was to gather information on the services provided, the site's staffing profile, the characteristics of the patients served, the organization's capacity, its role in the safety-net, and information about the site's resource needs and major challenges. The site visits also allowed JSI to gather information on physical, clinical, and administrative infrastructure as well as to generally assess the extent to which the site applied evidence-based, patient-centered, integrated, well-coordinated services. Finally, the site visits allowed JSI to gather insights from key providers on how HFWCNY could best support them in their efforts to expand access to services and strengthen their ability to serve low-income children and their families. The visits were guided by a protocol to ensure that a standard set of information was collected at each of the sites. The site visit protocol is included in Appendix B.

[4] Institute of Medicine, Crossing the Quality Chasm: A New Health System for the Twenty-first Century (Washington: National Academy Press, 2001).
[5] Quinn D, Bingham JW, Garriss GW, and Dozier EA. Residents learn to improve care using the ACGME Core Competencies and Institute of Medicine Aims for improvement: the health care matrix. Journal of Graduate Medical Education.2009; 1(1).

IV. FINDINGS RELATED TO THE UNDERLYING DEMAND, SUPPLY, AND STRENGTH OF THE PRIMARY CARE SAFETY-NET

The central New York region, except for the cities of Syracuse and Utica, is predominantly rural. As such, there are a range of common themes that describe the underlying population characteristics (primary care service demand), primary care system structures and capacity (primary care supply), and the overall strengths/weaknesses of the primary care system across the eight counties in the region. The urban areas of Syracuse and Utica, while quite different from each other, share features with respect to the health-related characteristics of their populations and their primary care systems that are consistent with urban areas across the country. It is important to note, however, that despite these commonalities, there is also considerable variation across the region, particularly in safety-net capacity and strength. In order to build and improve the safety-net's capacity to serve more people more efficiently in consideration of the specific geographic and population context, it is important to articulate both the commonalities and the variations.

The first part of this section is a discussion of the common regional themes that emerged from the assessment. These themes apply either throughout the entire region or to major geographic segments of the region, certain types of provider groups, or certain major segments of the population. Specifically, this regional review will include a discussion of the common themes with respect to: 1) primary care demand (underlying population characteristics, community needs, and barriers to care); 2) consumer input and barriers to access; 3) primary care supply (primary care structure, capacity, service gaps, and strengths/weaknesses); 4) primary care internal operations (outreach/enrollment, patient flow/scheduling, staffing, quality of care, and internal infrastructure); and 5) external collaboration among primary care safety-net providers.

The second part of this section includes a discussion of the demographic and health-related characteristics of the populations in the eight counties in central New York as well as the characteristics and capacity of the counties' primary care systems. This section highlights variations in population characteristics and primary care system structure and capacity, and, more generally, the strengths/weaknesses of the primary care operations and systems.

A. Common Themes Across the Region

1. Primary Care Demand, Community Need, and Barriers to Care

When assessing primary care strength and capacity it is critical to understand the population characteristics and trends, as well as their health related-needs, health status, and major morbidity and mortality factors. This information is essential to whether, from a geographic perspective, there is sufficient raw health service capacity. It is also essential to assess the extent to which existing providers are capable of meeting the needs the at-risk population.

The following is a discussion of the common themes and relative variation across the central New York region related to demographic and socio-economic population characteristics (social determinants of health), health status, and morbidity/mortality rates. With respect to demographic and socio-economic characteristics, the most important factors to consider are

poverty or low-income status, race/ethnicity or foreign born status, and age. These factors are closely associated with health care disparities and community need and help identify the most at-risk population segments. With respect to health status and morbidity, the most important factors are disease rates, hospital emergency department utilization, and hospitalization rates. These factors help identify geographic "hotspots" where there is particularly poor health status. Information about hospital emergency department and hospital inpatient utilization also indicates where primary care systems are limited, as there tends to be disproportionately higher utilization of certain hospital and emergency department services in communities that have limited primary care systems. NS-LIJ specifically analyzed AHRQ's set of prevention quality indicators (PQIs) to facilitate this analysis.

Common Themes Related to Demographic and Socio-economic Characteristics

Since 2000, the 19-county upstate New York region has seen a decline in population (-2.07%). Most of this population loss has occurred in the Buffalo region, specifically Erie County, which recorded a 4.32% population decline between 2000 and 2009. The Rochester and Syracuse regions' populations each declined by less than 1% (-0.52% and - 0.91% respectively). Per capita income increases and rates of poverty have remained stable over this time and are comparable to upstate New York averages. The central New York population is slightly older than then the upstate New York and New York state averages. What is clear though, when analyzing the demographic and socio-economic characteristics of the eight-county region that HFWCNY defines as central New York, is that there are large portions of the population living in poverty or low-income households. This is particularly true in Syracuse and Utica and in some of the most rural areas of this region.

The following is a description of the common themes with respect to demographic and socio-economic characteristics.

- **Large numbers and percentages of low-income populations.** Living in poverty or in a low-income household is one of the leading factors associated with vulnerability, as those who are in these income brackets face economic barriers to care and tend have stress in their individual or family lives that limit access to care. In the eight-county region that HFWCNY defines as central New York, the low-income population in 2010 comprised 30.2% of the total population, compared to 28.8% in 2005.

  As is true throughout the nation, poverty and low-income population rates tend to be highest in urban and rural areas and lowest in suburban areas. A review of the map in Figure 3 shows that this trend applies in central New York. The highest numbers and highest density of those living in poverty or in low-income households are located in the inner-city areas of Syracuse and Utica. In many of these inner city neighborhoods, more than 70% of the population lives in low-income households. However, a high percentage of the region's rural population also lives in poverty. Throughout the region, the county averages range from 25.1% in Madison to 33.8% in Herkimer. Only in the more suburban areas of the region outside Ithaca, Syracuse, and Utica, are rates lower than 10%.

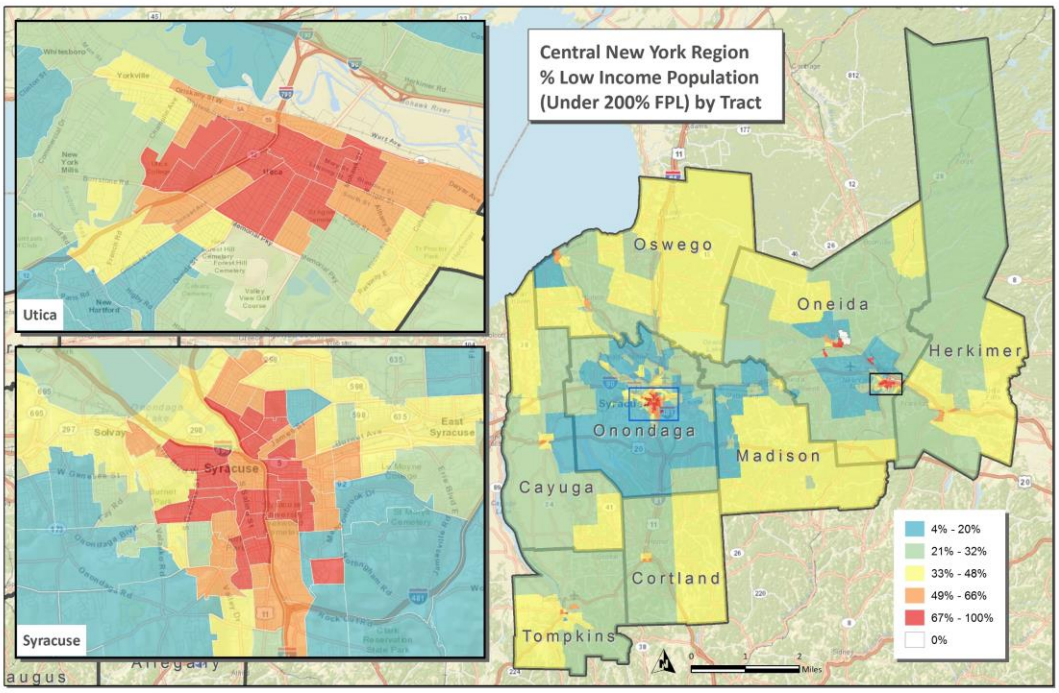


Figure 3: Percent of the Population Living Under 200% FPL in Central New York

- **Large but decreasing numbers and percentages of uninsured populations.** Lack of insurance has always been one of the leading factors associated with high-need, at-risk populations because those who are uninsured tend to have less access to health services and face disparities across the leading health indicators. In the context of health reform, high rates of uninsurance are also indicators of where there might be new, additional primary care demand following full implementation of the ACA. Under the ACA, many individuals from these populations will become newly insured as a result of the expansion of Medicaid and the creation of new subsidized plans under the State Health Insurance Exchange.

  The possible gains that can be made statewide from improved health insurance coverage are less significant in New York State due to the fact that New York State has a robust and progressive Medicaid program compared to other states in the nation. Statewide, residents of New York are more likely to be insured than residents nationally. In 2013, 12% of New York residents were uninsured compared to 15% nationally. In central New York, the uninsured rates are comparable on a region-wide basis; however, there are significant pockets of the population both geographically and demographically who are uninsured and will remain so even after the implementation of ACA.

  In central New York, the areas with the highest percentages of uninsured residents are located in Syracuse and Utica, where the rates span as high as 25-30%. Outside these urban areas, the highest numbers and rates of people who are uninsured are found in Cayuga and Herkimer counties, where the rates range from 15-20%. Per the map included as Figure 4, most areas in the region have uninsured rates between 10% and

15%. The highest rates of insurance are in suburban areas outside Syracuse, Utica, and Ithaca.

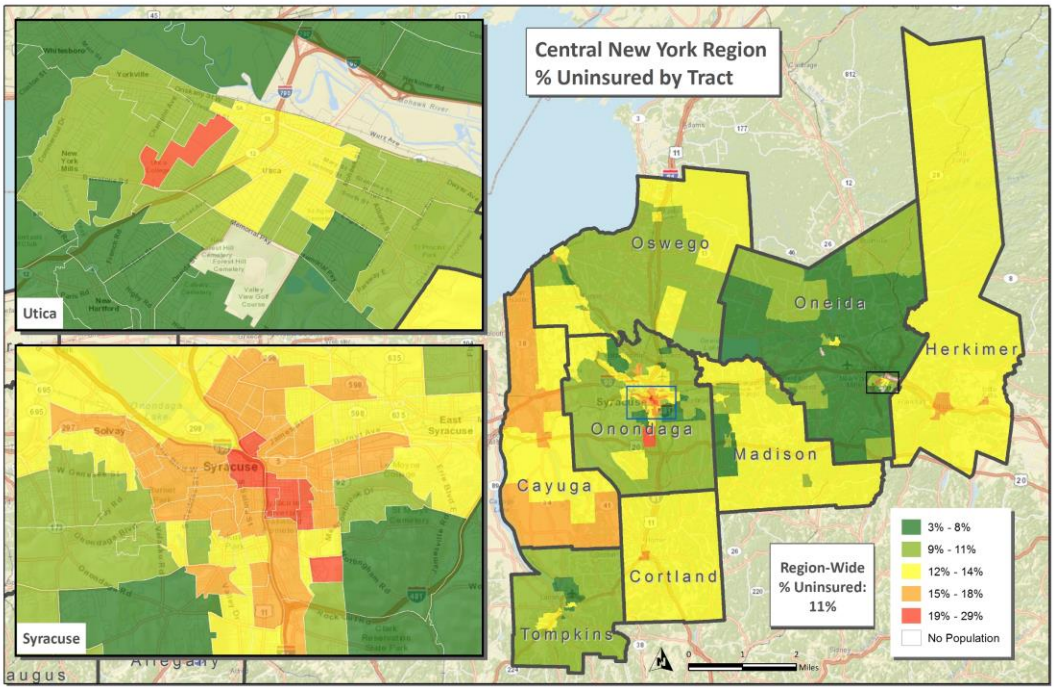


Figure 4: Percent of the Population who are Uninsured in Central New York

In order to better understand the impact, opportunities, and challenges related to ACA, JSI compiled and analyzed data on the distribution of the region's residents who are projected to be newly insured due to various elements of ACA as well as the distribution of those who are projected to remain uninsured after ACA. The areas with high projected percentages of newly insured populations represent opportunities for growth, and the areas with high percentages of remaining uninsured represent areas where providers will likely be challenged in their efforts to serve those in need.

- **Large and increasing numbers and percentages of racial/ethnic minority and foreign-born populations, particularly in Syracuse and Utica.** Another leading factor associated with limited access to care and disparities in health outcomes is whether one is foreign born, a recent immigrant, or part of a racial/ethnic minority group. Between 2000 and 2010, there were major increases in the racial/ethnic minority populations in Syracuse and Utica. In 2000, 64% of the population in Syracuse and 79% of the population in Utica categorized themselves as of white race alone. By 2010, the percent of the population that was white alone had declined to 56% in Syracuse and 69% in Utica. The fastest growing population during this time was the Hispanic/Latino segment of the population. In 2000, 5% of the population of Syracuse and 6% of the population in Utica were of Hispanic/Latino origin. By 2010, the percent of the population that was of Hispanic/Latino dissent had increased to 8% in Syracuse and 10% in Utica. In some communities in the central New York region, the percentages of the population that are in racial/ethnic minority groups are as high as 70-80%. African American/black is the leading racial/ethnic minority group, followed by people of Hispanic/Latino descent.

There are also extremely large and growing immigrant and refugee populations in Syracuse and Utica who struggle with access, health literacy, and various health conditions. The largest immigrant/refugee populations are from Bosnia, Somalia, Thailand, Burma, Central America, and Iraq. Amazingly, according to figures from UNHCR (The UN Refugee Agency), Bosnian immigrants now constitute about 10% of the total population of Utica.

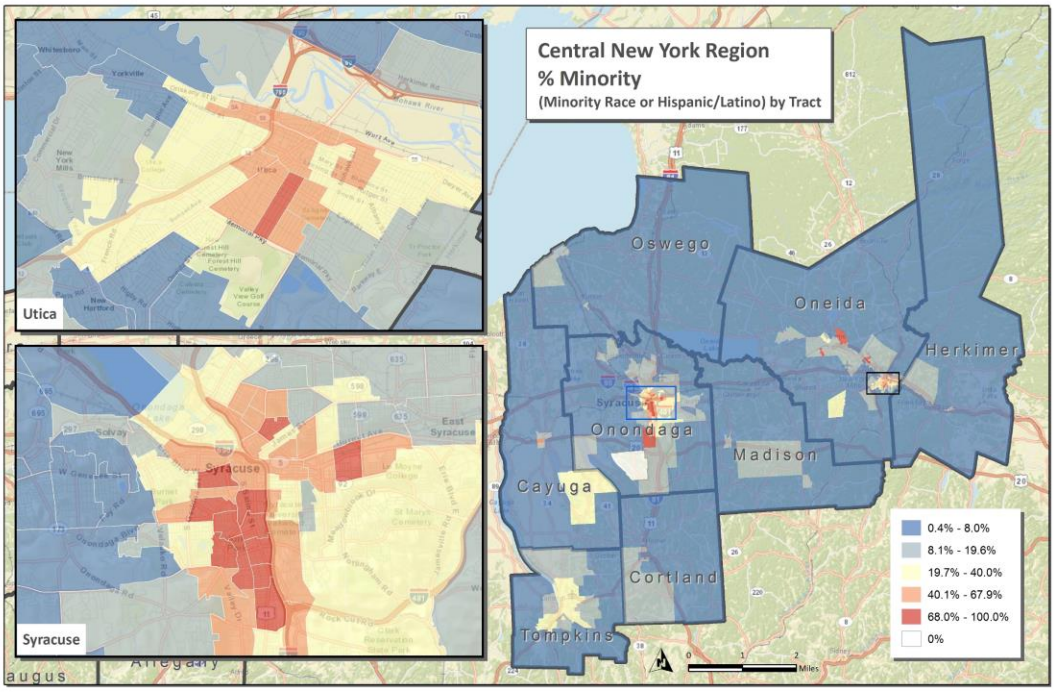


Figure 5: Percent of the Population in Minority Race Categories in Central New York Region

Common Themes Related to Health Status and Rates of Preventable Health Conditions

- **High rates of morbidity for the leading health conditions.** According to data compiled by the JSI project team and NS-LIJ there are high rates of mortality and morbidity throughout the central New York region and in particularly in Syracuse and Utica. The rates for the leading chronic diseases and priority health conditions are generally higher across all counties in the region when compared to statewide and Upstate New York rates. Figure 6 below includes data on the leading indicators by county with regional and upstate New York comparison data, and illustrates these disparities in outcomes.

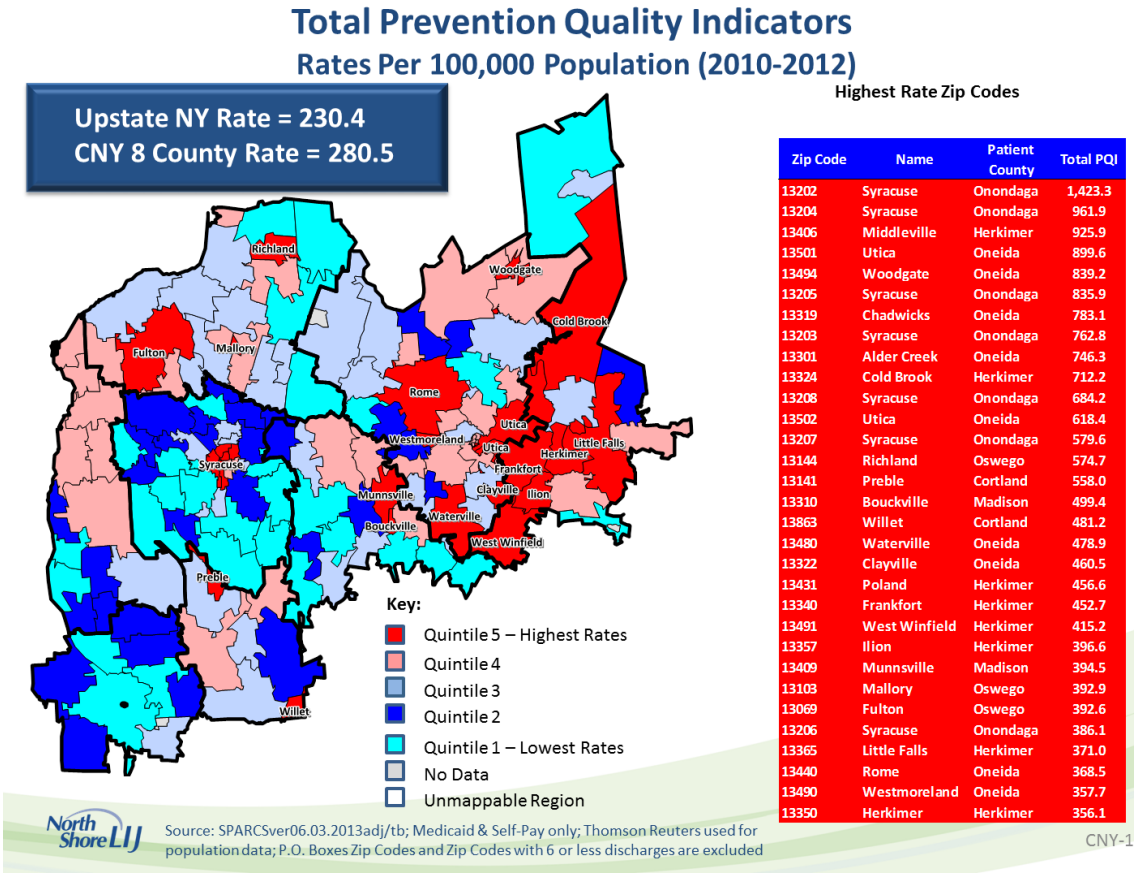
  A review of NS-LIJ's maps, an example of which is included below, shows that there are geographic hotspots with higher morbidity distributed throughout the region. The highest rates tend to be in more urban areas but there are hotspots throughout the region, even the most rural areas.

  High rates of preventable inpatient service utilization. As discussed in the methods and introduction to this section above, NS-LIJ compiled and analyzed a great deal of

hospital discharge data, particularly on AHRQ's preventable quality indicators (PQIs). These indicators help identify geographic areas or segments of the population with high rates of illness, and they also help identify areas that may have limited access to primary care. The conditions that are part of the PQI data set are thought to be preventable or controllable if appropriate, timely, high-quality primary care is provided. Specifically, areas that have high rates in one or more PQIs are associated with limited primary care access or a lack of engagement in primary care on behalf of consumers. High PQI rates usually indicate a need for preventive and chronic disease management services, health education and health promotion services, and/or care coordination and case management services.

A review of NS-LIJ's maps and data tables, an example of which is included below, shows that there are geographic hotspots with higher PQI rates distributed throughout the region. Once again, the highest rates tend to be in the more urban areas but there are hotspots throughout, even in the most rural areas of the region.

Figure 6: Total Prevention Quality Indicators (rates per 100,000 population) in Central New York



Highest Rate Zip Codes

Zip Code	Name	Patient County	Total PQI
13202	Syracuse	Onondaga	1,423.3
13204	Syracuse	Onondaga	961.9
13406	Middleville	Herkimer	925.9
13501	Utica	Oneida	899.6
13494	Woodgate	Oneida	839.2
13205	Syracuse	Onondaga	835.9
13319	Chadwicks	Oneida	783.1
13203	Syracuse	Onondaga	762.8
13301	Alder Creek	Oneida	746.3
13324	Cold Brook	Herkimer	712.2
13208	Syracuse	Onondaga	684.2
13502	Utica	Oneida	618.4
13207	Syracuse	Onondaga	579.6
13144	Richland	Oswego	574.7
13141	Preble	Cortland	558.0
13310	Bouckville	Madison	499.4
13863	Willet	Cortland	481.2
13480	Waterville	Oneida	478.9
13322	Clayville	Oneida	460.5
13431	Poland	Herkimer	456.6
13340	Frankfort	Herkimer	452.7
13491	West Winfield	Herkimer	415.2
13357	Ilion	Herkimer	396.6
13409	Munnsville	Madison	394.5
13103	Mallory	Oswego	392.9
13069	Fulton	Oswego	392.6
13206	Syracuse	Onondaga	386.1
13365	Little Falls	Herkimer	371.0
13440	Rome	Oneida	368.5
13490	Westmoreland	Oneida	357.7
13350	Herkimer	Herkimer	356.1

2) Common themes related to consumer input and barriers to access

The 2013 Central New York Consumer Access Survey (CNYCS) was developed to understand consumer experience related to using primary care services in the region. The primary objective is to understand gaps in services encountered by adults accessing care for themselves and/or children. The survey questions, which were designed to mirror and complement the qualitative interviews with providers and other key informants, assesses consumers' experience scheduling appointments, reaching providers by phone, and ability to communicate with providers to access care and a medical home. The survey covered general health access barriers such as insurance status and communication as well as specific barriers to different types of medical services. A copy of the survey is included in Appendix C.

The survey was designed based on the 2007 Western New York Consumer Access Survey (WNYCAS), which was developed primarily by drawing questions from existing state and national health surveys. Where questions were not available to address specific issues of interest to HFWCNY, JSI adapted similar questions from previous JSI surveys. The 2013 survey added questions on adult access to care, as the 2007-08 survey was focused on children's access. The four national surveys from which questions were pulled were: the 2003 National Survey of Children's Health (NSCH);[6] The Commonwealth Fund 2006 Health Quality Survey;[7] CDC Behavioral Risk Factor Surveillance System 2006 (BRFSS);[8] and the 2011/2012 Consumer Assessment of Healthcare Provider and Systems (CAHPS) Patient-Centered Medical Home Item Set.[9] The western New York region that was surveyed in 2007 was surveyed using the new questionnaire in 2013 as well, and data from this survey will be used as comparison throughout this report.

The goal of survey distribution was to capture families in two distinct groups: 1) those waiting for services and affiliated with one of the community health centers or other pediatric providers that serve low-income families; and 2) families in the community whose status related to the safety-net utilization were unknown. The survey was distributed face-to-face to parents at community agencies, events, and provider offices with the cooperation of numerous organizations and individuals across the central New York region. A total of 531 surveys were collected from September through October 2013.

A complete discussion of the methodology and the limitations of the survey are listed in the Appendix C.

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[6] Child and Adolescent Health Measurement Initiative. *2003 National Survey of Children's Health*, Data Resource Center for Child and Adolescent Health website. http://childhealthdata.org/content/Default.aspx

[7] The Commonwealth Fund 2006 Health Quality Survey http://www.commonwealthfund.org/surveys/surveys_show.htm?doc_id=50684

[8] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006**.** The CDC Behavioral Risk Factor Surveillance Survey (BRFSS) http://www.cdc.gov/brfss/

[9] The CAHPS Patient-Centered Medical Home Item Set https://cahps.ahrq.gov/Surveys-Guidance/CG/PCMH/index.html

Summary of Survey Results

A comprehensive safety-net provides children and their family access to preventive and acute care and enables communication between providers and families. The results of the 2013 Central New York Consumer Survey (CNYCS) provide insight into which components of comprehensive care the central New York safety-net has provided and the areas where consumers perceive there to be gaps. Comparing data from this survey with state and national statistics provides a context for the data and highlights areas where central New York residents have better access to care than is typical, and areas that may be targets for improvement within the safety-net.

Figure 7: Demographic Characteristics

Children	**Age range:** <1 year 1% 1-5 years 27% 6-12 years 41% 13-18 years 31%	**Children with special needs:** 17% of children need more health services than usual* *Determined by Question 13 of survey		
Adults	**Age range:** 18-40 years 41.6% 41-65 years 51.6% 65+ years 6.8%	**Gender:** 75% female 25% male	**Race:** 82% white 7% black or African American 1% Native American <1% Asian 3% multi-racial 5% Hispanic	**Employment:** Fulltime: 41.2% Part time (one job): 11.9% Part time (multiple jobs): 3.6% Not employed -retired: 10.1% Not employed -student: 5.0% Not employed for pay: 5.6% Not employed –disability: 14.7% Other: 8.0%
Household	**Income:** <10,000 20.0% 10,000-15,000 11.1% 15,000-25,000 13.0% 25,000-35,000 12.0% 35,000-50,000 13.2% 50,000-75,000 16.1% 75,000+ 14.6%		**Number of children living at home** 96% 1-3 children living at home 4% 4+ children living at home	

Respondents were asked to fill out the adult portion of the survey, and if the adult was a parent with a child under the age of 18, s/he was also asked to complete the portion of the survey on the child's access to care. Of the 531 surveys completed, 501 respondents who filled out the adult survey portion of the survey and 220 parents completed both the adult and the children's access-to-care portions.

Eighty-two percent (82%) of those surveyed identified as White; 7% identified as Black or African-American; 1% as Native American or Alaskan Native; 3% multi-racial; <1% as Asian; and < 1% as Native Hawaiian or Pacific Islander. When asked specifically about Hispanic ethnicity, 5% of survey respondents identified as Hispanic/Latino.

Seventeen percent (17%) of children in the CNYCS were perceived by their parents as having a health condition that requires more services than usual. This is slightly lower but still comparable to the western New York survey region, in which 21% of children were identified as requiring more services than usual. According to the CDC's National Survey of Children with Special Healthcare Needs, 13% of children nationwide have special health needs. The definition of a child with special healthcare needs is complex, and the difference in these numbers is based on the kinds of questions used to determine special needs. The CNYCS and WNYCS asked a single question, while the CDC survey asks parents a series of more detailed questions of to determine whether the child has special healthcare needs.

Health Care Access and Utilization

- **Location of care.** Families were asked where they usually take their child when s/he is sick and needs health care. For most families, the primary source of care is a doctor's office or private clinic (82%), followed by community health centers (9%), and urgent care (3%). Four percent (4%) said they don't have a place where they usually take their children, and 1% said they take their child to "some other place" for care.

  Among adults, the primary sources of care were doctor's office or private clinic (68%), community health center (13%), and urgent care (4%). Six percent (6%) of adults reported they do not have a usual place, 3% said they don't know where they go, and 6% did not respond to this question.

  It is important to note that many people do not differentiate a community health center from a doctor's office or private clinic, so it is likely that many of those who responded "doctor's office or private clinic" go to a community health center.

Table 1. Where do you usually go for health care?

Location	Children	Adults
Doctor's office or private clinic	81.6	68.0
Community health center or other public clinic	9.2	12.6
Hospital outpatient dept.	0.0	0.2
Urgent care	2.8	4.0
Hospital ER	1.0	0.9
Some other place	1.0	0.4
Don't know	0.0	2.3
Don't have a place I usually go	4.1	5.6
Did not respond	0.2	6.0

- **Health coverage.** The rate of insurance among the children surveyed was 94%. This is the slightly above rate of coverage that was seen in the WNYCAS survey (92%), and somewhat lower than the state and national rates of children's coverage. The lower rate of insurance is likely due to the deliberate over-sampling of low-income children in the CNYCS. According to the National Survey of Children's Health (2011-12)[10] 95% of children nationally have coverage and in New York State 97% have coverage.

  Among adults, 84% of adults surveyed have coverage, which is slightly lower than the rate in New York state. According to the March 2013 US Census Current Population survey, 88% of adults in New York state have health insurance. The rate of coverage of

[10] http://www.childhealthdata.org/browse/survey

adults surveyed is also lower than the adults surveyed in the WNYCS survey, which was 91%.

Continuity of coverage is a concern for children and adults. Thirteen percent (13%) of children and 15% of adults had some period of time in the last 12 months without health insurance. This is slightly higher than in western New York, where just 11% of children and 13% of adults surveyed experienced a lapse in coverage in the previous 12 months. Nationally 11% of children have had a gap in coverage in the last 12 months.

The majority of the children in the population surveyed have public coverage, with 60% of children on Medicaid. In contrast, the majority of the adults surveyed have private insurance (45%), with just 27% on Medicaid (Table 2). In comparison, 23% of the total population in New York state is covered by Medicaid. The high percentage of respondents with Medicaid is biased by the deliberate surveying of low-income families.

Table 2. Health Insurance Coverage

Insurance	Children	Adults
Medicaid	**60%**	**27%**
Medicare	**1%**	**14%**
Private Insurance or Private HMO	**37%**	**45%**
Other	**1%**	**12%**
Don't know	**1%**	**1%**

- **Preventive care.** Regular preventive care is associated with lower rates of emergency room use and inpatient hospitalization. Among children the rate of accessing preventive care is consistent with the state average and with the experience of families surveyed in western New York. In 2013, 88% of children surveyed had a preventive care visit in the last year. This compares to the state of New York rate of 92%,[11] and the WNY survey rate of 89%. There was no difference in rate of preventive care access between those children surveyed in community locations such as Head Start and provider locations such as health centers.

  Parents were asked the wait time to schedule a preventive care visit. The majority (69%) of children could access a preventive care visit within a week, and only 14% had to wait more than a month. These wait-times are comparable to the WNY survey, in which 68% of children had access to a preventive care visit within a week.

  Adults had a lower rate of accessing preventive care than children. Eighty-four percent (84%) of adults had a preventive care visit in the last year. Comparison data is not available

In comparison to the WNYCS survey, access to acute care visits is much higher in central New York, with more families able to access same-day appointments and fewer families choosing the emergency room.

[11] National Survey of Children's Health (2011/2012)

for adults, as this question is no longer part of the standard Behavior Risk Surveillance System questionnaire. Adults were not asked about the wait-time for scheduling a preventive care visit.

- **Acute care.** In addition to wait-times for preventive care visits, adults and children were asked how long they had to wait for an urgent care visit. The majority of parents (71%) reported that they were able to get an appointment to see a provider on the day their child became sick. An additional 24% were able to get an appointment in 1-to-3 days, and the remaining 5% of families had to wait four or more days or went to the emergency room. In comparison to the WNYCS survey, access to acute care visits is much higher in central New York, with more families able to access same-day appointments and fewer families choosing the emergency room (Figure 8).

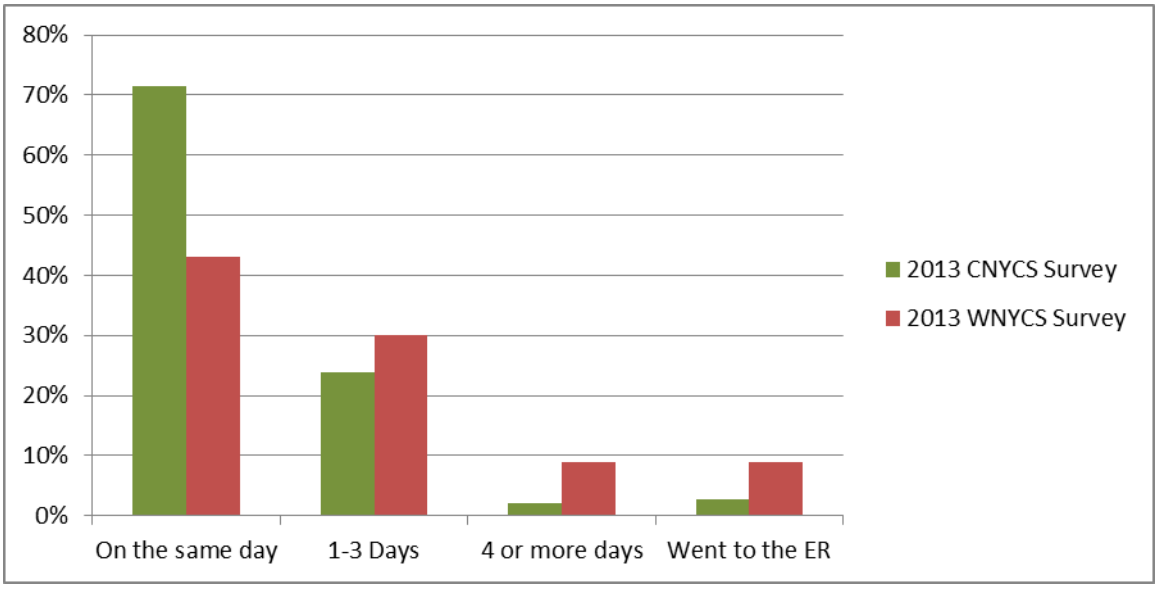


Figure 8. "The last time your child was sick or needed medical attention in the past 12 months how quickly could you get an appointment to see a health care provider?"

Among adults who were sick in the last year,[12] 47% were able to get care on the same day, 36% in one-to-three days, 14% in four or more days, and 3% went to the ER. The Commonwealth Fund Survey 2006 Quality Survey found that 41% of adults were able to schedule an appointment on the same day they called, 16% the following day, and 28% had to wait two or more days.[13] While a different question, a more recent benchmark is that 67% of adults in the CAPHS Survey (2011-12) said they got an appointment for urgent care as soon as needed.

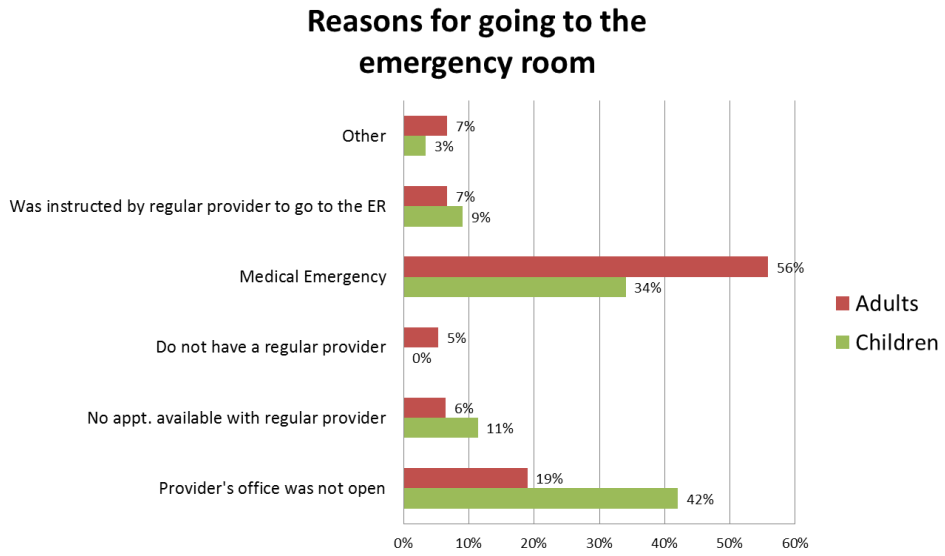
- **Emergency room use.** Among children, 43% had an emergency room visit in the last year in central New York, compared to 44% in western New York, and 40% in the 2007

[12] Access to urgent care was calculated from the total who sought acute care from a primary care provider in the last 12 months. Those that responded that they did not need acute care or directly went to the ER were removed.
[13] The 2006 Commonwealth Fund Quality Survey has not been repeated, and this was the original question source.

WNYCAS survey. The National Survey of Children's Health no longer includes a question on emergency room use, but for the last year data was available (2003), the rate was 18.9% for children nationally.

The rate of emergency room utilization of adults surveyed was slightly lower, at 39%. In comparison, in 2012, 28% of adults nationally visited the emergency room according to the Commonwealth Fund Insurance Tracking Survey for Adults. Many families used the emergency room multiple times a year, as 14% of adults and 17% of children went to the emergency department two or more times during the last twelve months. The reason people used the emergency room was often that their provider office was not open (42% for children, and 19% for adults). Many went because they had legitimate medical emergencies (34% for children, and 56% for adults) (Figure 9).

Figure 9: Reasons for Going to the Emergency Room



Access to Oral, Mental Health and Specialty Care

- **Dental care.** Dental care access was determined by two questions: 1) Did you see a dentist for preventive care in the last twelve months? and: 2) Did you receive all the dental care needed in the last 12 months? Of those children who are older than 1 year[14], 65% received a dental visit in the last 12 months, and 70% reported their child received all the dental care he or she needed. While the rate of preventive dental access in central New York is less than the national rate (77%), it is comparable to the western New York region, where 72% of children had a preventive dental care visit in the past year. The cited locations for preventive dental care were a dental office (90%), health center or primary care office (3%), and school or daycare (7%).

[14]The determination of age of 1-year and older for recommended dental care is based on guidelines used by the National Survey of Children's Health. Casamassimo P. Bright Futures in Practice: Oral Health. Arlington, VA: National Center for Education in Maternal and Child Health, 1996.

Children reported much higher rates of dental access than adults; as 70% children received all the preventive dental care they needed compared to 55% of adults.

- **Mental health care.** Parents were asked whether their child received mental health services in the last 12 months and if all the services needed were received. Fifteen percent (15%) reported that their child had received mental health services in the last 12 months. This is more than double the number of children nationwide, according to the National Survey of Children's Health (6.8%). This may indicate children in central New York have better access to services, a higher degree of need than children nationally, or both. However, of children who needed mental health services, 26% did not get all of the services they needed. This is much higher than the 10% found in the western New York survey region. There were no clear reasons why children were unable to get this care, with the most frequent answers being "other" (n=4) and "don't know" (n=2). Reasons related to cost, transport, or insurance were listed only once or not at all. Adults were not asked about mental health utilization but they were asked about behavioral health screening in their primary care office (see 'Medical Home' below).

- **Specialty care.** Access to specialty care was assessed by asking parents (1) if their children had needed specialty care in the past 12 months, (2) how much of a problem was it to get care from the specialty provider? Forty percent (40%) of parents said their child did not need specialty care in the last year. Of the 60% of respondents who said their child needed specialty care, a total of 30% reported some problem accessing a specialty provider. Of those, 13% said accessing a specialist was a small problem, 13% said it was a moderate problem, and 3% said it was a big problem. For those who said specialty care was a problem, 14% said it was too long to wait for an appointment and 9% could not find a provider who accepts their child's insurance. Many families (9%) cited multiple problems including prohibitive cost, no health insurance, and long distance.

  Access to specialty care was less of a problem for adults (27%) than children (30%). Ten percent (10%) of adults said it was a small problem, 7% said it was a moderate problem and 6% said it was a big problem. Among those who reported there was a problem, 41% said there was too long a wait for an appointment; 23% said cost was a problem, 20% had no insurance, and 14% could not find a provider that accepts their insurance. Many (19%) cited multiple reasons including long distance, long waits, and lack of transport.

Access to a Medical Home

Forty-three percent (43%) of adults in central New York who called said their provider returned calls on the same day. The national CAHPS survey found that 63% of adults were able to get a response from their provider the same day.

Access to a medical home is increasingly being identified as a standard for high quality primary care. The Consumer Assessment of Health Providers and Services (CAHPS) has developed a Patient Centered Medical Home (PCMH) survey to assess whether a practice has adopted features of a medical home. Several questions were drawn from this survey to assess adult access to a medical home.

- **Ability to get advice from provider by phone.** Access to advice by phone is considered an important part of medical home access. Both children and adults were asked about phone access to their provider; however, different questions were used to allow for comparison to national surveys. Parents were asked, "During the past 12 months when you have called your child's health care provider for help or advice over the phone because your child was sick, how often were you able to get the help or advice you needed?" About half (47%) said that if they called they got the help they needed. While this is comparable to the rate in the 2007 WYNCAS survey of 48%, phone access remains significantly poor compared to the 80% of families who were always able to get the advice they needed over the phone in the 2003 National Survey of Children's Health.[15]

  Adults were asked a similar question: "In the last 12 months, when you phoned this doctor's office during regular office hours, how often did you get an answer to your medical question the same day?" Forty-three percent of adults said that if they called, their provider responded the same day. Compared to the national CAHPS survey, which found that 63% of adults were able to get a response from their provider the same day, central New York patients experienced poorer phone access.

- **Provider and patient communication.** Provider communication was assessed by asking: "How often does your provider explain things in a way that you understand?" And "How often did your provider listen carefully to you?" Among children, 64% of parents said that their child's provider always listens carefully to them, and among adults, 60% said their provider always listens carefully to them. Sixty-three percent (63%) of adults and 66% of parents said their health provider always explains things in a way they understand. Provider communication in central New York could be improved as compared to national rates of quality communication in the 2012 CAHPS survey (Figures 10 and 11).

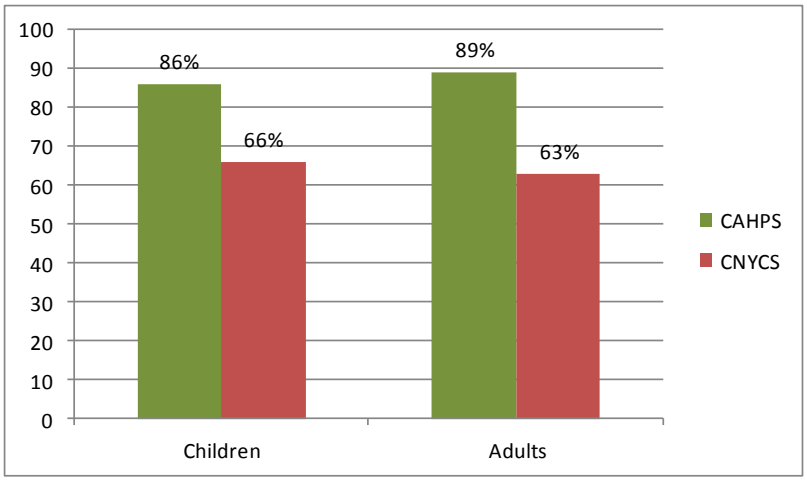


Figure 10: "How often does your provider explain things in a way that you understand?"

[15] Note that the National Survey of Children's Health has not included the question on phone access to providers in the more recent 2011/2012 survey.

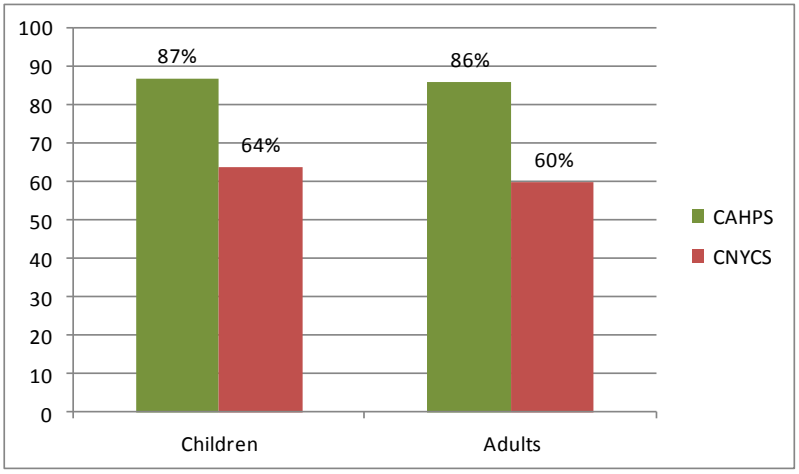


Figure 11: "In the last 12 months, how often did your provider listen carefully to you?"

- **Adult access to medical home.** In addition to questions on provider communication and phone access, adults were asked a series of questions from the CAHPS PCMH survey to assess whether they have access to a provider who offers medical home access. Eighty-two percent (82%) of adults have someone they think of as their personal doctor or primary care provider. Among adults surveyed, 63% reported that their provider seems to know important information about his/her medical history. With respect to setting goals for health, 75% reported that their provider talked within them in the last 12 months about goals. In comparison, only 47% reported that their provider was informed on care received from specialists. Sixty-eight percent (68%) said their provider gave them information on what to do for care during evenings, weekends, or holidays. Access to integrated behavioral health in primary care is predicated on screening in the primary care office. Of those who had seen their regular provider in the last year, 53% reported that their provider had talked to them about things in their life that worry them or cause stress.

  Relative to CAHPS national benchmark data, adults in central New York have good access to screening for behavioral health and goal setting. There is room for improvement in access to providers who have information on their medical history and their care from specialists. Further, many adults in central New York (32%) did not know what to do if they needed care on nights, weekends, or holidays, compared to adults nationally (17%) (Figure12).

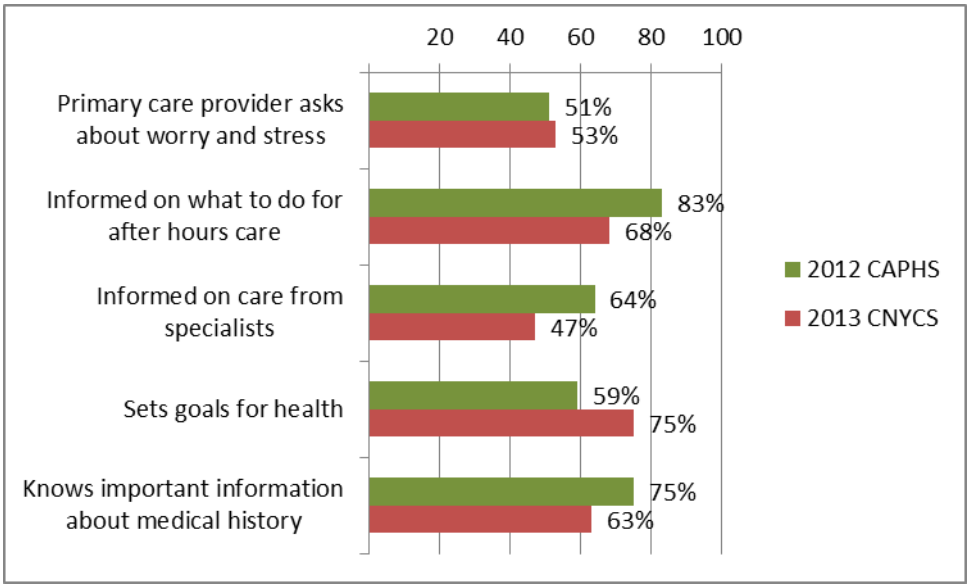


Figure 12. Adult Access to a Medical Home.

3) Primary Care Structure, Supply, and Capacity

As stated above, there are a number of common themes that are cross-cutting with respect to the structure, capacity and strength of central New York's primary care safety-net and the primary care system overall. However, there is also considerable variation, particularly in the degree to which some of these cross-cutting factors impact specific counties and geographic areas. If HFWCNY and the region's other stakeholders are going to engage communities, provider organizations, or groups of providers and develop targeted strategies to strengthen the primary care safety-net or primary care system overall, they must understand the nature of the commonalities and variation that exist in the region.

The following section is a review and discussion of the common themes across the region based on data and information collected through the provider survey, NPI data, and the JSI project team's interviews and site visits.

Primary Care Safety-net Structure and Capacity

The safety-net in central New York is a diverse collection of primary care clinics or practice sites that fall into one of three categories. The first category is a group of publically and/or privately subsidized, full-service primary care clinics that are formally committed, either by mission or mandate, to serve low-income uninsured or insured patients. Federally qualified health centers (FQHCs), New York State, Article 28 clinics, clinics run by faith-based organizations, and free clinics (such as those that operate in Syracuse) are primary entities in this category. The practices in this group are categorized as "core" safety-net providers.

The second category is a group of hospital-owned or affiliated primary care clinics or practices that are typically part of larger, integrated delivery systems. These practices are most often located directly on or adjacent to the hospital campuses but many are scattered throughout the hospital service areas as well. With the implementation of ACA, these hospital-based practice

sites are becoming a more and more integral part of hospital's service delivery and business strategies. They serve a broad range of predominantly insured patients across the socio-economic spectrum, including a significant portion of low-income, Medicaid-insured patients. The providers in this category can typically be categorized in the "essential" safety-net category, primarily due to their size and their relatively strong commitment to serving Medicaid-insured residents.

The third category is private, solo, or group primary care practices that operate independently in the community and, like the hospital-based practices, tend to serve insured patients, including those with Medicaid-insured. Practice sites in this category are more likely to be pediatric clinics, given the relatively favorable nature of coverage and Medicaid reimbursement for children in New York state. Often these practices cap the number of Medicaid patient they serve. These practice sites may not make a large individual impact but there tend to be large numbers of these providers and collectively they can have a major impact. The practice sites of this type are typically considered in the "contributing" safety-net provider category, as they usually fluctuate in and out of the safety-net based on the volume of low-income, Medicaid, or uninsured patients they are seeing at any given time.

In the central New York region, there is considerable variation on a county-to-county basis as to which of these provider types is dominant. However, except for Herkimer and Madison, which do not have a practice site in the "core" safety-net provider category, all of the county's safety-nets have at least a portion of each type of provider category.

Following is a discussion of the common themes with respect to primary care system and safety-net structure and capacity.

- **Considerable growth in FQHC capacity.** Typically, safety-nets are bolstered by a set of "core" safety-net providers that are formally or informally mandated to serve low-income Medicaid-insured, underinsured, or uninsured populations. These organizations are often heavily subsidized through grants and enhanced provider payments so that they can tailor their operations to low-income populations, provide a range of enabling and supportive services, and provide uncompensated care to the uninsured. Throughout the United States, FQHCs are often at the heart of these safety-nets and this is true in the central New York region.

  In 2007, there were five FQHCs in the region that served 63,795 patients. In 2007, these FQHCs served approximately 19% of all low-income residents in the region (low-income penetration) and only 5.4% of all residents across all income brackets in the region (total penetration). In 2007, the majority of the region's FQHC capacity served residents of Syracuse. Specifically, approximately 56 % of all the region's FQHC patients were served by Syracuse Community Health Center. Since 2007, two new FQHC grantees were funded, bringing

In 2012, the region's FQHCs served 104,670 patients, a 64% increase since 2007. These FQHC sites served 29% of the low-income population in the region, which represents a 55% increase in low-income penetration since 2007.

the total number of FQHC grantees in the region to seven. In addition to the new sites, there was some growth among the existing FQHCs. All told, the region's FQHCs served a total of 81,110 patients in 2012, representing a 27% increase since 2007. Moreover, these FQHC sites served 23% of the low-income population living in households earning < 200% of the federal poverty level, which represents a 17% increase in low-income penetration since 2007.

Substantial and growing impact of private, hospital-based, or independent community-based primary care practices. Private, hospital-based and independent, community-based primary care practices have always played a role in safety-net systems in the United States, particularly in rural areas with low population density. In rural areas, it is not efficient to establish safety-net clinics like FQHCs because the volume of patients is not high enough because of the low population densities. It tends to be more efficient to support rural community hospitals to fill this role, which is what the federal government has done through the Critical Access Hospital network. In central New York, these hospital-based providers play an even larger role than is typical, in both rural and urban areas. With the rollout of ACA, it is likely that these providers will increase their involvement in primary care safety-nets as they take strategic steps to serve those who are newly insured through ACA and take advantage of emerging service delivery and payment reforms.

While central New York hospital-affiliated clinics have played a larger role in the safety-net than in other places, they have been constrained by low payment rates and a lack of other financial supports that would allow them to sustain operations while meeting the complex needs of low-income Medicaid-insured or uninsured patients. Today, numerous components of ACA are aimed at changing this dynamic and encouraging hospitals and independent private practice physicians to become part of the primary care safety-net. These efforts are often part of a hospital's broader strategy to develop multi-service, integrated delivery systems that provide a range of outpatient services—such as primary care, medical specialty, behavioral health, long-term care, and home-based services—in addition to standard inpatient and emergency services. Moreover, the service delivery and payment reforms that are part of ACA are putting a greater emphasis on how well hospitals and these larger integrated service-delivery organizations are keeping their patients and communities healthy, rather than on how many services they are providing. In turn, these provider organizations are, on their own or with other community partners, developing population-based, community health programming that emphasizes chronic disease management, prevention, and

The fact that hospitals are taking steps to become part of the primary care safety-net is generally positive. However, because these practices are not driven by mandate or mission to serve low-income, Medicaid-insured patients, some people believe that their involvement will be fleeting and/or inconsistent, depending solely on whether their primary care operations can contribute to their profits.

wellness.

Increasingly, primary care is being perceived as the heart of this movement and, in turn, hospitals are taking steps to expand their primary care market share and develop broader geographically defined target populations that include, rather than avoid, low-income, Medicaid-insured, and even uninsured residents. Changes in payment models are a major factor in this shift. Hospitals are increasingly being held accountable for re-admissions and are being paid or penalized based on health outcome performance. Hospitals must develop closer relationships with primary care practices and institute more robust care coordination to perform better on these measures of quality. In short, ACA has expanded the safety-net as hospitals and private providers increasingly recognize the possibility that they can simultaneously improve the overall health of their communities, provide high-quality, coordinated, patient-centered services, and sustain or even enhance their financial position.

It should be noted that early payment reform pilots focused on Medicare populations and did not include the safety-net. This is changing dramatically.

This trend is generally positive because it is encouraging hospitals to be more collaborative and to re-consider their role as a fee-for-service acute care provider to one that is paid to keep people healthy and prevent them from entering the hospital. If this trend continues, it will likely lead to an expanded, more integrated and coordinated safety-net. But some people are skeptical about relying on or supporting hospital-based and private community-based primary care practices' efforts to be part of the safety-net. Because these practices are not driven by mandate or mission to serve low-income Medicaid-insured patients, some people believe that their involvement may be fleeting and depends solely on whether their primary care operations can contribute to their bottom line. Ultimately, this may draw support away from core safety-net providers and lead to the destabilizing of the safety-net.

A review of the data that JSI collected from the leading safety-net providers shows that there are 33 hospital-based or independent, private primary care practice organizations that provide a substantial amount of services to low-income residents in the region. Based on our survey, these providers served an estimated 158,426 patients in 2012. This represents 50% of the total patients served by the practices that were surveyed by JSI. The hospital-based practices located in Onondaga County (8) and Oneida County (17) collectively served 43% (139,340) of the total number of patients surveyed by JSI. A significant but unknown portion of these patients are insured commercially probably do not fall in low-income brackets, although it is fair to assume that a clear majority of these patients are low-income and that the aforementioned providers are a major part of the region's safety-net.

Assuming trends continue and the components of ACA referenced above continue to sway hospitals to become part of the safety-net, it is highly likely that the impact of these hospital-based practices will grow as these providers continue to explore ways to take

advantage of new payment reform models and the fact that more residents in their service areas will have health care coverage.

- **Active and growing group of free clinics.** Free clinics in central New York, with locations in Madison, Onondaga, and Tompkins counties, have become an important part of safety-net care. Each operates independently, and most are faith-based in origin and funding source. These clinics are staffed by volunteers who provide care to people without insurance. They provide comprehensive services and referrals to specialty services such as oral and behavioral health, to the most-vulnerable populations. All of the clinics noted that they struggle to link with providers who accept Medicaid-insured patients after a patient is enrolled in Medicaid. Only Christian Health Services bills for Medicaid, but most offer insurance-enrollment assistance.

- **Substantial unmet need in low-income population.** There has been considerable primary care capacity progress in central New York over the past 5 years. This is largely due to the growth of FQHC practices as well as the hospital-affiliated practices in Syracuse, Utica, and Ithaca. The quantitative and qualitative data captured during this assessment shows that every county in the region has a solid core of providers and stakeholders that are increasing the safety-net capacity and promoting primary care engagement among those most at-risk.

  What is also clear, however, is that despite the substantial efforts of a group of core and essential safety-net providers, there is still substantial unmet need among the low-income population and very limited capacity in many of central New York's communities, especially to serve people who are uninsured. A portion of this unmet need is associated with the lack of primary care capacity and/or inefficiencies in primary care operations. A portion of this unmet need is associated with the lack of primary care capacity and inefficient primary care operations. However, a large portion is also associated with a lack of primary care engagement and/or a lack of consumer awareness about the importance of regular primary care, chronic disease management, and prevention. What practice sites are finding is that the expansion of capacity does guarantee that people will take advantage of it, even if the penetration rate is relatively low.

  Despite the dramatic growth in core safety-net provider organizations, there is still substantial unmet need in the region, particularly for low-income segments of the population. A portion of this unmet need is associated with the lack of primary care capacity and/or inefficiencies in primary care operations. However, a large portion is also associated with a lack of primary care engagement and/or a lack of awareness on the part of the consumer regarding the importance of regular primary care, chronic disease management, and prevention.

  Most of the communities have a relatively robust set of providers who are willing and committed to serving Medicaid-insured residents, but people who are uninsured are typically obliged to obtain services through hospital EDs.

The county summaries, included in the next section, describe the capacity and unmet needs of safety-net systems. They also identify geographic hotspots and those segments of the population that are most at-risk.

Establishing a figure that reliably estimates unmet primary care need is extremely challenging. This assessment was able to determine the number of patients served by the core of the region's safety-net. But what the assessment could not estimate is the number of low-income patients who are served by private, independent, or hospital-based primary care practice sites. Individually they serve only a small number of Medicaid-insured and uninsured patients but collectively may have a considerable impact. The assessment is also unable to estimate the number of low-income individuals who do not and will not access care regardless of whether there is capacity.

Based on data compiled by the JSI project team, 18 provider organizations comprise the core of the region's safety-net. These provider organizations operate 59 practice sites and serve and estimated 314,668 patients, of whom 114,245 are uninsured or Medicaid-insured patients.[16] Due to limitations related to data collection, it is difficult to determine the exact characteristics of this population. However, considering what we know about the nature of the clinic sites that are operated by these organizations, it is reasonable to assume that the vast majority of these patients are in low-income brackets.[17]

JSI's assessment of demand showed that there are 360,806 low-income residents living below 200% FPL, which means that the leading safety-net providers in the region serve approximately 31% of the total low-income, Medicaid-insured population in the region. This calculation is based on the fact that the core safety-net providers surveyed serve 114,245 Medicaid-insured or uninsured patients.[18] The corollary to this figure is that 69% of the population is either not engaged in regular primary care, receives primary care at a hospital emergency department, or receives care from a provider outside the JSI's list of core providers. Surely a portion of the remaining 69% of the population is able to secure high-quality, timely primary care from practice sites that are outside the list of leading providers. However, a large portion is receiving untimely episodic primary care from care providers who are not part of the safety-net and are not providing PCMH-driven care. Based on JSI's experience conducting these analyses throughout the United States, we conservatively estimate that 10-20% of the population, depending on the community, receives relatively high-quality care from independent or hospital-based primary care practices that are not typically considered part of the safety-net. This means that of the 69% of the population not served by the leading safety-net providers on our list, approximately 50-60% is in the unmet need category on a regional basis. This number fluctuates tremendously by county and

[16] Three of the 18 organizations confirmed as safety-net providers were not able to provide data, so the total number of patients served by safety-net organizations is higher than the number captured by the survey.
[17] A portion of these patients are not low-income, particularly those served by members that operate hospital-based or hospital-owned clinics, as these sites serve a broader cross section of the socio-economic spectrum. It is not possible to determine the exact proportion who are not low-income so for the primary analysis we assume that all are in low-income brackets.
[18] This figure does not include the older adult, low-income, Medicare-insured population, who likely makes up a significant portion of these providers patient populations.

might be as low as 20% in Oswego, where the safety-net is strongest, to as high as 75% in Herkimer, where it is weakest.

- **Over-utilization of hospital emergency departments (EDs).** As discussed in the review of the consumer survey results above, there are large proportions of the population that rely on the emergency department for their primary care, either because they: 1) have no other source of primary care and as a result are forced to use the ED; 2) use the ED as their first choice of care rather than regular, comprehensive primary care, or who overlook the cost saving of using primary or urgent care; or 3) have difficulty accessing primary care during normal business hours and must resort to the ER's 24-hour availability.

  JSI estimates that 50-60% of the region's low-income population is not getting regular high-quality primary care in a primary care setting. Furthermore, we assume that a large proportion of this population is using the hospital emergency room for a substantial portion of their primary care. A review of the consumer survey data cited above shows that 39% of adults and 44% of children surveyed went to a hospital emergency department at least once in the past 12 months, and 14% of adults and 17% of children went to the emergency department two or more times during this period. Further analysis shows that only approximately 56% adults and only 34% of children surveyed were seen in the ED for a medical emergency. The remaining visits were because those surveyed did not have a primary care provider, could not been seen by their regular primary care provider due lack of capacity or after-hours care, or were instructed by their provider to go to the ER (9% of adults).

  Data cited above in the primary care demand and community need section on preventable quality indicators (PQIs) reinforce the idea that there is over-utilization of the emergency department. NS-LIJ's data showed that high proportions of the population in the region, particularly in certain geographic hotspots, were being seen frequently in the inpatient setting for conditions that could have been avoided or prevented with appropriate, timely primary care. A large proportion of these inpatient visits originate in the hospital emergency department. Not surprisingly, the communities in the region where the PQI utilization rates are highest are in Syracuse, Utica, and large segments of Herkimer counties. See Figure 6 on page 25 for a review of the regional hot spots with particularly high rates of PQI admissions.

  It should also be noted that in addition to lack of capacity and no after-hours or weekend care, there are a range of other barriers that hinder access to primary care and encourage the over-utilization of the emergency room, such as limited public transportation, long wait-times, lack of timely scheduling, practice sites that do not take certain insurance, and administrative barriers to Medicaid enrollment. As a result, a large number of the families in the region have learned over time to rely on the region's hospital EDs as their usual source of care and do not, in any real sense, have a "medical home."[19] The consumer survey indicates that 8% of children and 14% of adults use the emergency room or do not have a usual source of care.

[19] This report is using the Commonwealth Fund's definition of medical home defined as: a regular doctor or source of care, easy access to the provider by telephone, easy access to health advice on evenings and weekends or whenever the provider is closed, and visits with the provider that occur conveniently for patients, are on time and are efficient

- **Increasing impact of urgent care.** In three of the eight counties in central New York (Cayuga, Herkimer, and Oswego), the people interviewed or visited mentioned that urgent care centers have a substantial impact on the primary care systems in their area.[20] In some markets the impact is perceived as extreme. In the city of Auburn, the county seat of Cayuga, for example, there are three urgent care centers. Two are affiliated with the local community hospital and one is operated independently. Oswego and Herkimer each have only one known urgent care provider, but primary care is so limited in these counties that they are perceived as having a substantial impact.

  It is not possible to determine who is using these urgent care centers, how they are being used, or the exact impact that the clinics have on primary care access. Typically, urgent care clinics provide immediate walk-in care for people with acute conditions, minor emergencies (e.g., fractures and lacerations), and exacerbations of chronic conditions. They tend to have limited wait-times for appointments, which distinguishes them from EDs, and extended hours of operation, including evening and weekend hours that distinguish them from regular primary care practices. Urgent care clinics also typically serve only those who are insured, (including Medicaid at least in rural areas), or have the means to pay on a undiscounted, fee-for-service basis. As such, research suggests that urgent care clinics have the ability to expand access, meet unmet primary care need, and reduce some non-emergent ED utilization.[21] Research has also shown that urgent care clinics cost less than care provided in the ED setting.[22] Typically, urgent care is still more expensive than regular primary care settings, but considerably less than the cost of ED-based care.

  Increasingly, urgent care clinics are being developed by hospitals or private practices in partnership with hospitals as a way of reducing the burden that non-emergent utilization has on their EDs. This has its advantages as it does expand access to primary care. However, if the hospital or privately operated urgent care clinics serve only people who are insured, the core safety-net providers are left with a larger, disproportionate share of the uninsured or underinsured

  On the downside, research has shown that that urgent care sites may not provide the same level of quality or, as mentioned above, achieve the same level of cost savings as regular primary care practice settings. Specifically with respect to quality, care is not typically as coordinated, comprehensive in nature (i.e., include routine preventive or chronic disease management services), and information from these visits does not usually flow to the patient's primary care provider. As a result, many policy makers are promoting demonstrations, program pilots, accountable care organizations, and other initiatives that

[20] This assessment was not intended to develop a complete inventory of all primary care providers in the region, so it is possible that urgent care sites exist in other counties and are having an impact.
[21] Weinick, Robin M, Rachel M. Burns, and Ateev Mehrotra. Many Emergency Department Many Emergency Department Visits Could Be Managed At Urgent Care Centers And Retail Clinics. Health Affairs. 29, NO. 9 (2010): 1630–1636
[22] O'Malley, Ann S. After-Hours Access To Primary Care Practices Linked With Lower Emergency Department Use And Less Unmet Medical Need. HEALTH AFFAIRS 32, NO. 1 (2013)

focus on the expansion of the patient-center medical home and more traditional primary care settings rather than on urgent care clinics. Furthermore, while urgent care clinics may serve Medicaid-insured patients, particularly in rural areas where there is limited access to primary care, they do not serve all comers and are not often a source of care for low-income individuals or families.

Increasingly, urgent care clinics are being developed by hospitals or private practices in partnership with hospitals as a way of reducing the burden that non-emergent utilization has on their EDs, while maintaining or even increasing their patient population or market share by providing care that is highly accessible and patient-centered (i.e., no wait-times, on-site labs and x-rays, and other amenities). This has advantages as it does expand access to primary care. However, many feel that it threatens the core safety-net, whose financial position is often dependent on serving at least a portion of insured, paying patients. If the hospital or privately operated urgent care clinics are serving only the insured, both Medicaid and commercial, the core safety-net providers are left with a larger, disproportionate share of the uninsured or underinsured population.

- **Hospital consolidation, closings, and financial insecurity**. There are hospitals in the region that are on solid financial ground and are committed to being part of the primary care safety-net. However, there are a number of hospitals that are exploring consolidation with other regional or local hospital partners or that are at risk of closing. In some cases, these decisions are being explored to take advantage of strategic alignments or to build capacity in certain clinical areas. In most cases though, it is due to financial reasons and the fact that some hospitals are experiencing large financial losses. These circumstances are jeopardizing primary care operations, which could ultimately reduce the capacity of the primary care safety-net. Nationally and in upstate New York, these circumstances have also created general uncertainly and led to the loss of community control, which has also reduced access and, in some cases, the capacity of the primary care safety-net. As mentioned above, hospital-based practices often struggle to provide primary care to low-income, Medicaid-insured, or uninsured populations due to low provider payment rates and the lack of other financial supports. When hospitals face financial losses and are forced to cut costs, often one of the first things to go are primary care practices that serve large numbers or proportions of Medicaid-insured patients. This concurrent trend of uncertain financial viability of hospitals is a major factor in the skepticism of hospitals' long-term ability to commit to primary care, despite changes from ACA encouraging them to invest in a system of care that promotes health.

- **Lack of consumer engagement.** Another important factor in unmet need and insufficient primary care access is the lack of primary care engagement. A certain portion of unmet need is more closely associated with a lack of consumer awareness about the importance of regular primary care, chronic disease management, and preventive services than it is about a lack of actual primary care capacity. This was a common theme in JSI interviews and site visits. Practice sites often said that while there is absolutely unmet need and a lack of primary care capacity in nearly all of their communities, they often struggle to engage their patients and their target populations in appropriate primary care services. Many providers

are keenly aware that even if they increase capacity or develop new sites, there will be a lag in service until they promote primary care engagement effectively.

In this regard, there needs to be a greater focus on prevention, health promotion, community health education, and emergency room diversion, and greater efforts to identify and engage those who are not accessing primary care. This is particularly important for people with chronic disease and/or other health related conditions (mental health, substance abuse, hospital discharge, etc.) as well as certain demographic (children, frail elders, single-parent mothers, etc.) and socio-economic (low-income, public housing residents, WIC recipients, etc.) segments of the population. In addition to exploring how to increase primary care capacity, safety-net organizations need to focus on outreach, primary care engagement, and the implementation of population-based efforts that are data driven and promote appropriate utilization. Practice sites need to be savvier in using their own electronic health records, other managed care data, or hospital partner data to identify and reach out to those who are not engaged in care. Once they get a patient in the door, they have to offer patients convenient hours, ensure quality customer service on the phone and in person, and build strong relationships so patients choose them as their preferred provider for both preventive and acute needs.

4) Internal Primary Care Operations: Strengths and Weaknesses

JSI has drawn from the Institute of Medicine's (IOM's) core competencies for 21st-century health care to clarify and guide its assessment with respect to understanding primary care system strengths. These core competencies describe an approach that health care providers should take in providing care. According to this approach by the IOM,

> "All health professions should be educated to deliver patient centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement practices, and informatics."

JSI applied the basic tenets of this approach in assessing the strength and the overall quality of care provided by the primary care system and the safety-net in central New York. Through its key informant interviews, site visits, and other provider interviews, the project team collected a significant amount of information. It should be noted, however, that the project team's methodology was not designed to conduct a rigorous site-by-site analysis. Such an analysis requires much more extensive data-collection efforts and would have been burdensome to provider organizations. JSI believes that its methods provide ample information to assess the extent to which the IOM's standards are applied in central New York and, more specifically, how HFWCNY and other community stakeholders can continue to expand and strengthen primary care operations and respond to current health reform trends.

- **Outreach, eligibility/enrollment, and primary care engagement.** One factor that sets "core" safety-net providers apart from "essential" safety-net providers and "contributing" safety-net providers is that core safety-net providers are committed, and in some cases mandated, to promote engagement in care to low-income target populations. This is typically done with the assistance of a formal outreach coordinator

who is responsible for identifying, engaging, and promoting proper utilization of services. This also usually is done with the assistance of other community partners such as public housing facilities, Women, Infant, and Children (WIC) sites, schools, hospital emergency departments, community centers, and other community venues where low-income populations are likely to congregate. Assessing for eligibility and enrolling consumers in Medicaid or other entitlement programs has always been an important facet of this job description. With the passage of ACA, the significance of assessing low-income, underinsured, or uninsured consumers has become more important.

Recently, nearly all FQHCs have received additional funds dedicated to outreach, eligibility, and enrollment efforts. This provides a real opportunity to engage those not currently accessing primary care, but it is too early to measure the results of these new resources. While community education and outreach are core parts of the FQHC model of care, non-FQHC providers do not typically have staff or resources dedicated to community engagement. As a result, in areas where hospital-affiliated and private practices are the major safety-net providers, there are limited resources to connect the most vulnerable populations to care. The free clinics often do not have the resources to conduct significant amounts of education and outreach, so focus on having the capacity to meet the needs of people who come through their doors. Further, some but not all of the free clinics have onsite staff to help enroll people who are eligible for insurance. The free clinics also have limited resources to facilitate referrals to patients to primary care providers who accept Medicaid once a patient becomes insured. There is an opportunity to further connect the free clinics with other safety-net providers to facilitate these referrals. However, they are not the only providers reaching out to low-income populations. Other core safety-net providers, as well as those in the essential safety-net category such as hospital-based or private physician practices that see a lot of Medicaid patients, see this as a main part of their strategy and are focusing on insurance eligibility and enrollment. It is worth noting that core safety-net providers are more likely seek out people who are hardest to reach and engage because these people are the heart of their target population.

Safety-net providers need to make more effort to identify people who are not receiving appropriate primary care services, and to promote primary care engagement, preferably in a patient-centered medical home setting.

As discussed above, there is substantial unmet health care need in the community, and a significant portion of this, particularly among low-income populations, is associated with a lack of primary care engagement, rather than a lack of primary care capacity. Safety-net providers must make greater efforts to identify people who are not receiving appropriate primary care services and promote primary care engagement, preferably in a patient centered medical home setting that is committed to providing quality, evidenced-based care. This is particularly true in the context of the rollout of ACA.

- **Design and implementation of patient-centered care.** Over the past ten years there has been a great deal of resources invested nationally and statewide to develop primary care operations that are patient-centered and follow patient-centered medical home (PCMH) guidelines promoted by various professional organizations, including the National Committee for Quality Assurance. New York has a PCMH pilot program that has involved a number of organizations in the region. According to data provided by the NYS Department of Health in December 2012, there were more than 4,500 PCMH-accredited practices in New York State.[23] FQHCs in particular, with the encouragement and resources from the Bureau of Primary Health Care, have embraced PCMH, and collectively have made great strides.

  All the practice sites that JSI talked or visited with have embraced the principles associated with PCMH. There was clear recognition that a range of activities must be undertaken to create a truly patient-centered, coordinated, integrated, service-delivery approach focused on quality, safety, and access. But none of the practice sites, even those that had received Level 3 accreditation, had implemented all the principles associated with PCMH .

  All providers in the safety-net (core, essential, and contributing) that the JSI project team talked or visited with have embraced the principles associated with PCMH. However, there are clear differences in the ability of various providers to implement the principles. All the FQHCs that JSI spoke with are working to various degrees to transform their practices. However, although all essential provider practice groups recognized its value, some had less capacity to implement a patient-centered medical home. The rural and small hospital-affiliated practices often have only one or two providers and have struggled to transform their practices. The free clinics are not designed to offer a medical home because of their limited hours and resources. Further, many see patients on a first-come, first-served basis and do not allow patients to make appointments.

  There was clear recognition of the broad range of activities or domains that need to be addressed in order to create a truly patient-centered, coordinated, integrated, service-delivery approach focused on quality, safety, and access. Yet none of the practice sites had adopted all the principles associated with PCMH, even those who had received Level 3 accreditation. However, each practice, based upon the needs of its patients, available resources, and the strengths and weaknesses of its operations, had prioritized a particular set of PCMH domains. Most practice sites agreed that there needs to be more concerted, individual, and collaborative efforts in the region to drive the application and implementation of PCMH principles into practice. There was a general sentiment that practice sites needed to move beyond accreditation and infrastructure development and take steps to implement PCMH in ways that more clearly improve the patient care experience and the quality of care.

[23] http://www.health.ny.gov/health_care/medicaid/redesign/docs/pcmh_quarterly_report.pdf

This does not mean that certain organizations have not made great strides in certain areas to develop more coordinated, integrated, patient-centered, and higher-quality operations. Particular emphasis has been on EHR development and quality improvement.

Considering the national and regional emphasis and the increasing possibility that these activities will be tied to payment, the biggest strides have been made in the area of quality/performance improvement and EHR implementation. All of the core safety-net providers JSI talked to or visited (and nearly all the other practices), had either recently upgraded or newly implemented EHR systems. All of the providers were to varying degrees, using them to track quality, improve care coordination, and support patient communication and/or clinical decision making. Although it is difficult to measure, these efforts have certainly led to improvements in the quality of patient care, most notably in the areas of screening and chronic disease management.

The efforts in this area have led to a noticeable cultural shift across all practices and are being largely embraced at the clinical provider level. Most of the sites JSI spoke to were using their EHRs to track clinical quality indicators and were taking steps operationally and/or with respect to adoption of evidence-based clinical protocols to improve a variety of measures. Once again, this was particularly true in the areas of chronic disease management and preventive screening. This cultural change is a critical step in the PCMH process and it is clear that the foundation for real change has been developed across the safety-net. However, having an EHR doesn't guarantee that it will be used to optimize care, and there is still considerable room for improvement, particularly with respect to identifying people at-risk and managing and coordinating patient care.

Significant strides have also been made with respect to the integration and coordination of a broad scope of services. Specifically, practices are either co-locating services (e.g., medical specialty care, behavioral health, and oral health services) on-site or developing formal referral protocols with specific partners.

Improvements are still needed in the areas of team-based care, provider-patient communication, patient flow, and access. Issues related to team-based care are discussed below. With respect to provider-patient communication, the consumer survey showed that many consumers still struggle to communicate with their clinical providers. Also, a common theme from the JSI project team's interviews were struggles related to health literacy, particularly in Utica and Syracuse with their large numbers of immigrants and refugees. As for patient flow and access, one of the practice sites' biggest concerns was related to high no-show rates, which were affecting their productivity, provider scheduling, and patient satisfaction. Also, the lack of after-hours care, high utilization of EDs, and lack of primary care engagement were issues that were identified in JSI's data analysis, interviews, and site visits. These issues are related to a lack of primary care capacity as well as patient satisfaction and are evidence of the need to develop operations that are more patient centered.

- **Utilization of interdisciplinary teams.** Team-based care is currently the standard for providing high-quality and efficient primary care. However, there are many examples of

who comprise such a team.[24] Two major components of the team model of care are stronger connections with specialty providers to create a medical home, and nurse practitioners, physician assistants, nurses, and medical assistants working with a physician to address the need of a defined panel of patients.[25] The interdisciplinary models in place in central New York include integrating primary care with medical specialty care, behavioral health, oral health, and chronic disease management services. These interdisciplinary teams are usually created by co-locating specialty care providers, chronic disease specialists/care managers, behavioral health, or dental providers in the primary care setting. The primary care provider staff, often in concert with the nursing or medical assistant staff, will identify those in need of specialty care services and initiate an internal referral, usually by a "warm hand-off" in which the primary care provider introduces the patient to the specialty care provider at the time of the initial primary care visit. In other cases the integration or team-based care occurs through enhanced referral arrangements that include formal arrangements for provider communication and scheduling with a specific pool of community- or hospital-based providers. These arrangements may not be co-located but often include information-sharing protocols that facilitate coordination and communication.

What does not seem to be happening in the region, at least in the practice sites that JSI visited, is the development of team-based care approaches to providing primary care medical services.

Team-based model of care implementation amongst central New York safety-net providers is varied. The FQHCs are the most advanced in this regard, and the FQHCs in Oswego and Cortland counties, Syracuse, and Utica have implemented team-based care. Although the FQHCs have taken steps to implement teams, more learning and further development of this model is needed. In addition to the cultural shift for providers, full implementation of this model of care is hindered both by the fee-for-service reimbursement system and legal and regulatory constraints on the scope of practice of nurse practitioners and physician assistants.[25]

There is much wider variation between hospital-affiliated practices. Many have not embraced this model, but a few, particularly in Syracuse, have been more innovative and taken this approach. Integrated hospital networks have always had an advantage when it comes to this level of service integration and team-based care, as these practices typically have access to a pool of medical specialty and behavioral health providers that can be easily integrated with primary care. The hospital-based practices and family practice residency practices in Syracuse are other good examples of this type of integration. Outside Syracuse, there are also notable examples of practices that have engaged in or are working to integrate this level of team-based care. Safety-net providers that work with complex, developmentally disabled, or frail elderly patients are also experienced with this

[24] Porter ME, Pabo EA, Lee TH. Redesigning Primary Care: A Strategic Vision To Improve Value By Organizing Around Patient Needs. Health Affairs 2013; 32(3):516-525.
[25] Grover A, Niecko-Najjum LM. Primary Care Teams: Are we there yet? Implications for workforce planning. Academic Medicine 2013;88 (3):1-3.

level of team-based care as they work to ensure that their patients have access to the comprehensive array of services that they often need.

Yet, in the region, at least in the practice sites visited, the development of team-based care approaches to providing primary care medical services is happening to a lesser extent. These approaches involve the creation of primary care pods that are typically led by a physician who, with nurse practitioners and/or physician assistants, is responsible for caring for a panel of patients. These arrangements are increasingly being espoused by PCMH-accrediting organizations and have been proven to increase productivity while promoting quality, care coordination, and greater continuity of care.[26] Often these primary care pods or teams include a chronic disease care manager and a behavioral health provider, in addition to a cadre of nurses and medical assistants that augment the team and promote even greater care coordination.

It should be noted that although services are part of vertically and horizontally integrated provider networks, care is not automatically integrated and interdisciplinary teams harmonized. Although JSI's assessment was not able to determine how well these teams were working, there is still a lot that could be done to ensure that these models are well-functioning and that information and expertise is shared appropriately.

- **Utilization of health information technology (HIT) and the application of quality improvement strategies.** As mentioned above, over the past five years all of the safety-net providers that JSI spoke to or visited have either updated their existing systems or implemented new systems that have improved information transfer between providers, driven quality-improvement efforts and data tracking, facilitated care coordination, and enhanced clinical decision-making support. Many of the organizations also have dedicated quality improvement coordinators on staff who are developing and overseeing data tracking and quality and performance improvement. Independent private primary care practices were less likely to have the same robust infrastructures related to clinical quality and performance improvement, but most had functioning EHRs.

Over the past 5 years, many practice sites have implemented robust EHR systems and use them in productive ways. But many practices still need support to use their EHRs to identify and manage illness, coordinate care, and exchange vital information

It is important to note that simply establishing HIT is not the goal. Rather, HIT is the means through which a provider can improve the quality of care, enhance patient experience, and create operational efficiencies. Over the past five years, great strides have been made to promote the implementation of robust EHR systems, and many practice sites are using them in productive ways, particularly to advance quality and

[26] McCarthy D, Mueller K, Wrenn J. Kaiser Permanente: Bridging the Quality Divide With Integrated Practice, Group Accountability, and Health Information Technology. New York, NY: Commonwealth Fund; June 2009. http://www.docstoc.com/ docs/153018987/Kaiser-Permanente-Case-Study---The-Commonwealth-Fund. Accessed January 14,2014.

performance improvement. However, more efforts and support are needed. It is not enough to have an EHR; it must be used, especially to identify and manage illness, coordinate care, and share vital information between providers.

- **Employment of evidence-based practices.** The JSI project team's interviews and site visits identified many provider organizations that have prioritized the management of diabetes, asthma, and other chronic medical conditions, including depression, as part of their operational strategies. As a result, these organizations have applied evidence-based practices that allow providers to more effectively identify, screen, assess, and manage or treat patients who have these conditions. These evidenced-based practices have also allowed patients to more effectively manage their own conditions, and participate in self-management support activities. Although many of the core safety-net providers have continued to make strides in this area, others, usually smaller and rural practices without the infrastructure to fully utilize their EHRs and implement PCHM, are not fully engaged in or even started on these activities.

- **Provider recruitment and retention.** As discussed above, there is still substantial unmet need and limited capacity in many of central New York's communities. As a result, primary care safety-net practices across the region are actively working to build capacity, promote primary care engagement, and reduce over-utilization of hospital EDs. This issue is likely to become even more extreme in the context of ACA and the increased demand that is projected due to the expansion of health care coverage for low- and middle-income population segments.

  The most significant barrier to the growth of the safety-net is primary care provider recruitment and retention. This is especially true in the region's more rural areas.

  Recruiting new providers to add capacity and the aging and retirement of the current physician community are concerns. When safety-net practices try to fill vacancies or hire new primary care providers, it often takes more than a year to find a candidate and when they do practices must pay more than the market rate or provide benefits, such as limiting the length of the provider work week or not requiring that providers take after-hours calls, that are counter to their mission.

  There are many assets in the region that support recruitment and retention. The primary care residency program in Syracuse yields a substantial portion of doctors who remain and practice in the region. And in Tompkins County physician recruitment is made easier by the presence of Cornell University. Some of the safety-net providers work with physician training programs as a long-term strategy to bring providers to both rural and urban area. These efforts are positive but insufficient. The safety-net would benefit from resources that would ease the challenge of recruitment and retention.

5) External Collaboration among Primary Care Safety-net Providers

The central New York region, as most in the nation, has struggled to coordinate and integrate its primary care system and safety-net. External collaboration is one of the most challenging activities for providers, because it is not paid through current reimbursement. While new payment systems are designed to support more of this type of work, there is far to go. Federally qualified health centers have an advantage compared to other safety-net providers because collaboration and referral systems for their patients are required as part of their federal grants. Collaboration remains a challenge for other safety-net providers, but where it is considered a priority, it is possible. One example of this is Mary Rose Clinic in Madison County, a free clinic that has persuaded dentists and behavioral health providers to see their patients at limited or no cost. They have also built relationships with health plans to get onsite facilitated enrollment staff during clinic hours.

While there are several good examples of external collaboration most of the safety-net providers in central New York, including medical, behavioral health, dental and social service providers, struggle to make these connections and are not part of a broader system of care for low-income populations. As a result, they are not sharing information and expertise, coordinating or integrating their care, or facilitating referrals.

Collaboration is clearly more important today than ever and JSI's current assessment was geared to assessing the level of collaboration and the extent that safety-net providers were working in partnership with each other and other health and social service providers. The following is a review of the strengths and weaknesses related to collaboration.

- **Increased collaboration as a result of ACA.** Collaboration is at the heart of this innovation, as health and social service providers explore how to better integrate and coordinate their services with the goal of improving the health of the population (including increase quality of care), enhancing the patient experience, and creating efficiencies that reduce costs. Numerous components of ACA have provided resources, usually through the Centers for Medicare and Medicaid Services (CMS) or the Centers for Disease Control and Prevention (CDC), to incentivize collaboration and help health care organizations achieve the "Triple Aim." The Community Care Transitions Program (CCTP), the Medicare Shared Savings Programs (MSSP), the Pioneer ACO Model Program, the Emergency Room Diversion Grant Program, and the Community Transformation Grants are examples of these efforts. Health care providers throughout the western New York region have received CMS grants in all of these areas and participated in these initiatives. This has led to improvements in service delivery and the quality of care as well as created cost savings.

- **Safety-net is bolstered by a strong network of hospital and academic partners.** The central New York region's safety-net is supported by a network of major hospitals (both urban and rural) and the University. As discussed above, these are essential components of the safety-net that collectively serve more than half of the patients served by JSI's list of leading safety-net providers. In addition, the hospital emergency rooms play a vital role in providing primary care services, particularly after-hours. In many communities,

hospitals are the sole source of medical specialty care services. The Upstate New York Medical Center, Cayuga Medical Center, and St. Joseph's Hospital Health Center also participate in provider recruitment, planning, and research activities that directly and indirectly support the safety-net in significant ways.

As discussed above, some people are skeptical about the commitment of these hospital providers to the primary care safety-net. Surely their role is critical (e.g., emergency department services, medical specialty care, primary care to Medicaid-insured) but most providers in this group are not core safety-net providers, as they do not typically provide a primary care medical home to those who are uninsured and at times feel obligated to roll back or limit their commitment to Medicaid-insured patients in the outpatient setting.

- **Strong county health departments involved in primary care engagement and population-based health activities.** The provision of comprehensive direct primary care services is outside the scope of most health departments. However, they continue to play a vital role in the safety-net system. The county health departments, including the public health and mental health agencies, provide a range of health and social services including direct patient care, particularly for high-risk children and families. There is a range in the scope of services they provide in each county but in many cases they are the provider of last resort and their case management services are critical to connecting families with comprehensive care. County health departments are also increasingly involved in collaborative efforts to improve health status and promote health, prevention, and wellness.

IV. B. County-Specific Characteristics and Findings

These county-specific summaries combine information from a number of quantitative and qualitative data sources, including data from the US Census Bureau, the New York State Department of Health, the New York's Statewide Planning and Research Cooperative System (SPARCS), the Health Resources and Services Administration, and the project's interviews and site visits. The summaries include information on the characteristics of the underlying population that seeks services (Primary Care Demand) as well as the characteristics of the primary care system and the array of organizations that provide primary care services (Primary Care Supply). The description of primary care demand includes demographic and socio-economic data (e.g., age, race/ethnicity, poverty), as well as insurance status data. The provider supply data includes information on provider capacity, operations where possible, and the extent to which the system of providers seem to collaborate and work collectively. The information on provider supply is broken out by "core" safety-net providers and "non-core" safety-net providers. The "non-core" includes the "essential" and "contributing" providers that were discussed above. Finally each summary describes the particular "hot spots" in the county for primary care demand based on demographics and health status.

Primary Care Demand: Community Need and Barriers to Care

A. Population Characteristics

Table 3. Demographic and Socio-Economic Information	
• **Total population**	80,204
• **Percent male; Percent female**	51% 49%
• **Population <5 years of age; 5-17; 18-64; 65+ years of age**	5% 17% 63% 15%
• **Race (White, Black, Asian)**	93% 4% <1%
• **Hispanic**	2%
• **Foreign-born population**	2%
• **Percent of 5+ year olds that speak non-English language at home**	4%
• **Percent HS diploma or greater**	85%
• **Median household income (in 2010)**	$50,140
• **Percent of single parent households**	30%
• **Unemployment rate (October 2013)**	7%
• **Percent in poverty (<100% FPL)**	12%
• **Percent low-income (<200%)**	31%

Table 4. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	16%
• **Current Number of uninsured adults**	8,940
• **Uninsured population 150-400% FPL**	4,175
• **Uninsured population <150% FPL**	2,928
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Remaining uninsured After ACA**	5,898
• **Newly insured under 65 After ACA**	3,039

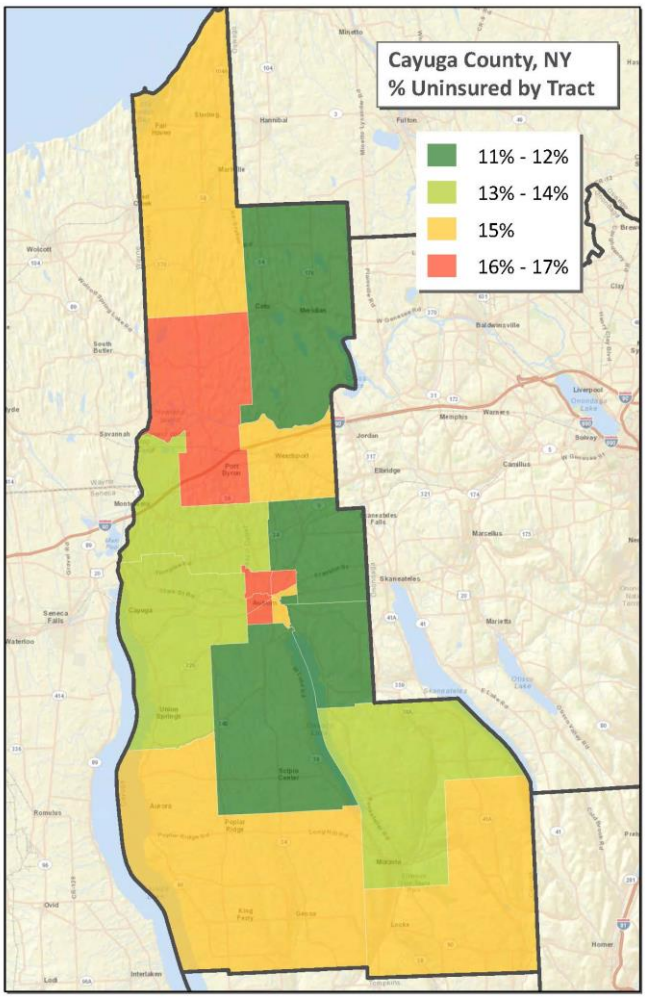


Figure 13: Percent of the population who are uninsured in Cayuga County

Supply: Primary Care Capacity Gaps

Table 5. Primary Care Characteristics and Capacity	
• **Penetration into Low Income Population[1]:**	26.6%
• **HPSA/MUA Designations:**	• 1 area designated MUP • No areas designated MUA • 4 areas designated HPSA Primary Care • Entire county HPSA Mental Health • 2 areas designated HPSA Dental
• **FQHC Capacity Located in County**	East Hill Family Medical Center (FQHC) Finger Lakes Community Health (FQHC) Family Health Network (FQHC)
• **Residents in County served by FQHCs**	12,334 (55% of total low income population[2])
• **Listing of Other Core SN Providers:**	Auburn Community Hospital urgent care

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

B. Core Provider Capacity

Cayuga county has a strong presence of core providers and is served by three FQHCs, East Hill Family Medical Center (East Hill), and Finger Lakes Community Health (Finger Lakes), and Family Health Network. East Hill is located in Auburn and includes family planning, a focused pediatric clinic, dental, and behavioral health services. Finger Lakes located in Fort Byron is also a comprehensive primary care site which includes dental, pediatric, and family planning services but does not include behavioral health. The Family Health Network clinic in Moravia is a small practice with one physician and one nurse practitioner providing women's health and family medicine. There is one hospital in Cayuga county, Auburn Community Hospital, which has two affiliated urgent care sites, but it does not have affiliated comprehensive primary care clinics.

1. Internal operational strengths/weaknesses

East Hill is a full service health center which is able to offer a full complement of services including on site behavioral health. One of the critical challenges of this health center has been developing the sophistication in data systems and quality improvement infrastructure to take advantage of performance payments based on quality offered by some of the health plans. A second challenge has been provider and staff recruitment and retention. In the fall of 2013, they had vacant positions for social work and a diabetes health educator. Currently care management is primary responsibility of the physicians and they do not have dedicated care management

staff. The Finger Lakes office recently expanded their clinic size adding more exam rooms, additional space for dental, and a new space for telehealth consultations.

2. External collaboration

East Hill and Auburn Community Hospital have had discussions around collaboration in the areas of health information sharing and on promoting health care access. In the next year they expect to share information on labs and radiology. With respect to primary care access, they have talked about how to ensure immediate primary care access to patients who have had a hospital admission. In addition they have discussed collaborating to expand urgent care in the community. Currently East Hill does not operate on an open access model but this is something they are exploring. Collaboration across the three FQHCs in the county has had limited success in the past. One area they have discussed is supporting one another in health information technology.

B. Capacity of Non-Core (NPI Data)

Table 6. Total Primary Care Providers in the County (111)	
Provider Type	**Provider Specialty**
CNM: 5	Core PCP: 61
MD/DO: 54	Internists: 20
NP: 45	OB/GYN: 15
PA: 7	Unspecified: 15
Data Source: National Provider Identifier Dataset	

Non-core providers play a limited role in Cayuga due to the strength and number of FQHCs. Auburn Community Hospital has two urgent care clinics which have an obligation to provide discounted services as affiliates to the hospital. Both of these clinics offer weekend hours, and have at some points in time offered extended after hours availability. These hours were cut back due to limited demand in 2012.

Identification of hot spots and key target populations

Within Cayuga County there are two areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Auburn city and Sterling town. Sempronius has higher than average percentages of poor, young, and minority populations, but does not stand out as having increased health needs. In contrast towns like Genoa, Weedsport, and Martville do not have high numbers of classically at-risk populations, but all show up as having more than one indicator of high healthcare utilization and need, including having >500 Medicaid enrollees, high numbers of ED and preventable hospital admissions, and high morbidity/mortality.

- Auburn City is the largest city in the county, with a population of 27,768. It also has the lowest median household income ($37,973) and a relatively high percent racial and ethnic minority communities, at 12% and 15% respectively. It is one of 5 localities with >500

Medicaid enrollees, and has the second highest rate of preventable hospital admissions (278 per 100,000). It also has the highest number of ED admissions (1869), substance abuse admissions (93), and mental health admissions (392) per 100,000. It is one of three places noted as a morbidity and mortality hotspot.

- Sterling town has the highest rates of poverty in the county, with 17% living below 100% FPL, and 48% living below 200% FPL. It has the third lowest median household income, and the third highest rate of preventable hospital admissions, right behind Auburn.

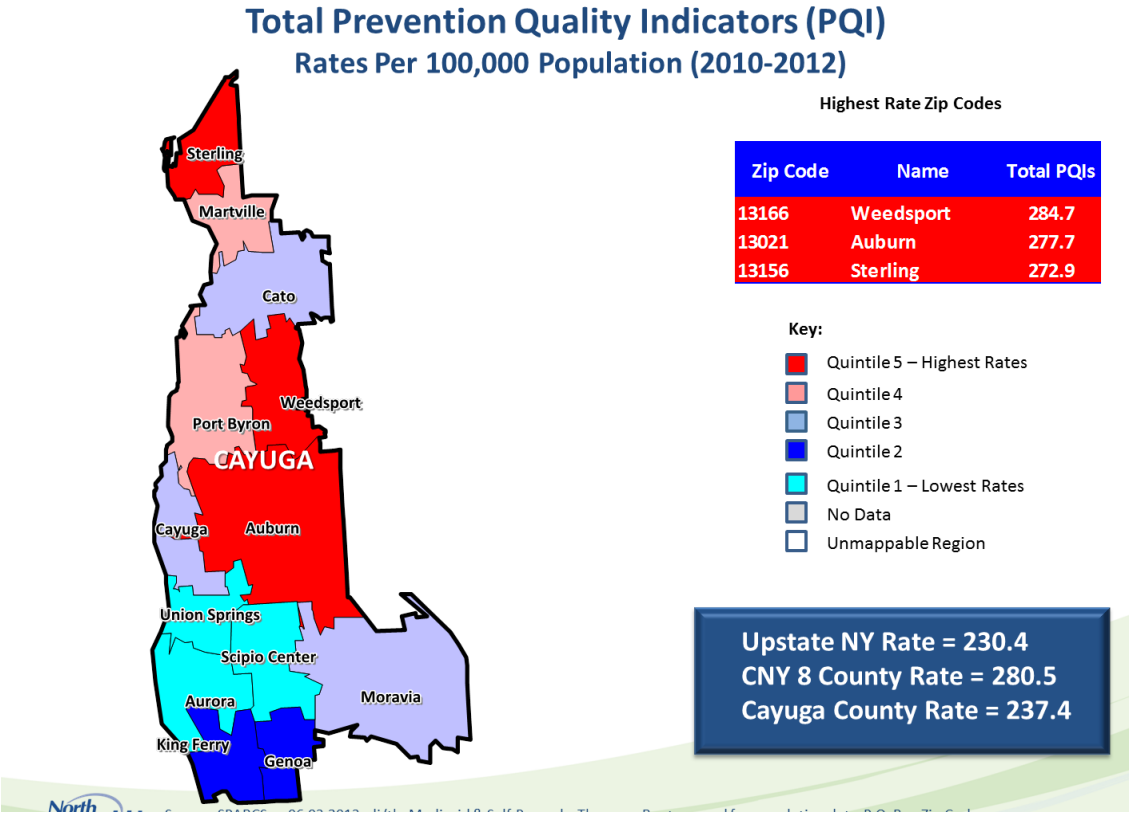


Figure 14: Total Prevention Quality Indicators (rates per 100,000 population) in Cayuga County

Primary Care Demand: Community need and barriers to care

A. Population Characteristics

Table 7. Demographic and Socio-Economic Information	
• **Total population**	49,411
• **Percent male; Percent female**	49%; 51%
• **Population <5 years of age; 5 to 17; 18 to 64; 65+ years of age**	5%; 16%; 66%; 13%
• **Race (White, Black, Asian)**	95%; 1%; 1%
• **Hispanic**	2%
• **Foreign-born population**	2%
• **Percent of 5+ year olds that speak non-English language at home**	4%
• **Percent HS diploma or greater**	90%
• **Median household income (in 2011)**	45,956
• **Percent of single parent households**	33%
• **Unemployment rate (October 2013)**	7%
• **Percent in poverty (<100% FPL)**	15%
• **Percent low-income (<200%)**	35%

Table 8. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Uninsured adults as of 2010:**	14%
• **Current number of uninsured Adults**	5,258
• **Population 150-400% FPL:**	2,308
• **Uninsured population <150% FPL:**	2,087
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Remaining uninsured:**	3,472
• **Newly insured under 65:**	1,768

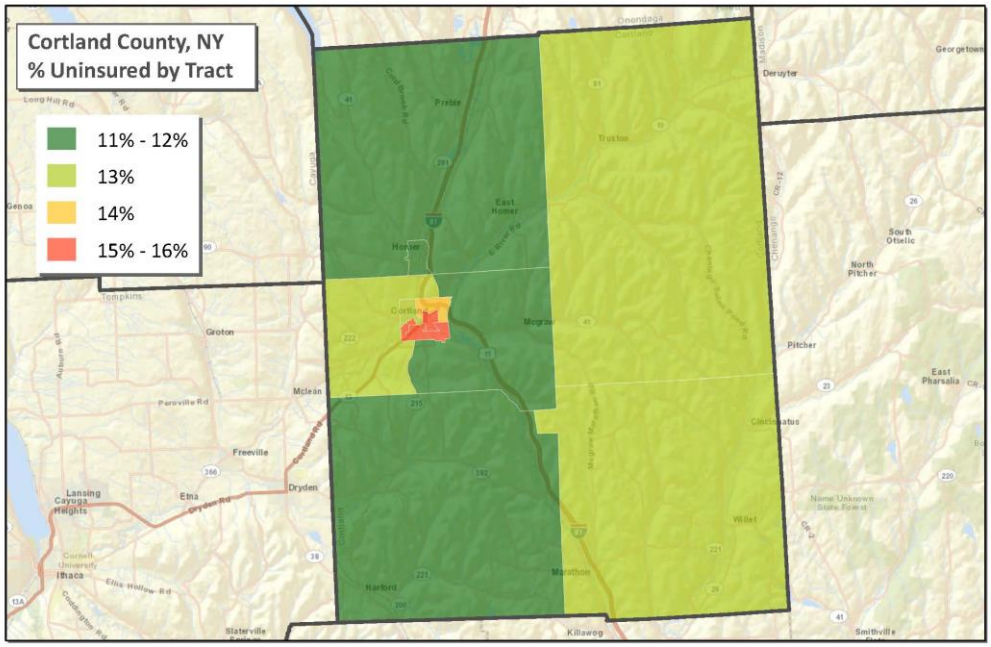


Figure 15: Percent of the Population who are Uninsured in Cortland County

Supply: Primary Care Capacity Gaps

Table 9. Primary Care Characteristics and Capacity	
Penetration into Low Income Population[1]:	25%
HPSA/MUA Designations:	• No areas designated MUP • 2 areas designated MUA • Entire county primary Care and mental health • 1 area designated HPSA Dental
FQHC Capacity in County	Family Health Network, Inc. • 4 Medical clinics • 1 Dental clinic • 4 School-based clinics
Residents in County served by FQHCs	9,489 (60% of total low income population[2])
Listing of other Essential Providers:	None

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

A. Core Provider Capacity

The safety-net in Cortland County is dominated by a FQHC grantee, Family Health Network, Inc. (FHN), based in Cortland, that has been operating since 1972 and currently serves approximately 15,000 patients. They provide comprehensive medical services as well as dental and full range of behavioral health services in collaboration with the County's mental health agency and other community partners. FHN is based in Cortland, NY but operates four other full service clinic sites that are scattered throughout the County. FHN also operates one dental site in Cortland, and four school-based sites. In addition to FHN, the safety-net is bolstered by primary care practice sites affiliated with Cortland Regional Medical Center that serve Medicaid patients on a limited basis. There are also a small number of private practice providers that serve Medicaid patients and collectively should be considered part of the safety-net.

1. Core provider internal operational strengths/weaknesses

FHN is a mature health center that has been operating with support from the Bureau of Primary Health Care (BPHC) since 1972. As such, it has been working for decades to develop high quality, well-coordinated, patient-centered operations. They have recently built or renovated a number of their main clinic sites, which has helped to ensure an efficient, pleasant patient experience. They have a well-functioning electronic health record and have been working for years to integrate behavioral health and medical specialty services into their medical operations. They certainly have room for improvement operationally with respect to develop fully patient-centered operations and to coordinate care, particularly for uninsured and those with complex chronic diseases, but there biggest challenge is related to provider recruitment, which has been a major challenge.

2. External collaboration

The core of the safety-net is a tight and very collaborative group. The County's health department along with the County child and mental health service agencies have a strong collaborative relationship with FHN and other community partners. FHN partners with the County mental health agency and other local behavioral health providers to integrate mental health services for its pediatric and adult patients. FHN also operates four school-based health centers, which helps to coordinate care for children and families. Cortland Regional Medical Center is also a big player in the health system, they have primary care practice sites that have an impact on the safety-net but it is unclear the extent to which they have been involved in safety-net planning in the region.

B. Capacity of Non-Core (NPI)

Table 10. Total Primary Care Providers in the County (65)	
Provider Type	**Provider Specialty**
CNM: NA	Core PCP: 65
MD/DO: 33	Internists: 13
NP: 29	OB/GYN: 7
PA: 3	Unspecified: 6
Data Source: National Provider Identifier Dataset	

In Cortland County, there are a number of private physicians that are covering the geographic area and have a significant role in contributing to primary care capacity. Through our interviews, the project team was told that there are a small handful of private practices that do have an impact on the safety-net, particularly in Cortland and Cincinnatus. It is fair to say, however, that in general the private primary care practices in the County serve predominantly commercially insured patient or Medicare insured patients and except for a few players are not part of the safety-net.

1. Internal Operational strengths/weaknesses

Limited information is known on the operational strength of the private providers.

Identification of hot spots and key target populations

Within Cortland County there are three areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Cortland City, Willet, and Preble.

- Cortland City is the largest in the county, home to nearly 40% of its total population, and it is also one of the most medically needy. More than 23% of its residents live below the 100% federal poverty level, and it has the lowest median per household income at $36,092. It has more than 1000 Medicaid and Medicaid safety-net recipients, and the highest number per 100,000 of substance abuse and mental health related ED admissions. It is has the highest number of mental disorder visits in the county, and has been flagged as a morbidity and mortality hotspot.

- Willet has the highest percent of residents under the age of 18 (34%) in the county, and falls right behind Cortland in number of preventable hospital admissions (481), and mental health related ED admissions (225), and overall number of mental health disorder visits (631). It has the highest number of substance abuse related admissions (419) in the county.

- Preble has the largest number of preventable hospital admissions in the county (558 per 100000), and has been flagged along with Cortland for its high rates of morbidity and mortality.

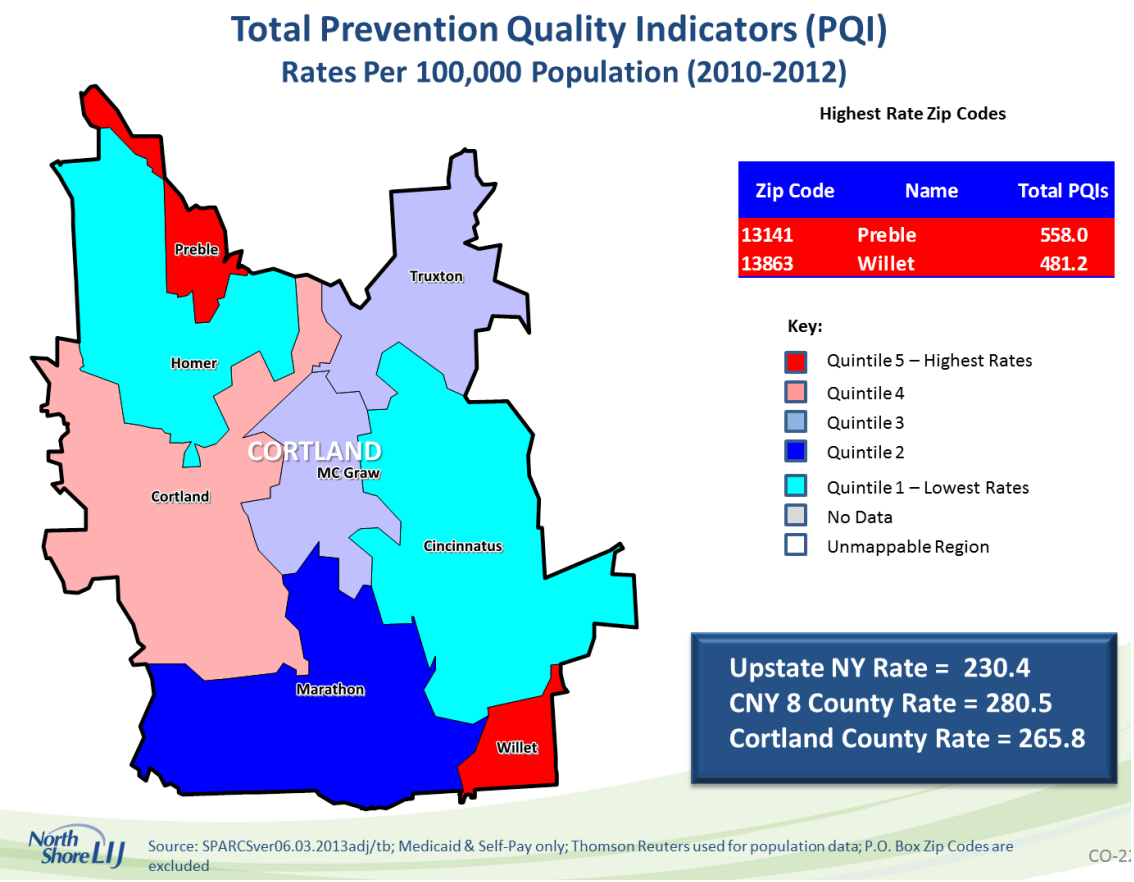


Figure 16: Total Prevention Quality Indicators (rates per 100,000 population) in Cortland County

Herkimer County

Primary Care Demand: Community need and barriers to care

This county level summary combines information from a number of sources, including qualitative interviews with key informants, to provide a picture of primary care access at the county level. The summary below includes information on primary care demand based on population demographics and insurance information and primary care supply based on provider data from several sources. A description of the primary care provider capacity follows the data describing the core and non-core providers, their operational capacity, and collaboration. Finally each summary describes particular "hot spots" in the county for primary care demand based on demographics and health status.

A. Population Characteristics

Table 11: Demographic and Socio-Economic Information	
• **Total population**	64,354
• **Percent male; Percent female**	49% 51%
• **Population <5 years of age; 5-17; 18-64; 65+ years of age**	6%, 17%, 61%, 17%
• **Race (White, Black, Asian)**	97%, 1%, <1%
• **Hispanic**	1.6%
• **Foreign-born population**	3%
• **Percent of 5+ year olds that speak non-English language at home**	6%
• **Percent HS diploma or greater**	87%
• **Median household income (in 2010)**	$42,680
• **Percent of single parent households**	31%
• **Unemployment rate (October 2013)**	7%
• **Percent in poverty (<100% FPL)**	15%
• **Percent low-income (<200%)**	38%

Table 12: Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	15%
• **Current Number of uninsured adults**	7,139
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Uninsured population 150-400% FPL**	3,497
• **Uninsured population <150% FPL**	2,621
• **Remaining uninsured After ACA**	4,712
• **Newly insured under 65 After ACA**	2,427

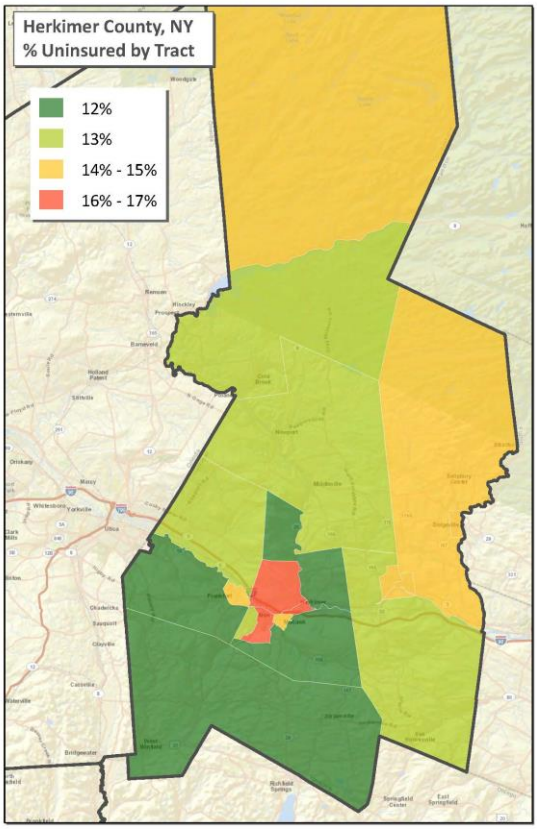


Figure 17: Percent of the Population who are Uninsured in Herkimer County

Supply: Primary care capacity gaps

Table 13: Primary Care Characteristics and Capacity	
• **Penetration into Low Income Population[1]:**	13%
• **Listing of HPSA/MUA Designations:**	• No MUP areas designated • 1 MUA area designated • Entire county HPSA Primary Care/Mental Health designated • No HPSA Dental areas designated
• **FQHC Capacity Located in County**	None
• **Residents in County served by FQHCs**	90 (0% of Total Low-income Population)
• **Listing of Other Essential Safety-Net Providers:**	Basset Healthcare

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

A. Core Provider Capacity

There are no FQHCs or free clinics within Herkimer County. Basset Healthcare is the major provider of primary care in the county and they do offer access to care to Medicaid patients and provide some sliding fee scale care. Basset Healthcare includes a few outpatient locations and a convenient care clinic. Basset Healthcare includes both internal medicine, family practice and pediatrics. They draw patients from Utica and Oneida as well as Herkimer County. The convenient care clinic provides primary care access seven days a week. Little Falls Hospital is a 25 bed critical access hospital affiliated with Basset Healthcare. The hospital provides emergency room services, rehabilitation services, and limited specialties. Other providers include the Herkimer Area Resource Center which provides services for individuals with disabilities. For specialty care, individuals may travel to Cooperstown, Utica, Syracuse, or Albany. It is at least an hour drive to any of these major medical centers outside of the county.

1. Core provider internal operational strengths/weaknesses

Specialty access is considered a challenge in the community, and there is interest in telemedicine to build remote access to the rural county. Current interest and emphasis in telemedicine has been focused on the area of women's health including prenatal care and fetal maternal medicine.

In terms of behavioral health and primary care integration, Basset has been making strides to increase capacity for integrated behavioral health and is planning on expanding from one provider a few times a week to having a licensed clinical social worker co-located with primary care five days a week to serve primarily the adult population.

Access to women's health services has been a challenge in the community. At Basset, they have had one midwife provider leave the area, and have been looking for a replacement. The currently have one physician providing women's health services.

Anecdotally, an interviewee confirmed that the low capacity of primary care providers has in fact lead to large panel sizes for the few available providers. One person interviewed indicated that the large patient panels has the potential to impact quality as there is a perception that providers are not able to spend adequate time with patients. "We do have a lack of primary care, we are not spending adequate time with the clients, and because they are too busy, they are not always looking at the chart before an appointment. There seems to be lack of continuity and historical knowledge."

Staff recruitment, both physicians, and other clinical and support staff were identified as a concern for the area. The rural area has difficulty recruiting new residents as a desirable place to live.

2. External collaboration

In terms of collaboration and information sharing across providers, one interviewee noted "we are still in the reactive rather than proactive stage of communication across providers." For patients with disabilities, the Herkimer Area Resource Center noted that they are the

communication link between a patients visit to the ER and to a primary care provider. To date, the systems are not set up for seamless information across care settings.

Initial groundwork has been laid for stronger collaboration and partnerships. Basset has begun to develop an Accountable Care Organization, and to promote population health activities. The Basset providers are on a single electronic health record, and they are capable of using this record to pull information and study health outcomes of specific target populations.

Improving the process for referrals, care coordination, and care management was recognized as an important goal for the county by more than one interviewee.

B. Capacity of Non-Core (NPI)

Table 14: Total Primary Care Providers in the County (49)	
Provider Type	**Provider Specialty**
CNM: N/A	Core PCP: 35
MD/DO: 29	Internists: 10
NP: 20	OB/GYN: 3
PA: N/A	Unspecified: 1
Data Source: National Provider Identifier Dataset	

Providers outside of Basset Healthcare are very limited. The two other providers are Adirondack community physicians and Slocum-Dickson Medical Group. These providers are not perceived to play a major role in the primary care safety-net.

1. Internal Operational strengths/weaknesses

No information is known on the operational strengths and weaknesses of the non-core providers.

Identification of hot spots and key target populations

Within Herkimer County there are four areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Middleville, Herkimer, Ilion, and Cold Brook. Overall the county has relatively low numbers of racial or ethnic minorities. Danube and several other towns have higher than average percentages of poverty, but do not stand out as having increased health needs.

- Middleville has the highest rates of preventable hospital admissions and ED admissions in the county, with 926 and 5,637 per 100,000 respectively. 616 per 100,000 of those ED admissions were for mental health reasons, and the town also has one of the three highest rates of morbidity/mortality in the county.

- Herkimer has some of the highest rates of poverty in the county, with 22% living below 100% FPL and 46% living below 200% FPL. It is also one of 7 towns to have >500 Medicaid enrollees, and is noted as both a mental health and morbidity/mortality hotspot.

- Ilion does not have a particularly high percentage of persons living under poverty or a large minority community, but yet still has >500 persons enrolled in Medicaid. It also stands out for its large number of ED admissions (2,561/100,000), and particularly for having the highest relative number of substance abuse admissions (139) and third highest mental health related admissions (435).

- Cold Brook has the second highest number of preventable hospital admissions (751/100,000), and also has one of top three morbidity and mortality rates in the county.

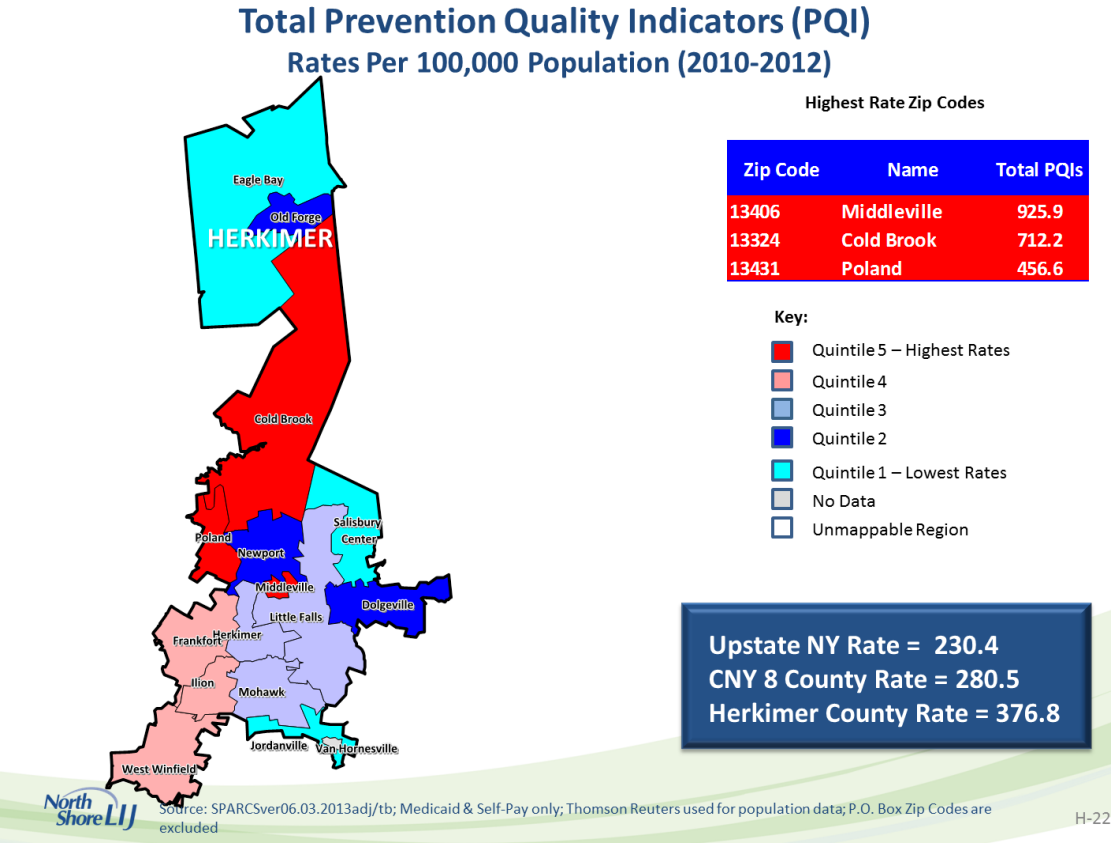


Figure 18: Total Prevention Quality Indicators (rates per 100,000 population) in Herkimer County

Primary Care Demand: Community Need and Barriers to Care

A. Population Characteristics

Table 15. Demographic and Socio-Economic Information	
• **Total population**	73,156
• **Percent male; Percent female**	49% 51%
• **Population <5 years of age; 5-17; 18-64; 65+ years of age**	5% 17% 64% 14%
• **Race (White, Black, Asian)**	95% 2% 1%
• **Hispanic**	2%
• **Foreign-born population**	2%
• **Percent of 5+ year olds that speak non-English language at home**	4%
• **Percent HS diploma or greater**	89%
• **Median household income (in 2010)**	$53,473
• **Percent of single parent households**	32%
• **Unemployment rate (October 2013)**	7%
• **Percent in poverty (<100% FPL)**	10%
• **Percent low-income (<200%)**	29%

Table 16. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	14%
• **Current Number of uninsured adults**	2,274
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Uninsured population 150-400% FPL**	989
• **Uninsured population <150% FPL**	944
• **Remaining uninsured After ACA**	1501
• **Newly insured under 65 After ACA**	773

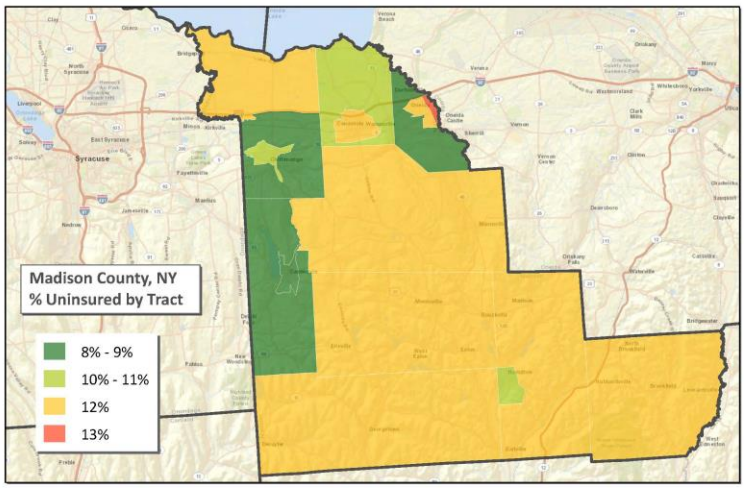


Figure 19: Percent of the Population who are uninsured in Madison County

Supply: Primary Care Capacity Gaps

Table 17. Primary Care Characteristics and Capacity	
• **Penetration into Low Income Population[1]:**	6%
• **Listing of HPSA/MUA Designations:**	• No areas MUP/MUA designated • Two areas HPSA Primary Care designated • Entire county HPSA Mental Health designated • One area HPSA Dental designated
• **FQHC Capacity Located in County**	• None
• **Residents in County Served by FQHCs**	• 506 (2% of total low income population)
• **Core Providers:**	Mary Rose Free Clinic Oneida Healthcare (hospital) affiliated clinics: Canastota –Lenox Health Center, Chittenango Family Care Harden Blvd Health Center Community Memorial Hospital affiliated clinics: Family Health Center of Community Memorial Hospital (3 locations)

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

A. Core Provider Capacity

Madison County is the home to two hospitals (Oneida Healthcare and Community Memorial Hospital) that each has a group of affiliated primary care clinics. As article 28 clinics, all of these clinics have an obligation to provide discounted services to financially eligible residents of Central New York. In addition to these six hospital affiliated clinics, the Mary Rose Center, located in Oneida, provides free primary care services. There are no FQHCs in the county.

1. Core provider internal operational strengths/weaknesses

The Mary Rose Clinic is staffed entirely by volunteer providers, and is affiliated with the Community Action agency in the county. The current hours of the Mary Rose clinic are 4 hours a week on Wednesday afternoons. They generally do not accept appointments and see patients on a first come, first serve basis. The staff includes a volunteer health educator to work with patients on smoking cessation, and outreach and enrollment facilitators to support access to coverage who may be eligible. While the clinic does not offer behavioral health on site, the clinic has established referral relationships with a nearby mental health services agencies that will accept their patients at limited or no cost. In terms of specialty services, the clinic has developed relationships with the nurse referral services at Upstate Medical Center in Syracuse and they have been able to work collaboratively to provide financial assistance to those in need of specialty access. For dental services, they have worked with the Salvation Army to provide access to a local dentist. They have considered expanding to offer dental services but the costs of equipment have been prohibitive. In fall 2013, the clinic expanded into a larger facility space through the support of the Gorman Foundation. This space will have the benefit of sharing this space with several other social services agencies that support health, literacy, early childhood education, and consumer services.

2. External collaboration

As noted in the operational strengths, the Mary Rose Clinic has established a number of collaborative relationships with local providers to facilitate access to behavioral health, dental, and specialty services for their patients. In addition, their affiliation with the county Community Action Agency supports access to enabling services such as enrollment in food stamps and case management services. To date, the Mary Rose Clinic has not participated in the New York Regional Association of Free Clinics.

B. Capacity of Non-Core (NPI)

Table 18. Total Primary Care Providers in the County (85)

Provider Type	Provider Specialty
• CNM: N/A	• Core PCP: 51
• MD/DO: 51	• Internists: 12
• NP: 29	• OB/GYN: 8
• PA: 5	• Unspecified: 14

Data Source: National Provider Identifier Dataset

No information is available on the capacity of the non-core providers in the county.

1. Internal Operational strengths/weaknesses

No information is available on the capacity of the non-core providers in the county

Identification of hot spots and key target populations

Within Madison County there are two areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Oneida City and Eaton Town. Brookfield Town has overall high levels of poverty and significant minority populations, but does not rank as having any of the major indicators of increased healthcare needs. In contrast, several other areas do not have particularly high levels of poverty or typically identified at-risk communities, but show up for several of the indicators of high healthcare needs, including >500 Medicaid enrollees, preventable hospital admissions, high numbers of ED admissions, and high rates of morbidity and mortality. These areas are: Bouckville, Munsville, Hubbardsville, North Brookfield, and Castanosa.

- Oneida City has the fourth lowest median household income in the county, and is one of 6 areas with >500 Medicaid enrollees. It has the third highest number of preventable hospital admissions, with 297/100,000, and the second largest number of ED admissions, with 1,704/100,000 in the past year, 99 of which were for substance abuse and 265 of which were for mental health reasons (more than 80 more per 100,000 than the next highest locality). It also had the second highest rates of morbidity and mortality of all towns in the county.

- Eaton town has the second-highest percent of racial and ethnic minority communities in the county, at 13% for each category. It also has a high percentage of its population living in poverty, with 16% below 100% FPL, and 44% below the 200% level. It has the second lowest median household income in the county behind Brookville and is noted as a morbidity and mortality hotspot.

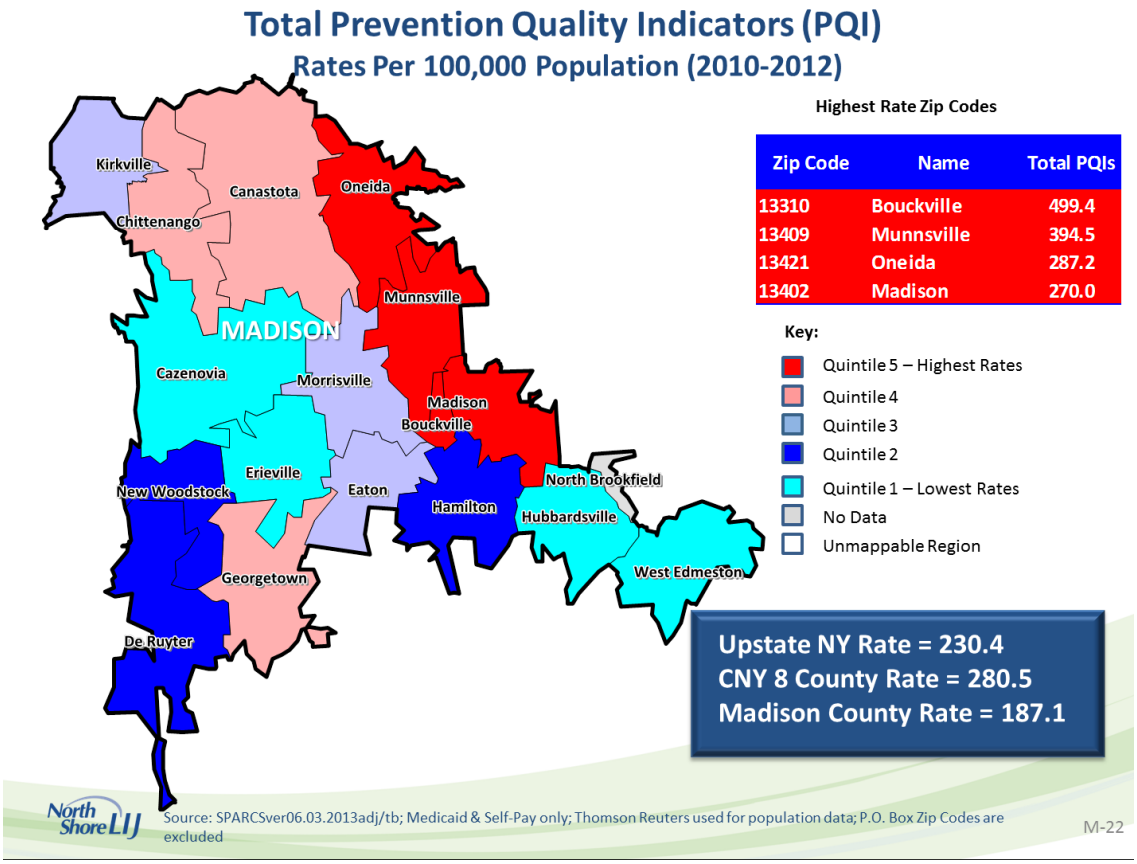


Figure 20: Total Prevention Quality Indicators (rates per 100,000 population) in Madison County

Oneida County

Primary Care Demand: Community need and barriers to care

A. Population Characteristics

Table 19. Demographic and Socio-Economic Information	
• **Total population**	234,549
• **Percent male; Percent female**	50%; 50%
• **Population <5 years of age; 5 to 17; 18 to 64; 65+ years of age**	6%; 16%; 62%; 16%
• **Race (White, Black, Asian)**	87%; 6%; 3%
• **Hispanic**	5%
• **Foreign-born population**	7%
• **Percent of 5+ year olds that speak non-English language at home**	11%
• **Percent HS diploma or greater**	86%
• **Median household income (in 2011)**	48,382
• **Percent of single parent households**	37%
• **Unemployment rate (October 2013)**	7%
• **Percent in poverty (<100% FPL)**	15%
• **Percent low-income (<200%)**	34%

Table 20. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	13%
• **Current Number of uninsured adults**	13264
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Uninsured population 150-400% FPL**	5,759
• **Uninsured population <150% FPL**	5,257
• **Remaining uninsured After ACA**	8,753
• **Newly insured under 65 After ACA**	4,510

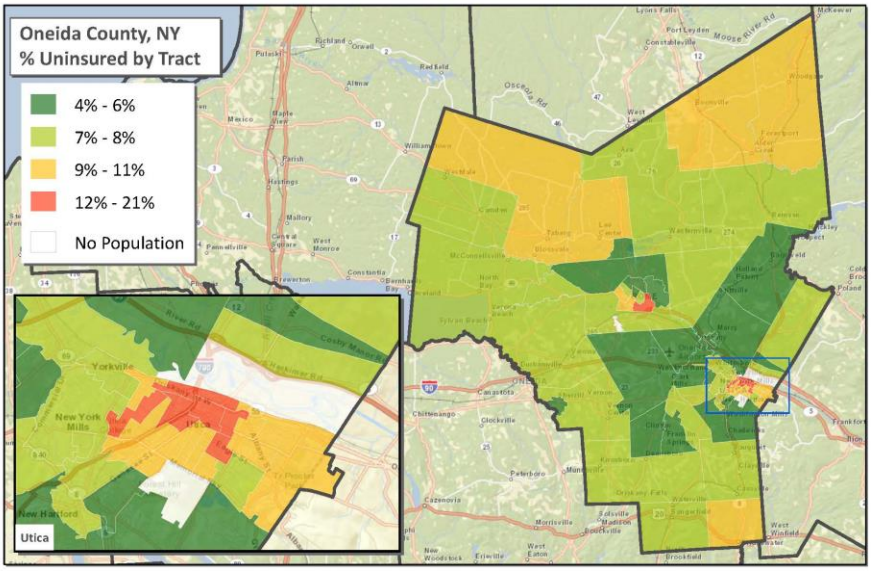


Figure 21: Percent of the Population who are uninsured in Oneida County

Supply: Primary care capacity gaps

Table 21. Primary Care Characteristics and Capacity	
Penetration into Low Income Population[1]:	32%
HPSA/MUA Designations:	• No areas designated MUP • 3 areas designated MUA • 5 areas designated HPSA Primary Care • Entire county HPSA Mental Health designated • No Dental HPSAs
FQHC Capacity Located in the County:	• Regional Primary Care Network
Residents in the County served by FQHCs	• 4,287 (6% of total low income population)
Listing of Other Essential Safety-Net Providers:	• St. Elizabeth Medical Center Community-based primary care locations • Faxton St. Lukes Hospital Community-based primary care locations • Rome Memorial Hospital/Rome Medical Group

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.

2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

Core Provider Capacity

Oneida County's safety-net is made up of a diverse group of providers, including per our categorization methodology practices that fall into the "core", "essential", and "contributing" safety-net provider categories. The safety-net system in the County has two hubs. The largest is in Utica, which is the population center of the County. It is home to a large and growing low-income population including one of the largest and fastest growing immigrant populations in New York State. As mentioned above, according to UNHCR (The UN Refugee Agency), Bosnian immigrants constitute about 10% of the total population of Utica. There are also large numbers of refugees/immigrants from Somalia, Burma, and Thailand. The second hub is in the City of Rome, northwest of Utica.

The County has an FQHC provider that operates in Utica, called Regional Primary Care Network (RPCN), which is based in Rochester and has more than twenty clinic sites throughout the region. RPCN opened its Utica satellite site in 2010 and currently serves a relatively modest patient population (approximately 5,000 patients), given the size of the cities low-income population. The majority of the low-income population in the County is served by practice sites that are affiliated with the County's three hospitals; St. Elizabeth Medical Center and Faxton St. Lukes Healthcare in Utica and Rome Memorial Hospital in Rome. In Utica, St. Elizabeth Medical Center's network of primary care practice sites serves the bulk of the low-income population, including a large portion of the refugee/immigrant population. These sites are New York State, Article 28 safety-net clinics, and approximately thirty-percent (30%) of the practices' patients are Medicaid-insured. Faxton St. Lukes also operates a number of clinics that serve a smaller portion of the Medicaid-insured. In Rome, Rome Memorial Hospital is the leading safety-net provider and operates a large family medicine practice clinic in Rome as well as a number of other primary care practice affiliates. Other than these hospital affiliated networks, the County safety-net is made up of a large number of independent, private practice sites that individually do not have a substantial impact but collectively serve a large number of Medicaid-insured or underinsured patients with high co-pays and deductibles.

Core provider internal operational strengths/weaknesses

The project team talked primarily with senior administrative staff at only a select number of service sites in the County. Accordingly, very limited information is available on the operational strengths/weaknesses of the core providers in the county. The FQHC and the hospital-affiliated practice sites all have electronic medical records and have quality assurance and performance improvement mechanisms in place. These practice sites are all taking steps to participate in meaningful use and, as such, are tracking clinical measures. The FQHC as a requirement of their funding is providing case management and care management services, as well as a range of other enabling services to ensure that care is patient-centered and well-coordinated. The hospital practice sites are trying to adapt to various components of the ACA and develop patient-centered operations. Despite these efforts, meeting the needs of the low-income population in Utica, given the large number of refugees, immigrants, and low-income populations in the general community

is very challenging. Operations are definitely constrained and practice sites struggle to meet the needs of the population and provide the highest quality, most coordinated, patient-centered care. The smaller, independent, private practice sites in the County, very considerably in their operational capacity and strength but it is fair to say that most do not have sophisticated or robust, PCMH-driven operations.

External collaboration

Based on the limited number of interviews that we conducted, we did not see evidence of a great deal of collaboration across the primary care safety-net. There were signs that each of the individual primary care practice operations collaborated well with the social service and public health systems in the region but it seemed that there was limited primary care planning or collection action occurring with respect to the safety-net, particularly in the Utica/Rome area.

Capacity of Non-Core (NPI)

Table 22. Total Primary Care Providers in the County (435)

Provider Type	Provider Specialty
CNM: 2	Core PCP: 273
MD/DO: 224	Internists: 60
NP: 192	OB/GYN: 32
PA: 17	Unspecified: 70
Data Source: National Provider Identifier Dataset	

Internal Operational strengths/weaknesses

Limited information is known on the operational strength of the private providers. As noted above, several of the private providers have recently opened their practices to Medicaid patients.

Identification of hot spots and key target populations

Within Oneida County there are two areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Utica City and Chadwicks. Beyond Utica many other cities and towns in Oneida stand out as having extremely high healthcare needs on one or more measures. For example Rome, Clinton, New York Mills, Yorkville, New Hartford, Boonville, Taberg, and Camden all have >1000 Medicaid enrollees and recipients, Rome, Woodgate, Bayfield, and Barneveld all have very high numbers of preventable hospital admissions per hundred thousand. A variety of zip codes also show up as having high ED admissions for both substance abuse and mental health disorders, suggesting that some of these issues spread beyond specific locations.

- Utica City is the largest city in the county, housing more than a quarter of its total population, and is by far the area of highest need. It has a 29% racial and 33% ethnic minority population and 16% are foreign born. Greater than 50% of its residents live below the 200% FPL, with an additional 29% below the 100% FPL. Its median

household income is the lowest in the county at just $32,050 per year, and it has a 40% Medicaid enrollment rate. As can be seen on the map below, Utica also has the highest number of preventable hospital admissions each year, at more than 1 per 100 persons per year in some of its zip codes (13501 and 13502). These same regions also have the highest number of substance abuse and mental health disorder related ED visits and admissions of any zip codes in the county, with more than 1 per 100 mental disorder visits. These areas have also been flagged as hotspots because of their high rates morbidity and mortality.

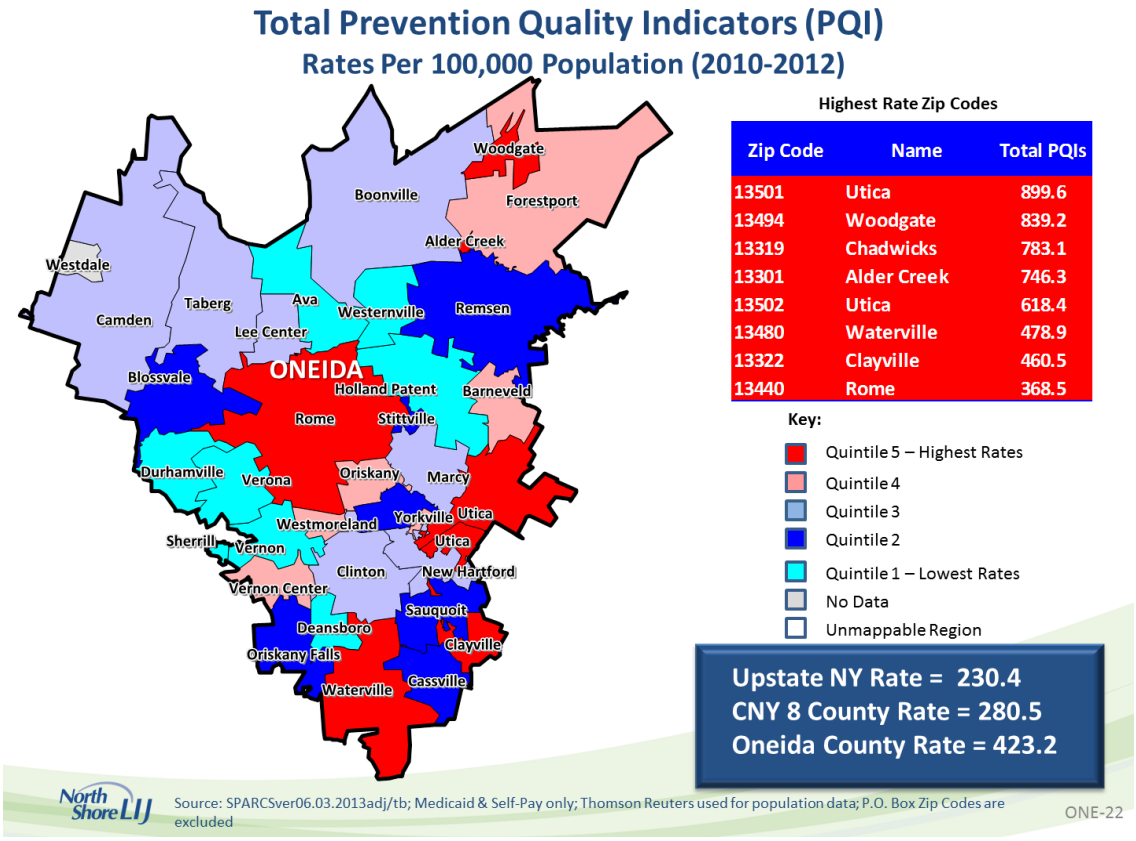


Figure 22: Total Prevention Quality Indicators (rates per 100,000 population) in Oneida County

Primary Care Demand: Community Need and Barriers to Care

Population Characteristics

Table 23. Demographic and Socio-Economic Information	
• **Total population**	464,921
• **Percent male; Percent female**	48%; 52%
• **Population <5 years of age; 5 to 17; 18 to 64; 65+ years of age**	6%; 17%; 63%; 14%
• **Race (White, Black, Asian)**	82%; 11%; 3%
• **Hispanic**	4%
• **Foreign-born population**	7%
• **Percent of 5+ year olds that speak non-English language at home**	10%
• **Percent HS diploma or greater**	89%
• **Median household income (in 2011)**	52,636
• **Percent of single parent households**	37%
• **Unemployment rate (October 2013)**	7%
• **Percent in poverty (<100% FPL)**	14%
• **Percent low-income (<200%)**	29%

Table 24. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	15%
• **Current Number of uninsured adults**	43454
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Uninsured population 150-400% FPL**	20,079
• **Uninsured population <150% FPL**	15,526
• **Remaining uninsured After ACA**	28,686
• **Newly insured under 65 After ACA**	14,774

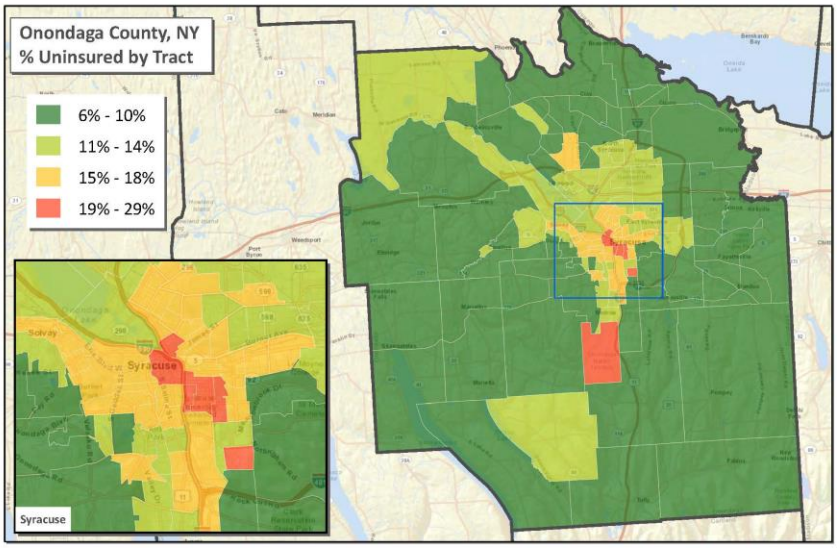


Figure 23: Percent of the Population who are uninsured in Onondaga County

Supply: Primary care capacity gaps

Table 25. Primary Care Characteristics and Capacity	
Penetration into Low Income Population[1]:	32%
HPSA/MUA Designations:	• No areas designated MUP • 2 areas designated MUA • 3 areas designated HPSA Primary Care • 3 areas designated HPSA Mental Health • 2 areas designated HPSA Dental
FQHC Capacity Located in the County:	• Syracuse Community Health Center
Residents in County served by FQHCs	39,681 (30% of low income population)
Core Providers:	• St. Joseph's Hospital Health Center • Amaus Clinic • Rahma Clinic • Poverello Clinic • Christian Health Services of Syracuse

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

B. Core Provider Capacity

Syracuse is the population center for Onondaga County as well as the hub for the central New York region. At the heart of Syracuse's safety-net is the Syracuse Community Health Center,

which provides comprehensive, medical, dental, and behavioral health services to nearly 40,000 patients. The health center operates five, full-service primary care clinics, eight school-based clinics, and three, small satellite clinics in Syracuse's underserved, low-income communities. Syracuse Community Health Center is also the parent company for SCHC Total Care, which is Central New York's largest Medicaid Managed Care Plan.

In addition to Syracuse Community Health Center, the Syracuse, Onondaga County, and the central New York regional health system is anchored by four large to mid-sized hospitals that operate in Syracuse and provide a full range of services, including tertiary services. Of these four hospitals, St. Joseph's Hospital Health Center was the only one recognized as an essential part of the safety-net. While the other hospitals (Crouse Hospital, Upstate University Hospital, Community General Hospital) have affiliated primary care practice sites that serve some proportion of Medicaid-insured patients, St. Joseph's is the only hospital that has made significant efforts to reach out to and grow its clinics in underserved communities. An integral part of St. Joseph's safety-net program is its family medicine and dental residency programs, which operate in partnership with the SUNY Upstate Medical University in Syracuse. In addition to these large players there are a number of smaller, safety-net, free clinics that play a small but important role serving the uninsured and specific demographic or cultural segments of the County's population. The free clinics that were mentioned in our interviews and site visits included Amaus Clinic, Rahma Clinic and Poverello Clinic, and Christian Health Services of Syracuse, who all operate in Syracuse. Finally, Lifetime Health Medical Group is private provider that operates in downtown Syracuse and serves Medicaid-insured patients. A number of interviewees referenced them as part of the safety-net.

1. Core provider internal operational strengths/weaknesses

Syracuse Community Health Center and St. Joseph's Hospital Health Center are both large mature health organizations that provide comprehensive services across multiple sites. They have robust electronic medical record systems and are working diligently to apply PCMH principles throughout their practice locations. They both are engaged in efforts to provide integrated, coordinated services to their patients, including social service case management, chronic disease management, behavioral health, and dental services. Both have integrated mental health programs and dental services. Both organizations are also taking major steps to reach out to underserved communities and engage those in need in appropriate primary care services. St. Joseph's has been working proactively to divert patients entering through their emergency department for primary care services to other full service primary care practice sites. Both organizations struggle to serve all those in need and would agree that they have considerable room for improvement with respect to implementing PCMH operations across all of their practice sites but they are working proactively to do so.

There is considerable variation across the free clinic practice sites that operate in Syracuse but it fair to say that these clinic sites are less sophisticated and do not have as robust medical record or quality improvement systems in place. Their focus is on providing quality, culturally appropriate primary care and specialty care services to those who are uninsured and have limited access to care, regard regardless of the patient's ability to pay, and regardless of religion, race, gender or

background. They operate with mostly volunteer providers and therefore are less able to focus on team-based approaches or continuity

2. External collaboration

Nearly universally across our interviews there was a belief that there needed to be great collaboration across the health and social service safety-net in Syracuse and throughout Onondaga County. There were certainly isolated examples of coordination and partnership across service providers but most of our interviewees suggested that there was considerable room for improvement. In particular, most interviewees commented that Syracuse Community Health Center needed to take steps to better coordinate their care with other stakeholders and to be better collaborators, particularly given the dominant role they play in the community.

B. Capacity of Non-Core (NPI)

Table 26. Total Primary Care Providers in the County (1251)	
Provider Type	**Provider Specialty**
CNM: 16	Core PCP: 778
MD/DO: 546	Internists: 130
NP: 607	OB/GYN: 123
PA: 82	Unspecified: 220
Data Source: National Provider Identifier Dataset	

1. Internal Operational strengths/weaknesses

Limited information is known on the operational strength of the private providers. As noted above, several of the private providers have recently opened their practices to Medicaid patients.

Identification of hot spots and key target populations

Within Onondaga County, Syracuse City has been identified as being a major hot spot based on socioeconomic and healthcare utilization data. Quite a few other cities and towns have large number of Medicaid enrollees or large minority populations, but none come close to Syracuse in terms of need.

- Syracuse City is the largest city in the county, housing more than a quarter of its total population. It has a 42% racial and 46% ethnic minority population and 10% are foreign born. Greater than 54% of its residents live below the 200% FPL, with an additional 32% below the 100% FPL. Its median household income is the lowest in the county at just $31,689 per year, and at least five of its zip codes have a 40% Medicaid enrollment rate, with others having >1000 Medicaid recipients as well. As can be seen on the map below, Syracuse also has the highest number of preventable hospital admissions each year-- at or close to 1 per 100 persons per year in some of its zip codes. The area also has every zip code on the list of those with the highest number of substance abuse and mental health disorder related ED visits and admissions, with several areas having well above 1 mental

disorder and 1 substance use visit per 100 persons per year (one zip code is as high as 3.5/100). Syracuse has also been flagged as having the highest rates of morbidity and mortality in the region as well.

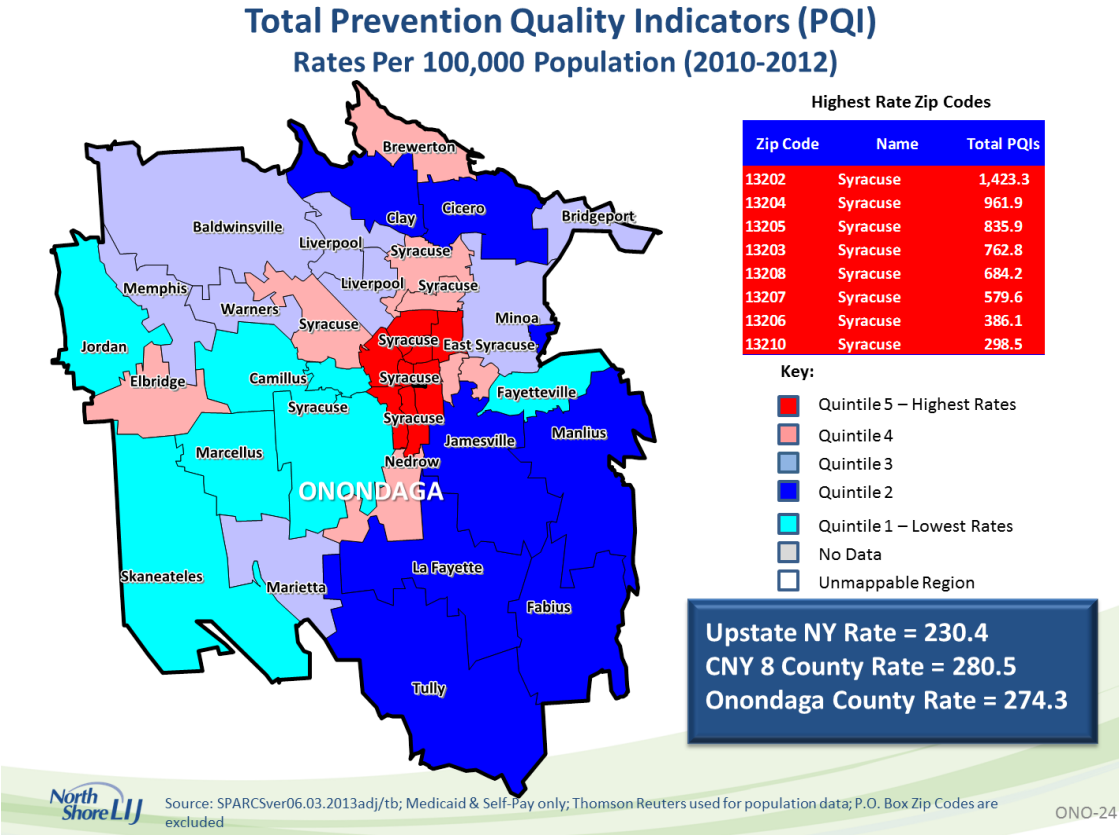


Figure 24: Total Prevention Quality Indicators (rates per 100,000 population) in Onondaga County

Primary Care Demand: Community need and barriers to care

A. Population Characteristics

Table 27. Demographic and Socio-Economic Information	
• **Total population**	122,206
• **Percent male; Percent female**	50%; 50%
• **Population <5 years of age; 5 to 17; 18 to 64; 65+ years of age**	6%; 18%; 64%; 12%
• **Race (White, Black, Asian)**	97%; 1%; 1%
• **Hispanic**	2%
• **Foreign-born population**	2%
• **Percent of 5+ year olds that speak non-English language at home**	4%
• **Percent HS diploma or greater**	86%
• **Median household income (in 2011)**	47,036
• **Percent of single parent households**	32%
• **Unemployment rate (October 2013)**	8%
• **Percent in poverty (<100% FPL)**	16%
• **Percent low-income (<200%)**	36%

Table 28. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	14%
• **Current Number of uninsured adults**	10660
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Uninsured population 150-400% FPL**	4,592
• **Uninsured population <150% FPL**	4,725
• **Remaining uninsured After ACA**	7,037
• **Newly insured under 65 After ACA**	3,624

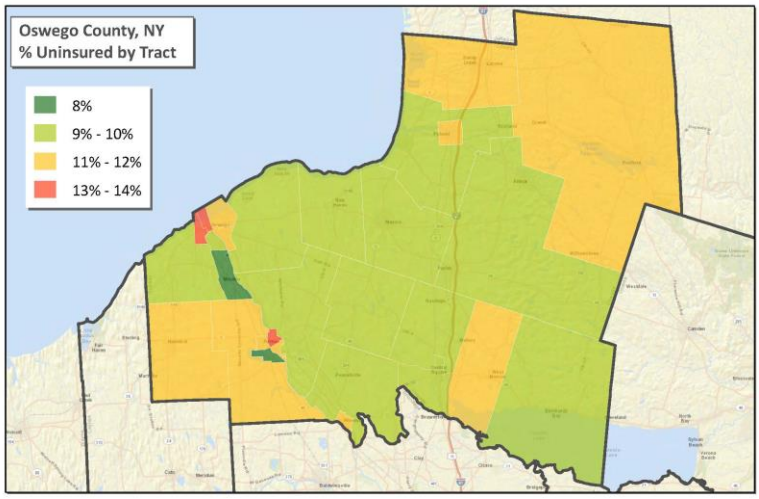


Figure 25: Percent of the Population who are uninsured in Oswego County

Supply: Primary Care Capacity Gaps

Table 29. Primary Care Characteristics and Capacity	
Penetration into Low Income Population[1]:	67%
HPSA/MUA Designations:	• No areas designated MUP • 1 area designated MUA • Entire county designated HPSA Primary Care and Mental Health • 1 area designated HPSA Dental
FQHC Capacity Located in County	• Northern Oswego County Health Services, Inc. • Finger Lakes Migrant Health Project
Residents in County served by FQHCs	• 13,698 (33% of low income population)
Core Providers:	• Oswego Hospital Outpatient Primary Care Practice Sites

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

B. Core Provider Capacity

The safety-net in Oswego County is relatively strong and is made up of a diverse group of providers, including two FQHCs, a network of hospital-affiliated practice sites, and a number of independent, private providers. The safety-net is anchored by the Pulaski Health Center, which is operated by an FQHC called Northern Oswego County Health Services, Inc. (NOCHSI) and serves nearly 12,000 patients. Pulaski Health Center provides comprehensive services, including

medical, dental, and behavioral health services to Northern Oswego and Southern Jefferson County residents, regardless of their ability to pay. In addition to health care and dental services at Pulaski Health Center, NOCHSI operates school based health centers at Pulaski and Sandy Creek Schools, and the regional high school. Finger Lakes Migrant Health Care Project is another FQHC that operates in Oswego County. They are based in Cayuga County but operate a small satellite site in Fulton that serves the region's migrant farm workers.

In addition to these FQHC providers the County safety-net includes numerous practice sites operated by Oswego Hospital, which is part of a small integrated delivery system called Oswego Health that operates a nursing home, and assisted living site, home health services, and outpatient services, as well as hospital inpatient and emergency services. Oswego Hospital operates numerous outpatient primary care practices that operate throughout the County and serve a significant portion of Medicaid-insured patients. In addition, there are a handful of independent, private practice sites that collectively have an impact on the safety-net.

1. Core provider internal operational strengths/weaknesses

Limited information is known on the operational strength of the core safety-net providers. The interviewees that the JSI project team talked with could not speak to operational issues.

2. External collaboration

For a relatively small, rural county Oswego County seems to have a well-integrated safety-net that collaborates and integrates services effectively. The hospital and the main FQHC have a strong history of collaboration. In addition the fact that the Hospital is owned by an integrated delivery system allows for broader collaboration across different types of providers.

B. Capacity of Non-Core (NPI)

Table 30. Total Primary Care Providers in the County (133)

Provider Type	Provider Specialty
CNM: 1	Core PCP: 96
MD/DO: 67	Internists: 17
NP: 54	OB/GYN: 7
PA: 11	Unspecified: 13

Data Source: National Provider Identifier Dataset

As mentioned above, in Oswego County there are a number of private physicians and according to those we talked to do collectively serve a substantial number of low-income, Medicaid-insured patients.

1. Internal Operational strengths/weaknesses

Limited information is known on the operational strength of the private providers.

Identification of hot spots and key target populations

Within Oswego County there are several areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Fulton, Mallory, Phoenix, Richmond, and Altmar. Oswego City has large racial and ethnic minority populations, high rates of poverty, and a large Medicaid population, but this is more likely due to its larger overall population than any outsize healthcare needs or overall lack of coverage.

- Fulton has the highest poverty rates in the county, with 29% below 100% FPL and 47% below 200% FPL. It has the lowest median household income, at $34593, and has more than 1000 Medicaid enrollees, recipients, and safety-net recipients. It has the third highest number of preventable hospital admissions, and the largest number of mental health related ED admissions, at a rate of 871.2 per 100000 per year. It also has the second highest number of mental health disorder visits (572 per 100000), and is the only city in Oswego County labeled as a morbidity and mortality hot spot.

- Mallory has the second highest number of preventable hospital admissions, and the highest number of both mental health visits and substance abuse admissions in the county, with mental health disorder visits at rates of 1.2% (1998 per 100000) per year.

- Phoenix has over 1000 Medicaid enrollees and recipients, and has among the highest number of both mental health and substance use admissions in the county.

- Richland has the highest number of preventable hospital admissions of any city (575/100000), and has high numbers of mental health admissions as well (681/100000).

- Altmar is one of the highest four cities for preventable hospital admissions, and also stands out as having a quite a few substance abuse (326/100000) and mental health (800/100000) related ED admissions.

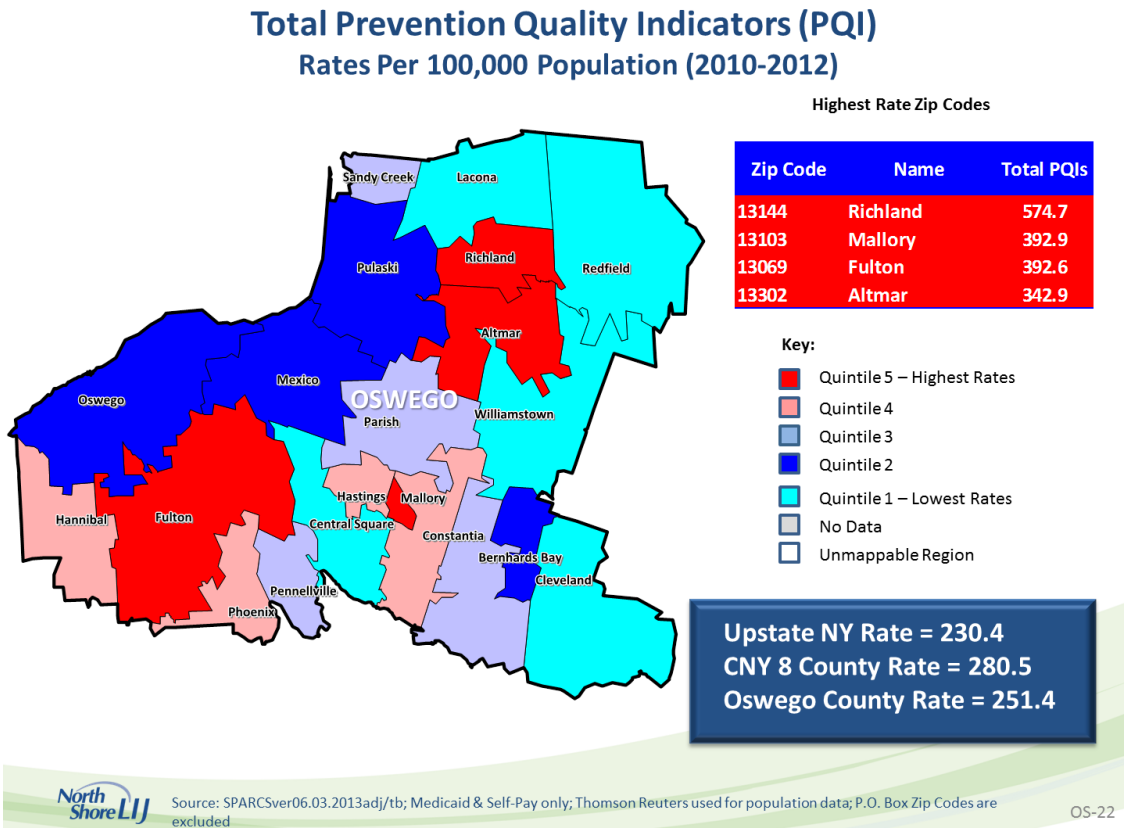


Figure 26: Total Prevention Quality Indicators (rates per 100,000 population) in Oswego County

Primary Care Demand: Community need and barriers to care

A. Population Characteristics

Table 31. Demographic and Socio-Economic Information	
• **Total population**	101,033
• **Percent male; Percent female**	50% 50%
• **Population <5 years of age; 5-17; 18-64; 65+ years of age**	4% 12% 73% 11%
• **Race (White, Black, Asian)**	83% 4% 9%
• **Hispanic**	4%
• **Foreign-born population**	13%
• **Percent of 5+ year olds that speak non-English language at home**	16%
• **Percent HS diploma or greater**	93%
• **Median household income (in 2010)**	$49,789
• **Percent of single parent households**	37%
• **Unemployment rate (October 2013)**	5%
• **Percent in poverty (<100% FPL)**	6%
• **Percent low-income (<200%)**	3%

Table 32. Insurance Information (Now and After Implementation of ACA)	
Current Insurance Information	
• **Percent uninsured adults (2010)**	14%
• **Current Number of uninsured adults**	6,971
Newly Insured and Remaining Uninsured After Implementation of ACA	
• **Uninsured population 150-400% FPL**	3,426
• **Uninsured population <150% FPL**	2,507
• **Remaining uninsured After ACA**	4,601
• **Newly insured under 65 After ACA**	2,371

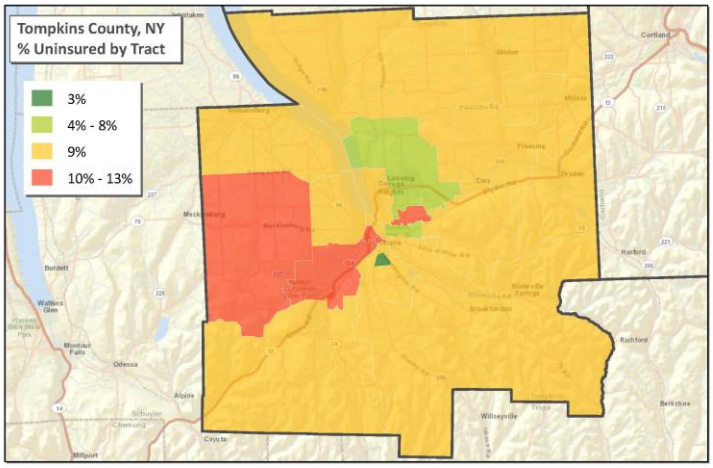


Figure 27: Percent of the Population who are uninsured in Tompkins County

Supply: Primary Care Capacity Gaps

Table 33. Primary Characteristics and Capacity	
• **Penetration into Low Income Population[1]:**	N/A
• **HPSA/MUA Designations:**	• 1 area designated MUP designated • No areas MUA designated • Entire county HPSA Primary Care/Mental Health designated • 1 area HPSA Dental designated
• **FQHC Capacity Located in County**	None
• **Residents in County served by FQHCs**	1,025 (3% of Total Low-income Population)
• **Listing of Other Core SN Providers:**	Ithaca Health Alliance Cayuga Medical Associates Dreydon Medical Associates Family Medical Associates

1. Calculated from JSI 2013 Provider survey. This is the ratio of Medicaid patients served by core providers to the total population below 200% FPL from the US census. No Tompkins county providers responded to the survey.
2. Calculated from the 2012 UDS mapper of UDS data. This is the ratio of total FQHC users in the county to the total low income population.

B. Core Provider Capacity

The Ithaca Health Alliance-free clinic is the only provider in the county that accepts all patients without regard to their ability to pay. There is no Federally Qualified Health Center in the county. Ithaca Health Alliance provides services to primarily adults, and is staffed entirely by volunteer providers. The clinic is open two half-days a week, and is focused exclusively on the uninsured population. They are extremely well respected and serve an important role in the County but, on their own, have a limit impact on the low-income population overall. Other than the Health

Alliance there are a number of large hospital-affiliated practices that serve some proportion of Medicaid patients as well as a large number of independent, private practice providers that contribute to the safety. The JSI project team was not able to capture data on number of patients served by payer-type from these private, hospital-based and independent primary care providers. However, based on numerous conversations with health and social service stakeholders, the project team got a clear sense that the County has a robust and strong primary care safety-net. The morbidity and mortality indicators would support this as the PQI indicators and other morbidity and mortality indicators are relatively very high, throughout the County. This sense is further bolstered by the fact that there are sizeable numbers of low-income residents. The County is relatively affluent overall, due to the fact that there are a large numbers of residents affiliated with the universities in Ithaca that are in higher income brackets, but the proportion of the population living in low-income households is not dramatically different than other Counties in the region.

1. Core provider internal operational strengths/weaknesses

The Ithaca Health Alliance provides walk-in appointments for acute and chronic health needs. They do not accept appointments, and is not a full service primary care provider. All provider services are volunteer. As a free clinic, their largest challenge is funding the operational staff to maintain systems and services. The hospital-affiliated clinics have robust operations and are well-known in the region for their efforts in collaboration with the Cayuga Medical Center to adapt to the ACA. Unique to central New York, physicians in Ithaca and beyond have organized a physician hospital organization (PHO),that is based in Ithaca. This PHO, Cayuga Area Plan, has been focused on clinical integration with the hospital and improving both quality and cost in the community. While the PHO and hospital-affiliated practice sites have embraced patient-centered medical home principles, little is known about the extent to which these have trickled down to low-income populations and affected the safety-net.

External collaboration

Collaboration in Tompkins County is viewed as strength by several of those we interviewed. There is an active safety-net coalition in the County, called the Human Services Coalition of Tompkins County, that has developed a county-wide plan to expand and strengthen the safety-net. The coalition has worked to reduce barriers to care, promote better integration and coordination of services, and expanding access for those who are most vulnerable, particularly for elder and low-income populations. As mentioned above, the hospital and the PHO are recognized for their forwarding thinking efforts to develop an integrated delivery system in the area. While there is not an active ACO in the county, this physician network and relationship with the hospital has supported integration of health information technology through a common disease registry system (Crimson). Cayuga Medical Center is also in the process of looking at how affiliations with other providers in surrounding counties may help strengthen smaller providers and strengthen their ability to serve their communities.

B. Capacity of Non-Core (NPI)

Table 34. Total Primary Care Providers in the County (188)	
Provider Type	**Provider Specialty**
CNM: 2	Core PCP: 120
MD/DO: 106	Internists: 32
NP: 75	OB/GYN: 18
PA: 5	Unspecified: 18
Data Source: National Provider Identifier Dataset	

The majority of primary care in Tompkins County is provided through private physicians. The largest primary care providers include Family Medical Associates and Dryden Family Medicine, which are both very closely affiliated with Cayuga Medical Center. In addition, many physicians in the county are part of Cayuga Medical Associates, a physician group that includes both adult internal medicine specialty care that is affiliated with Cayuga Medical Center at Ithaca. The physicians of the Cayuga Medical group are employed by the hospital, and have a long history of being well organized and connected with the hospital.

1. Internal operational strengths/weaknesses

The PHO structure in the county has supported the county in their physician recruitment and retention of both internal medicine and specialty providers. In particular this model has been essential for specialty provider recruitment. Cayuga Medical Associates does have contracts with the managed Medicaid program and accepts Medicaid patients. They do not however have a standard sliding fee scale or mission to provide services to the uninsured. As mentioned above, Cayuga Medical Associates practices are able to share clinical information through a data warehouse for quality data (Crimson). While the hospital sees care coordination and management of ER utilization as important, they do not have any specific programs in place to address these components of primary care access. Limited information is known on the private providers in the county, however both Dryden Medical Associates and Family Medicine Associates offer services 6 days a week, and Dryden Medical Associates commits to having same day appointments. Family Medicine Associates is a certified patient centered medical home. From the perspective of the hospital, most of the practices in the area have achieved primary care medical home status.

Identification of hot spots and key target populations

Within Tompkins County there are four areas that have been identified as being of particularly high need based on socioeconomic and healthcare utilization data. These are Ithaca City, Groton town, Dryden town, and Newfield.

- Ithaca City is the largest city in Tompkins County, home to about a quarter of its total population. It has the highest racial and ethnic minority populations in the county (27% and 32% respectively), and 18% of its population is foreign born. (Overall the county has relatively high numbers of racial and ethnic minorities, as well as foreign born persons, as

compared to other counties in the region.) It also has the highest rates of poverty with 45% living below 100% FPL and 58% below 200% FPL, and has by far the lowest income per household, at $28,940, over $20,000 below the county average. Unsurprisingly then it also is one of several areas with >500 Medicaid enrollees.

- Groton has 33% of its population living below the 200% FPL, and has the 4th lowest median household income. Twenty-seven percent of its population is under the age of 18, and >500 people in Groton are currently enrolled in Medicaid. It is notable for its high levels of ED and preventable hospital admissions (137 and 1017 per 100000 respectively, second in both categories overall). It also has a high number of mental health related admissions, at 259 per 100000.

- Dryden has slightly above average numbers of racial and ethnic minorities, and 21% of its population is under the age of 18. It is >500 Medicaid enrollees, and the highest numbers of ED and mental health related admissions in the county, at 1704 and 278 per 100000.

- Newfield, like Ithaca, has high poverty rates (14% <100% FPL; 45% <200% FPL), the second lowest average household income, 28% percent of its population under the age of 18, and >500 Medicaid enrollees.

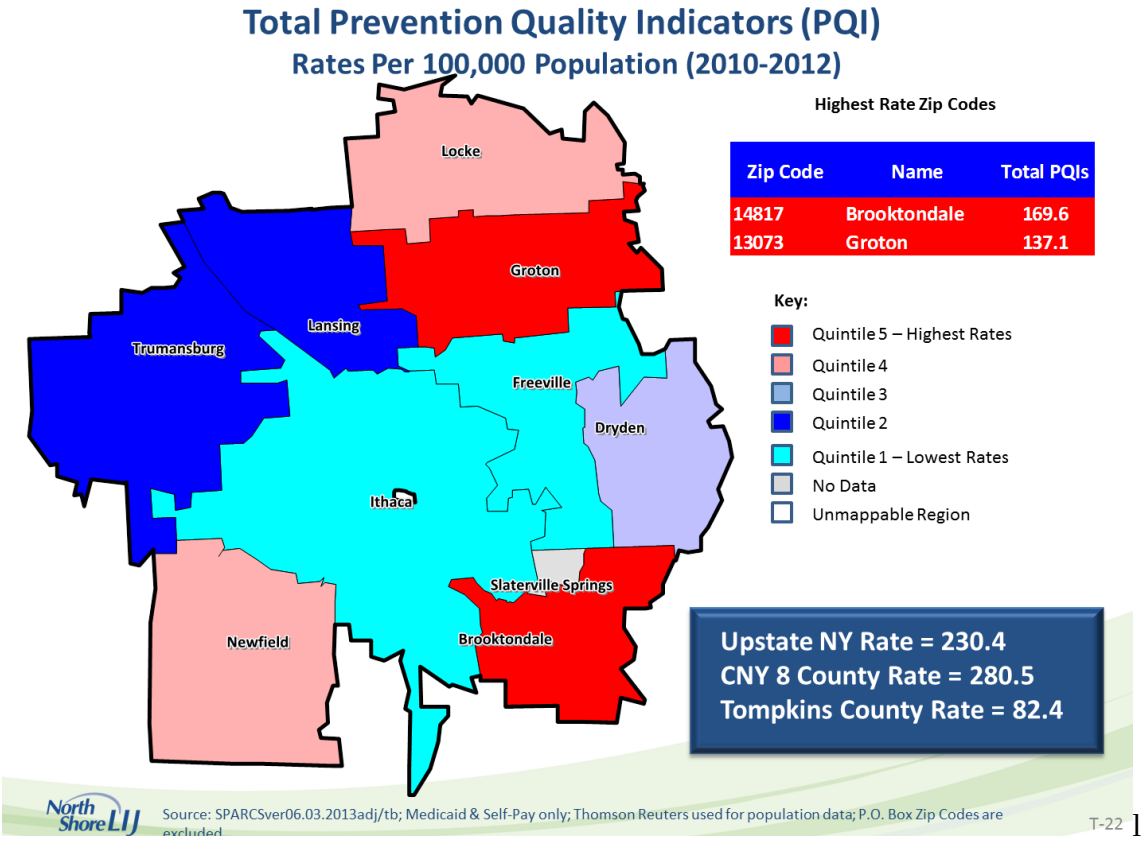


Figure 28: Total Prevention Quality Indicators (rates per 100,000 population) in Tompkins County

V. RECOMMENDATIONS

The findings above highlight the fact that there is a strong, diverse group of safety-net providers operating throughout the region, and all counties in central New York have at least some degree of access to the safety-net. There has been substantial safety-net growth over the past five years, driven by FQHC providers and a number of hospital-based and health plan integrated delivery systems. Despite these advancements, there is still substantial unmet need throughout the region and limited primary care capacity in some communities. The assessment also describes the major opportunities and challenges for most of the region's primary care safety-net practices, and what they need do in order to achieve the triple aims of improving the health of the population, enhancing the patient experience, and creating efficient, cost-effective operations. Finally, the assessment provides insight into the strength and capacity of the central New York primary care safety-net in the context of PPACA and explores how prepared the safety-net is to respond to and take advantage of health reform.

The following are recommendations for ways that primary care safety-net providers and other stakeholders in the region to strengthen and build the capacity of the safety-net and respond to PPACA and new health care trends. Each recommendation includes examples of effective programs from communities around the country that JSI suggests as potential models. It is possible that some approaches have already been applied or tested in the region.

1. Strengthen and expand the capacity of the primary care safety-net

Primary care operations must be strengthened and capacity expanded if the primary care safety-net is to address unmet need, fill capacity gaps, and improve the overall quality and efficiency of the care provided.

a. Strengthen primary care safety-net operations

Figure 29: The Triple Aim

Initially, primary care safety-net strengthening efforts should focus on enhancing internal clinical and administrative operations and systems. Specifically, these efforts should be geared to achieving the Triple Aim of: 1) improving quality of care and the overall health of the population; 2) enhancing the patient experience; and 3) creating efficient, cost-effective operations. The range of possible operational advancements in this regard is broad in nature and includes activities to enhance internal primary care operations and external provider partnerships. The goal of these efforts is to create patient-centered, coordinated, integrated, service delivery approaches that focus on quality, safety, and access.

Information about the most important issues captured in JSI's interviews and site visits fall into three areas.

i. Issues related to internal clinical and administrative procedures such as: 1) reduction of no-show rates; 2) staff/patient scheduling and patient empanelment; and 3) enhancement

of patient flow and clinical roles/responsibilities. Primary care practices need workshops, lectures, or tutorials about how to conduct these assessments on their own or will need individualized, on-site technical assistance.

ii. Issues related to quality and performance improvement and the use of EHRs/HIT. Specific activities could support such efforts as: identifying and empowering QI/HIT champions; supporting further development of QI infrastructure (e.g., QI committees, continuous quality improvement structures, identification of measures and benchmarks); supporting HIT training to maximize the use of existing systems; and supporting the development of patient satisfaction or consumer advisory efforts. Regional efforts should build upon or support the efforts taking place in the region.

iii. Issues that require the development and implementation of specific clinical practices or interventions to: 1) identify, screen, educate, and engage people with newly identified or emerging chronic health conditions (primary care engagement); 2) provide proven chronic disease care management and self-management support interventions; 3) integrate behavioral health or medical specialty care into primary care settings; and 4) collaborate with hospitals, health plans, or other health care organizations to reduce inappropriate hospital ED or inpatient readmissions.

b. Expand primary care capacity among core, essential, and contributing safety-net providers

Despite the tremendous growth in the past five years, targeted efforts still need to be made to build primary care safety-net capacity to fill geographic gaps, meet the needs of specific demographic/socio-economic population segments, and/or addresses specific health status issues. This should be accomplished through a multi-pronged strategy that focuses on maximizing existing primary care capacity then adding additional providers or practice sites across the spectrum of core, essential, or contributing safety-net categories, as appropriate.

Practice sites should first explore whether an unmet need can be addressed by decreasing patient no-shows, improving provider and patient scheduling, refining patient flow, developing primary care pods, creating interdisciplinary teams, or other ways that increase productivity and maximize existing capacity.[27] The Community Health Care Association of New York State (CHCANYS) developed a statewide plan in 2013 that details how community health centers should expand capacity. This document contains valuable information for primary care practices everywhere.

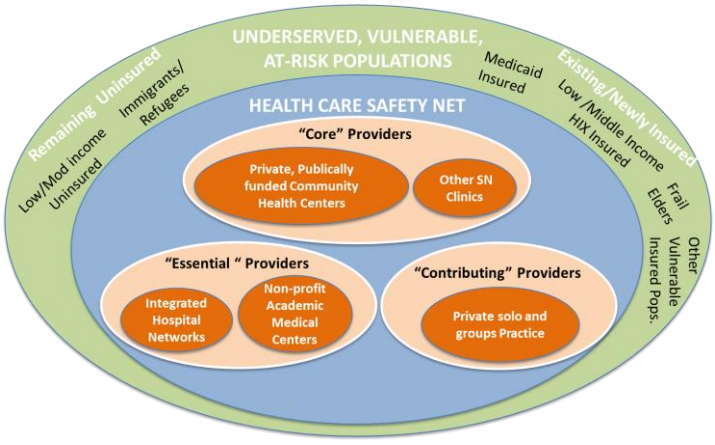


Figure 30: The Health Care Safety-net

Additional primary care capacity should

[27] The Community Health Care Association of New York State (CHCANYS), with support from the New York State Health Foundation, has developed a statewide plan for community health centers to increase their ability to serve more patients. Based on extensive quantitative and qualitative analyses, the plan identifies geographic areas that have the greatest need and potential for sustainable growth, estimates potential increases in capacity within the existing system, and highlights strategies for creating more capacity.

be attained, as needed, by filling provider vacancies, adding providers at existing clinic practices, or when feasible developing new primary care practices. Inevitably, expansion efforts will occur through the actions of individual practice sites. However, these actions should be considered in collaboration with the full safety-net. Ideally, efforts will be based on a community or market-level plan in the context of developing a strong, collaborative, integrated delivery system that coordinates the full spectrum of required public health, health care, and social services for all who need them.

Communities must ensure that there is a thriving safety-net practice or group of practices that are geographically focused on serving all-comers and that are committed to and capable of serving all residents regardless of their ability to pay. These core providers are an important asset and must be supported by the community at-large. However, in order to develop a system of care that is able to provide access to all in need, most communities in central New York will need to apply a multi-pronged approach that not only focuses on the expansion of "core" safety-net providers but supports the development of a broad range of providers—including "core," "essential," and "contributing." Most notably, safety-net providers need to work collectively to serve the uninsured population. In many markets, the core safety-net providers are left to serve a disproportionate number of the uninsured, which often makes it challenging for them to survive. Providers must develop systems and partnerships to share this burden. In central New York, efforts must be made to support the free clinics in Onondaga County because they are critical to the county's safety-net.

Evidence-Based Programs for Strengthening & Expanding the Primary Care Safety-net

The follow are a range of interventions that have been proven to be effective. Some may already be in use or tested in the region.

Primary Care Engagement and Community Health Programs

i. New York-Presbyterian Hospital Primary Care, Community Health Nursing, and Faith-Based Partnerships http://nyp.org/services/acn_outreach_faith_based.html)

ii. Hypertension Interventions in Barbershops http://health.mo.gov/data/interventionmica/HeartDiseaseandStroke/3204.pdf

iii. HEAL: BCC: Health Education and Adult Literacy: Breast and Cervical Cancer http://lincs.ed.gov/lincs/resourcecollections/healthliteracy/profile_03

Evidenced-based Chronic Disease Management and Self-Management Support Interventions

i. The Care Coordination Model http://www.ihi.org/knowledge/Pages/IHIWhitePapers/IHICareCoordinationModelWhitePaper.aspx

ii. Collaborative Care Model - http://www.thecommunityguide.org/mentalhealth/collab-care.html

iii. Primary care- and community-based community health worker (CHW) programs http://www.cdc.gov/diabetes/projects/comm.htm

http://www.health.ny.gov/community/pregnancy/health_care/prenatal/community_health_worker/

iv. Stamford Chronic Disease Self-Management Support Programs http://patienteducation.stanford.edu/programs/cdsmp.html

Specialty Care and Mental Health Integration

i. MacArthur Initiative on Depression and Primary Care - http://www.depression-primarycare.org/

ii. IMPACT Model - http://impact-uw.org/

iii. Brief Alcohol Intervention - http://www.ncoa.org/improve-health/center-for-healthy-aging/content-library/F_Prevention-and-Management-of-Alcohol-Problems-in-OlderAdults-Final.pdf

iv. Expansion of Medical Specialty Care Services - http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/S/PDF%20SpecialtyCareOverview.pdf

v. Project Access of Montgomery County, MD - http://www.primarycarecoalition.org/building-a-healthy-community/#we-need-specialists-to-help-build-the-network

Reduction of Inappropriate Hospital ED or Inpatient Utilization

i. Care Coordination: Strategies to Reduce Avoidable Emergency Department http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Supplement-Care-Coordination.pdf

ii. Project ASSERT - (http://nrepp.samhsa.gov/ViewIntervention.aspx?id=222)

iii. SBIRT: Screening, Brief Intervention, and Referral to Treatment http://www.integration.samhsa.gov/clinical-practice/sbirt

iv. The Care Transitions Intervention (CTI) - http://www.caretransitions.org/

v. The Transitional Care Model (TCM) - http://www.transitionalcare.info/

vi. Project BOOST http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/CT_Home.cfm

vii. Project RED - https://www.bu.edu/fammed/projectred/

c. Support initiatives that promote primary care provider recruitment and retention

Recruitment and retention would benefit from a regional approach drawing on the expertise of state and national agencies and organizations that are closely involved in provider training and development (e.g. CHCANYS, Area Health Education Centers (AHEC), NYS Primary Care Office, and National Health Service Corps). The recruitment and retention of clinical staff is an essential prerequisite to stabilizing and enhancing the safety-net. Almost all safety-net providers in the region struggle to recruit physicians and fill gaps in their clinical staffing. This issue is not unique to central New York; it is an issue that safety-net providers throughout the nation, particularly in rural areas, face. Additionally, providers could share resources and/or develop a tool kit to guide the recruitment and retention process and help practices be more prepared and involved in this process. Finally, regional stakeholders could develop a resource center that would work collectively on behalf of the region's practices to support the recruitment process, as occurred in Minnesota through a RWJF grant.

Evidence-Based Programs for Promoting Primary Care Provider Recruitment and Retention

The follow are a range of interventions that have been proven to be effective. Some may already be in use or tested in the region.

Primary Care Recruitment and Retention Tool Kits

- **National Association of Community Health Centers** http://www.nachc.com/Clinical%20Recruitment%20and%20Retention%20Toolkit.cfm
- **Michigan Primary Care Association** http://mpca.net/displaycommon.cfm?an=1&subarticlenbr=77#.UueAy_Mo5jo

State Resource Centers

- **Minnesota -** http://www.rwjf.org/en/research-publications/find-rwjf-research/2000/03/minnesota-adds-physicians-while-focusing-on-community-health-cen.html
- **Oregon -** http://www.oregon.gov/oha/OHPR/HCW/Resources/5-Year%20Strategic%20Plan%20for%20Pimary%20Care%20Provider%20Recruitment%20-%20HB%202366.pdf

Regional or Statewide Workforce Collaborations

- **NYS AHEC** - http://www.ahec.buffalo.edu/
- **CHCANYS** - http://www.chcanys.org/index.php?src=gendocs&ref=WorkforceDevelopmentInitiatives&category=Workforce%20Development

2. Promote population-based approaches to community health and consumer/ primary care engagement in a patient-centered medical home

The findings also highlight the importance of developing broad collaborative activities involving health care providers (including primary care), state/local public health officials, social service organizations, educators, business leaders, and philanthropic organizations that are focused on improving population-based health outcomes and engaging individuals and families in

appropriate primary care. There is growing appreciation in the health care field of the need for communities to address health care disparities and improve its overall health and well-being. To do so, communities need to develop a shared agenda and implement targeted, integrated efforts that build on existing programs or assets. There also needs to be evaluative metrics and a community infrastructure that guides and monitors these activities.[28]

Figure 31: Social Determinants of Health and Primary Care

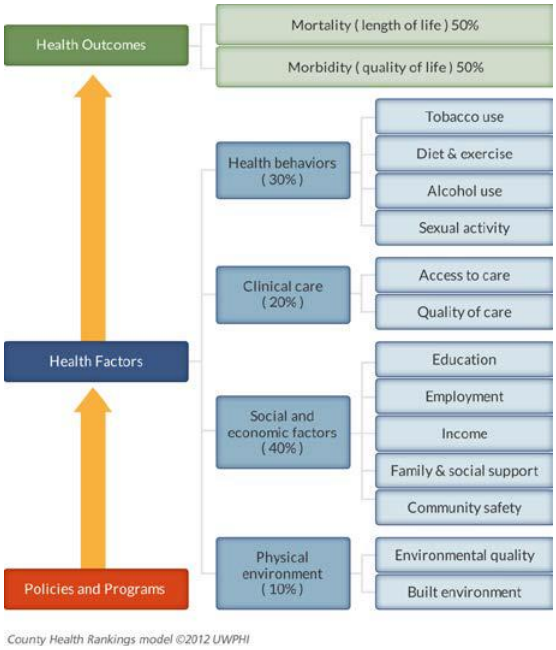
a. Promote population-based approaches to community health

Figure 32, developed by the University of Wisconsin's Population Health Institute, illustrates the importance of taking action at the community-level to improve health status and reduce mortality. Increasingly, the literature shows that clinical care has a limited impact on improving health outcomes and keeping people healthy. As a result, new payment models are being designed to entice providers to keep patients well and improve health outcomes rather than provide specific clinical care or treatment services. Certainly, a well-integrated system of care is essential to keeping communities healthy. However, the greatest impact comes from addressing the physical environment and the social/economic factors as well as changing risky health-related behaviors.

Communities that have showed the most promising results are taking a two-fold approach. First, communities are working to ensure that residents have access to a well-integrated system of care that:

- Gives residents access to appropriate primary care services that include medical, behavioral, and oral health components.
- Integrates a broad range of specialty care, inpatient, long-term care, and home-based services that individuals and families need throughout the life-cycle.
- Promotes care coordination, care management, and patient/family self-management, particularly for children, frail elders, and people with complex or chronic conditions.
- Delivers services across the full spectrum in a patient-centered manner.

Figure 32: Approaches to Community Health



[28] Hanleybrown, F., Kania, J., Kramer, M. Channeling Change: Making Collective Impact Work. Stanford Social Innovation Review. 2012

Second, communities and integrated delivery systems that include primary care are working to improve physical environments, address social/economic factors, and implement targeted community health programs that:

- Educate residents and raise awareness about key health issues.
- Identify people at risk, particular those who have chronic disease or the leading chronic disease risk factors.
- Provide evidence-based support for behavior change and disease management.
- Link all community residents, especially those most at risk, to regular, appropriate primary care services in a patient-centered medical home.

Evidence-Based Programs for
Promoting Population-Based Approaches to Community Health Improvement

The follow are a range of interventions that have been proven to be effective. Some may already be in use or tested in the region.

Regional or Statewide Collaboration

- *Hennepin County Human Services and Public Health Department - care coordination demonstration project - http://www.chcs.org/usr_doc/DeCubellisJ.pdf*
- *Key Considerations for Supporting Medicaid Accountable Care Organization Providers - http://www.chcs.org/publications3960/publications_show.htm?doc_id=1261529#.UuPu7vMo5jo*

  http://www.chcs.org/usr_doc/ACO_Provider_Supports_060313_Final.pdf

b. Promote consumer/primary care engagement in a patient-centered medical home

Communities and primary care practice sites need to collaborate to reach the community at-large to promote healthy behaviors, provide education and support, and promote primary care engagement. . As mentioned, a portion of the unmet need in communities throughout the region is due to limited primary care capacity and/or lack of after-hours care. However, according to information from JSI's interviews and site visits, a significant portion of the unmet need is associated with a lack of consumer engagement in care and a lack of appreciation for regular primary care services. Promoting appropriate engagement in primary care is particular important for people with health risk factors and/or chronic health conditions.

For people with chronic conditions or specific risk factors, it is important that the education be augmented with counseling on disease management, behavior change, and self-management.

There are numerous evidence-based outreach and engagement programs that target the community at-large as well as those with chronic illness or certain risk factors. See evidence provided in recommendation Section 1a.

c. Support the development of registries and other HIT tools to identify and promote primary care engagement and chronic disease management

Safety-net practices in the region would benefit from support that would allow them to share information between practice sites and explore how to use their EHRs to ensure that patients are fully engaged in their care, receive tailored follow-up, and the most appropriate case/care management services. Based on a recent issue brief published by the Center for Health Care Strategies (CHCS)[29], approximately 60 percent of physicians work in practices with four or fewer providers, and roughly 65 percent of all physician office visits occur in practices of this size. These national statistics reflect the characteristics of central New York's primary care safety-net. Smaller practices of this type usually don't have the staff to research and support the implementation of registries and use of all of the functionalities of their EHRs. Information gathered by JSI corroborates these findings.

Practice sites would also benefit from the formal implementation of primary care engagement and care management protocols/interventions that leverage their EHRs to identify and manage their chronic disease patients. Another issue brief developed by CHCS highlights the lessons and best practice programs from a national pilot.[30]

Evidence-Based Programs for
Promoting Population-Based Approaches to Community Health Improvement

The follow are a range of interventions that have been proven to be effective. Some may already be in use or tested in the region.

- Supporting Meaningful Use - http://www.chcs.org/usr_doc/Supporting_Meaningful_Use_Brief.pdf
- Key Factors for Improving Care Delivery in Small Primary Care Practices with High Medicaid Volume http://www.chcs.org/usr_doc/Key_Factors_for_Improving_Care_in_Small_Primary_Care_Practices.pdf

3. Promote collaboration and communication across the safety-net and a broad, collective understanding of health reform/health system trends

PPACA and the opportunities that are part of the bill have facilitated collaboration as entities explore how to respond to various grant opportunities or integrate their services to better position themselves for potential changes in payment practices.

Despite these positive steps, there is a need for greater collaboration and provider awareness about the various facets of health reform, important trends in health care service delivery and payment, and issues related to primary care clinical and administrative operations. These efforts will promote communication and partnership generally and will encourage services integration, care coordination, and joint planning.

The following recommendations relate to collaboration.

[29] http://www.chcs.org/usr_doc/Supporting_Meaningful_Use_Brief.pdf
[30] Key Factors for Improving Care Delivery in Small Primary Care Practices with High Medicaid Volume, http://www.chcs.org/usr_doc/Key_Factors_for_Improving_Care_in_Small_Primary_Care_Practices.pdf

a. Facilitate information sharing and collaboration by supporting the development of market-level primary care-specific or broader community coalitions.

Regional stakeholders should support the development of market-level coalitions that would focus on information sharing and respond to opportunities. There are a few rural health networks in the region that are doing this kind of work and support for it should continue. For example, the Herkimer Healthnet, a central coordinating organization for health planning in Herkimer County, has coordinated health prevention efforts. Similarly, the Seven Valleys Health Coalition provides planning resources for planning in Tompkins, Cortland, Madison, Cayuga, and Onondaga counties. They work with 21 health and social service providers across the region on topics such as improving access to integrated behavioral health and oral health education.

The assessment notes that providers are still operating in silos rather than as part of a broader system of care. Coalitions are important because they provide an important forum for planning, information sharing, and technical assistance. Community symposia, resource inventories, help/referral-lines, and coordinated case management programs can be organized through coalitions and could help dissemble silos and encourage better collaboration and referral among providers. These coalitions could be represented by a community hospital, area primary care practices, behavioral health organizations, long-term care facilitates, home health organizations, public health officials, etc., that would explore practical partnerships and collaborations. A specific area for collaboration and discussion is the use of patient navigators, and outreach staff to identify and enroll consumers who are not accessing primary care. New resources have been made available through the ACA to support health care providers and social service agencies in the enrollment of health coverage. There is much to be learned about how effective these resources have been, and how to identify best practices at the local, regional, and national level.

b. Raise awareness and understanding of current mechanisms and tools associated with health service delivery and payment reform

Regional stakeholders should ensure that all safety-net providers (core, essential, and contributing) providers are aware of and understand current mechanisms and tools associated with health reform and the development of integrated delivery systems so that practice sites can take advantage of opportunities. Payment reform has the potential to offer new flexibility, investment, and aligned incentives to achieve the Triple Aim. If providers understand payment reform concepts they can shape payment reform efforts to protect and sustain the safety-net. Safety-net providers are critical stakeholders and should advocate for payment reform efforts that maintain a focus on delivery system transformation to improve quality of care, not simply cost savings. Regional efforts to educate and raise awareness of issues, such as ACO/integrated delivery systems, health homes, shared savings models with CMS, value-based contracting, community care transitions programs, service integration/PCMH partnerships, and mental health integration, should be made.

c. Continue to support HIT infrastructure development and health information exchange

Investing in efforts to support the development of the central New York RHIO and the involvement of core safety-net providers would reduce the "digital divide" that is already

becoming apparent in the region. Experts continue to be concerned with the potential for a digital divide between safety-net providers and the broader healthcare marketplace regarding HIT adoption and electronic health information exchange. JSI observed that this was beginning to occur in central New York, but there are numerous national examples of safety-net providers participating in this movement. The continued investment of health information exchange is ever more important as payment reform initiatives are spread. Without the robust data systems, payment cannot reimburse based on health outcomes. Access to total health system utilization data is a first critical step in assuming accountability and eventually increased payment for achieving Triple Aim goals.