



A Plan for Expanding Sustainable Community Health Centers in New York

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Executive Summary

Federally Qualified Health Centers (FQHCs) are at the center of both federal and State health care reform strategies. FQHCs are located in underserved areas and provide community-based comprehensive primary care to anyone who needs care, regardless of their ability to pay. They provide a range of services including primary and preventive care, behavioral health services, dental care, and substance abuse services as well as enabling services such as transportation, interpretation, and outreach. Successful implementation of federal health reform, the Affordable Care Act (ACA), will require expanded primary care capacity to both care for the influx of newly insured people and ensure a strong safety net for those who remain uninsured. The federal law recognizes this and makes FQHCs a cornerstone of its plan for expanding access to health care. In New York State, FQHC capacity is expected to double to serve nearly three million New Yorkers by 2015.

Initiatives in New York State reinforce the need for enhanced primary care capacity. Governor Andrew Cuomo established the Medicaid Redesign Team (MRT) and tasked it with finding ways to reduce costs and increase quality and efficiency in the State's Medicaid program. A central strategy of the MRT has been promoting more integrated and Triple Aim-oriented¹ systems of care that produce better care and better health at lower costs and have community-based primary care as the foundation.

FQHCs are well positioned to participate in and lead these transformations and develop their capacity to serve more patients. There are untapped opportunities to derive more capacity out of the existing primary care system by changing how patients access care and how care is delivered. In addition, there are many communities throughout New York that need additional primary care capacity to meet the current and future needs of their communities.

CHCANYS' Statewide Expansion and Sustainability Plan

In this environment, it is critical that New York State has a rational, data-based plan for building FQHCs' capacity and expanding their reach to serve more patients. This report focuses on two important means for achieving that goal: **1)** expanding the internal capacity of existing FQHCs and **2)** expanding physical capacity.

- **Expanding Internal Capacity:** This report identifies opportunities to extract more capacity out of existing resources by addressing workforce needs, increasing productivity, and improving

¹ The Triple Aim is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance. <http://www.ihl.org/offerings/initiatives/tripleaim/pages/default.aspx>. Accessed December 7, 2012.

Executive Summary *(continued)*

operations and care delivery. Expanding internal capacity includes a range of organizational changes that would enable a provider to serve more patients. This could include becoming more efficient in the delivery of care, filling provider and staff vacancies, changing the care delivery model, implementing more advanced patient scheduling systems, better managing population health, and improving the health of the communities.

- **Expanding Physical Capacity:** This report identifies opportunities to expand capacity by expanding the system itself. Expanding physical capacity could take many forms. For example, this could include an FQHC expanding its existing sites or opening new sites, deploying mobile medical vans to new areas, expanding seasonal services to year-round (e.g., a summer mobile medical van serving patients all year), or expanding to serve new patients (e.g., a School-Based Health Center expanding to serve parents and other community members).

Key Findings

- Enhancing productivity could produce massive gains in capacity for hundreds of thousands of additional patients. Increasing visits per full-time equivalent (FTE) to the median rate for all FQHCs could provide more than 330,000 additional visits (a 5% statewide increase), which corresponds to an additional 72,000 patients. If all FQHCs could achieve a productivity level equal to the 75th percentile, the increase would exceed 1 million visits per year, the equivalent of serving another 225,000 patients.
- Filling existing provider vacancies could increase capacity to serve hundreds of thousands more patients, making workforce issues a top priority. If all vacant positions were filled, capacity would increase by about 850,000 visits a year, or 12.6% statewide. That additional provider capacity could accommodate 185,000 additional patients.
- Expanding the State's existing provider recruitment and retention programs to fill existing vacancies could produce 720,000 more visits for more than 155,000 patients.
- Expanding the number of FQHC sites could dramatically increase capacity in medically underserved communities. Millions of New Yorkers are without ready access to a primary care provider. In certain regions of the State, there are "primary care deserts," including areas with no FQHCs as well as areas where the demand well outstrips the existing capacity. These areas require the creation of new FQHC sites and the expansion of services at existing sites. Using a quantitative analysis of communities' relative need for additional FQHC capacity and the feasibility of such capacity expansions, this report ranks New York geographies into tiers for expansion.

Executive Summary *(continued)*

While almost all areas of the State would benefit from additional primary care capacity, these tiers can help inform, but not dictate, which areas to prioritize for expanding community-based primary care, including FQHCs. The tiers can also provide a platform for a more careful exploration of community-level conditions affecting need and sustainability.

In New York City, 16 neighborhoods fall into Tier One, the category of highest priority for expansion:

BRONX	BROOKLYN	MANHATTAN	QUEENS
Fordham • Bronx Park	Bedford Stuyvesant • Crown Heights	Washington Heights • Inwood	Long Island City • Astoria
Crotona • Tremont	East New York	Central Harlem • Morningside Heights	West Queens
High Bridge • Morrisania	Sunset Park	East Harlem	Flushing • Clearview
Hunts Point • Mott Haven	East Flatbush • Flatbush		Jamaica
	Williamsburg • Bushwick		

In the rest of the State (excluding New York City), CHCANYS conducted separate analyses of **1)** counties that were fully rural, **2)** the rural areas within “mixed” counties (i.e., counties with both rural and urban components), and **3)** the urban areas within “mixed” counties. Within each of those categories, CHCANYS identified counties for FQHC expansion:

FULLY RURAL COUNTIES	RURAL AREAS WITHIN MIXED COUNTIES	URBAN AREAS WITHIN MIXED COUNTIES
Cattaraugus Chautauqua Delaware Franklin Fulton Herkimer Montgomery Otsego St. Lawrence Sullivan	Broome Chemung Jefferson Niagara Oneida Ontario Wayne	Albany Broome Chemung Erie Jefferson Oneida Orange Rensselaer Westchester

Recommendations for Expanding Capacity of the Existing and Future System

To expand the internal capacity of existing primary care providers, to serve more patients, and to expand physical capacity, CHCANYS has developed actionable recommendations in four key domains:

DEVELOPMENT OF HIGH-PERFORMING COMMUNITY-BASED PRIMARY CARE

All existing and new community-based primary care providers, including FQHCs, should deliver care and operate at the highest level of performance. High-performing primary care providers must operate efficiently, be cost-effective, and optimize both productivity and quality. The State should support a training and technical assistance program to assist community-based primary care providers in implementing systems for managing and balancing supply and demand and increasing capacity. Primary care providers should implement practice redesign strategies that decrease patients' waiting times for appointments, reduce patient no-shows, maximize productivity and patient volume, and eliminate waste in their systems.

PRIMARY CARE WORKFORCE RECRUITMENT AND RETENTION

Primary care providers must be able to recruit, train, and retain a workforce that is stable and well qualified to serve low-income patients. Filling vacant positions is an immediate means to expand the capacity of existing providers to serve more patients. The State should expand its existing programs, Doctors Across New York and the Primary Care Service Corps, to support the recruitment and retention of more providers in underserved areas. In the long-term, the State and/or private and public funders should support the development of physician, physician assistant, and nurse residency teaching and training programs at FQHCs. This supports a "grow your own" approach to recruiting primary care providers. In addition, educational institutions need to embed new care delivery models into their clinical training programs as well as develop and provide programs for care coordinators, case managers, community health workers, health coaches, and others.

ACCESS TO AFFORDABLE CAPITAL

Capacity expansions require access to affordable capital. Capital funds help providers build new sites, expand their existing sites, purchase health information technology (HIT), renovate outdated facilities, and increase patient access through the use of telemedicine and mobile medical vans. They also support the development of new community-based primary care. Investments by the State should give priority to projects that leverage other funds and attract

Executive Summary *(continued)*

other investments including loans, foundation grants, and owner's equity. In addition, a program of technical assistance should be established to help community-based primary care providers accurately assess their capital needs, assess their risks, identify and secure capital financing for expansions, and effectively manage their projects.

COMMUNITY-LEVEL PLANNING

This plan should be supplemented by additional and ongoing planning efforts at the community level. This level of planning will support the development of community-specific expansion plans that are feasible and sustainable and will be an important complement to the regional planning efforts. Community-level planning efforts will require resources to develop the infrastructure for and support the implementation of this level of planning. In addition to conducting data analyses on needs and opportunities, the community planning work should also include conducting environmental assessments, addressing social determinants of health, soliciting input from all stakeholders, and facilitating the community planning process.

Introduction

Background

Federally Qualified Health Centers (FQHCs) are at the center of both federal and State health care reform strategies. FQHCs are located in underserved areas and provide community-based comprehensive primary care to anyone who needs care, regardless of their ability to pay. They provide a range of services, including primary and preventive care, behavioral health services, dental care, and substance abuse services as well as enabling services such as transportation, interpretation, and outreach. Successful implementation of federal health reform, the Affordable Care Act (ACA), will require expanded primary care capacity to both care for the influx of newly insured people and ensure a strong safety net for those who remain uninsured. The federal law recognizes this and makes FQHCs a cornerstone of its plan. Specifically, health reform allocated \$11 billion for FQHCs nationally over 5 years, \$9.5 billion of which is for operating funds and the remaining \$1.5 billion for capital expenses. Nationally, the number of people served annually by FQHCs is expected to increase to 30 million by 2015. In New York State, the approximately 60 FQHCs are expected to double capacity to serve nearly 3 million New Yorkers by 2015. As more New Yorkers gain health insurance coverage, experience from Massachusetts' health reform implementation suggests that community-based primary care providers should be prepared to see significantly more patients.²

Initiatives in New York State reinforce the need for enhanced primary care capacity. Governor Andrew Cuomo established the Medicaid Redesign Team (MRT) and tasked it with finding ways to reduce costs and increase quality and efficiency in the State's Medicaid program. A central strategy of the MRT has been to promote more integrated and Triple Aim-oriented³ systems of care that produce better care and better health at lower costs and have community-based primary care as the foundation. The State submitted a Medicaid Section 1115 waiver application to the federal government to secure funds to implement the MRT's action plan. Regardless of the outcome, the action plan in the waiver outlines specific opportunities to accelerate progress toward creating those systems of care. As a central part of how the State is pursuing the Triple Aim, the opportunities include not only an emphasis on health care but also on population health and the social determinants of health.

² Researchers who assessed data from Massachusetts after the State's health care reform law was enacted in 2006 saw a 31% increase in the number of patients receiving care at Massachusetts' community health centers from 2005 to 2009. (Leighton Ku; Emily Jones; Peter Shin; Fraser Rothenberg Byrne; Sharon K. Long. Safety-Net Providers After Health Care Reform: Lessons From Massachusetts. *Arch Intern Med.* 2011;171(15):1379-1384. doi:10.1001/archinternmed.2011.317.)

³ The Triple Aim is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance. <http://www.ihl.org/offerings/initiatives/tripleaim/pages/default.aspx>. Accessed December 7, 2012.

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FQHCs are well positioned to participate in and lead these transformations and develop their capacity to serve more patients. There are untapped opportunities to derive more capacity out of the existing primary care system by changing how patients access care and how care is delivered. In addition, there are many communities throughout New York that need additional primary care capacity to meet the current and future needs of their communities.

Besides serving more patients, expanding community-based primary care—including FQHCs—can also drive economic development in communities. Primary care providers employ many residents in the communities they serve, with some being the largest employers in their service area. The Primary Care Development Corporation estimates that the \$415 million invested in more than 90 primary care projects has not only produced 840,000 square feet of new or renovated primary care space and the ability to care for 900,000 more patients, but it has also created 4,600 jobs in low-income communities.⁴ The development of state-of-the-art health centers—often from previously dilapidated spaces—also has made communities more attractive for other investments and has contributed to an influx of additional businesses such as pharmacies and labs.

Plan for Expanding Sustainable Community Health Centers

In this environment, it is critical that New York State has a rational, data-based plan for building FQHCs' capacity and expanding their reach to serve more patients. This report focuses on two important means for achieving that goal: **1)** expanding the internal capacity of existing FQHCs and **2)** expanding physical capacity.

- **Expanding Internal Capacity:** This report identifies opportunities to extract more capacity out of existing resources by addressing workforce needs, increasing productivity, and improving operations and care delivery. Expanding internal capacity includes a range of organizational changes that would enable a provider to serve more patients. This could include becoming more efficient in the delivery of care, filling provider and staff vacancies, changing the care delivery model, implementing more advanced patient scheduling systems, better managing population health, and improving the health of the communities.
- **Expanding Physical Capacity:** This report identifies opportunities to expand capacity by expanding the system itself. Expanding physical capacity could take many forms. For example, this could include an FQHC expanding its existing sites or opening new sites, deploying mobile

⁴ <http://www.pcdc.org/capital-financing/impact.html>. Accessed November 3, 2012.

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medical vans to new areas, expanding seasonal services to year-round (e.g., a summer mobile medical van serving patients all year), or expanding to serve new patients (e.g., a School-Based Health Center expanding to serve parents and other community members).

CHCANYS' Center for Primary Care Informatics

This report is the inaugural initiative of CHCANYS' Center for Primary Care Informatics (CPCI). The CPCI provides in-depth and high-quality data and advanced analytical support to guide and drive significant improvements in patient access to care, quality of care, patient and population health outcomes, and cost containment. The CPCI provides health care providers, localities, the State, and others with the data and analytics they need to more precisely target limited resources.

The CPCI has three major components: **1)** a statewide data warehouse with data from Electronic Health Records (EHRs) and Electronic Practice Management systems of multiple health centers creating a single, centralized, and integrated database to give health centers the information they need to target improvements; **2)** advanced data analytic capacity that can develop and conduct complex analyses, including those that integrate external databases with health center data and support data analysis efforts of other health care stakeholders; and **3)** technical assistance to FQHCs to support them in using data to benchmark and monitor their performance to improve the quality and efficiency of care and patient outcomes.

The CPCI's data warehouse has numerous automated reports and other capabilities that can support the recommendations in this report, including the capacity to assess operational, clinical, and financial performance and health care disparities. Additionally, the development of this analysis and report has created a rich data repository of geographically-referenced data on health conditions, social determinants of health, existing service sites, and clinical data on the populations served in those sites that the CPCI can use in partnership with other stakeholders to develop regional and community-level plans for enhancing capacity and supporting healthy communities. (See Appendix F for an overview of the data resources developed in our planning effort.)

Methods in Brief

In developing this plan, CHCANYS conducted both quantitative and qualitative analyses. Given the variation in New York State in regard to primary care capacity, patient populations, and other influential factors, CHCANYS also focused separately on New York City (NYC) and the Rest of New York State⁵ (ROS) and adjusted the methodologies for the analyses as needed to account for the variation. The findings and recommendations presented in this plan address factors and

⁵ Rest of State excludes New York City.

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strategies that have statewide application as well as targeted strategies for specific geographic areas across the State. The project consisted of three activities:

QUANTITATIVE ANALYSES

Using data on FQHCs, CHCANYS conducted quantitative analyses and estimated the potential for expanding internal capacity to serve more patients by increasing FQHC visits per provider full-time equivalent (FTE) and by filling current FQHC provider vacancies.

CHCANYS also developed a comprehensive set of quantitative factors to assess and rank the areas' need for expanded FQHC physical capacity and the areas' potential for successful and sustainable expansion. See Appendix A for a detailed list of the measures of need and sustainability. Although the quantitative analyses could not capture all the factors that would pinpoint the best places to expand capacity (e.g., political support, operational readiness, capital resources, other providers able to serve low-income populations, etc.), the rankings provide a starting point for prioritizing areas of the State based upon need and sustainability.

QUALITATIVE ANALYSES

CHCANYS conducted qualitative interviews with FQHCs throughout the State to explore how FQHCs are considering capacity-related issues and what they are doing to address capacity. See Appendix B for Qualitative Methodology.

STAKEHOLDER AND EXPERT INPUT

CHCANYS also established both an Expert Panel and a Strategy Group to provide guidance on the development, dissemination, and implementation of the analyses and plan. The Expert Panel members included FQHC leaders and representatives and community-based primary care experts. The Strategy Group members included government officials, foundations that provide support to primary care, and primary care experts. See Acknowledgements for a list of members. CHCANYS also conducted key informant interviews to garner additional input on findings and recommendations.

Expanding Internal Capacity

Expanding Internal Capacity Through Increasing Productivity

All health centers need to be as productive as possible while maintaining high standards for quality of care. Providers that operate efficiently can both see more patients and bring in additional revenue. To expand capacity using the existing system, it is necessary to assess the productivity of each health center and to assist less efficient providers to improve their performance.

Historically, productivity for FQHCs has been measured by patient visits per full-time equivalent (FTE) staff. Although this measure has significant limitations, CHCANYS used 2010 and 2011 Uniform Data System (UDS) data⁶ to analyze visits per FTE for 52 New York FQHCs. All the FQHCs were ranked according to visits per FTE. CHCANYS also analyzed measures of cost and other factors that can be associated with productivity to assess the utility of the visits per FTE measure.

The initial rankings revealed weaknesses with the use of visits per FTE as a sole measure of productivity. For example, an FQHC's relative position on volume (i.e., visits per FTE) or cost (i.e., costs per FTE) varied across program components (i.e., medical services, other clinical services, enabling services), challenging the utility of this productivity measure to assess "more productive" centers versus "less productive centers." Additionally, the data showed no relationship between an FQHC's ranking on the productivity measure and its position on other characteristics such as payer mix, clinical patient case-mix, or quality of care. Productivity, as measured by visits per FTE, also fluctuated on an annual basis.

To account for these limitations, CHCANYS used an average of the 2010 and 2011 UDS data and calculated the overall increase in visits that would have accrued if the minimum number of visits per FTE staff among the 52 reporting FQHCs were brought up to the median value (50th percentile).

Because total visits per total FTE staff obscures significant differences in staffing patterns, patient characteristics, and program emphasis, CHCANYS also analyzed the potential increase in patient visits if the centers with lower visits/FTE medical staff⁷ were increased to the median medical visits per FTE medical staff. Based on this scenario, if all FQHCs were increased to the median value for visits per FTE medical staff, an additional 191,000 medical visits would be provided, which would increase total visits by 2.8%. Similarly, if just the visits for medical staff

⁶ The Health Resources and Services Administration (HRSA), the federal agency that oversees FQHCs, requires FQHCs to report on a core set of clinical and financial data, called the Uniform Data System (UDS), on an annual basis.

⁷ Medical staff are defined by HRSA as physicians (medical doctors and doctors of osteopathic medicine, excluding psychiatrists, ophthalmologists, pathologists, and radiologists but including licensed interns and residents), physician assistants, nurses, nurse practitioners, and certified nurse midwives.

Expanding Internal Capacity *(continued)*

were increased to the top quarter (75th percentile) of all FQHCs, nearly 500,000 additional visits would have been provided, creating a 7.4% increase in total visits. (See Table 1.)

TABLE 1. Estimated Increase in Patient Visits by Matching Median Value or 75th Percentile Value of 52 Reporting FQHCs, 2010-2011 Average

	ALL VISITS PER FTE	MEDICAL VISITS PER FTE
Increase Visits/ FTE to the Median Value	331,412 4.9%	191,196 2.8%
Increase Visits/ FTE to the 75th Percentile Value	1,040,244 15.5%	498,194 7.4%

KEY FINDINGS: Enhanced productivity could produce massive gains in capacity for hundreds of thousands of additional patients. Increasing visits per FTE to the median value for all FQHCs could provide more than 330,000 additional visits (a 5% statewide increase), which corresponds to an additional 72,000 patients. If all centers could achieve a minimum equal to the 75th percentile, the increase would exceed 1 million visits per year, the equivalent of serving another 225,000 patients.

WHAT FQHCs SAID ABOUT IMPROVING PRODUCTIVITY

As part of its qualitative interviews, CHCANYS asked leaders from 20 FQHCs to describe what they are doing to address productivity.⁸

Measuring and Monitoring Provider Productivity

An important aspect of addressing productivity is measuring and monitoring it. As stated above, the primary measure for productivity has traditionally been visits or encounters by provider FTE over a defined period of time.⁹ This measure of productivity does not include any assumptions

We are very aware of our productivity any given month because we check...mostly to match our capacity with demand. We always want to make sure that folks are getting in.

⁸ Some FQHC leaders indicated that addressing productivity is critical to the financial viability of the FQHC and/or is important to support their mission of providing access to care for patients. Some NYC interviewees said that they focus almost entirely on monitoring and addressing quality and/or patient experience rather than productivity.

⁹ HRSA, the agency that oversees FQHCs, does not measure provider productivity and instead reviews cost per patient as a performance measure. HRSA indicates that it does not enforce specific productivity guidelines (e.g., 4200/2100) so as not to promote incentives that are inconsistent with the purpose of the Health Center Program (e.g., discourage providers from using regular visits as opportunities to provide preventive services, discourage providers from using more efficient and patient-friendly approaches to care, such as phone consults and e-mail). HRSA eNews, Volume 1, Issue 3, December 2012.

Expanding Internal Capacity *(continued)*

about the appropriateness of what should happen in a visit or the complexity of the patient.¹⁰ Typical productivity measures also do not take into account quality of service. Many FQHC interviewees noted the limitations in using visits per provider FTE to measure productivity. Several indicated that they are delivering provider care through non-face-to-face methods (e.g., provider responding to a patient through e-mails or the telephone), which are not captured by this measure. Additionally, some interviewees noted the importance of being able to track clinical quality outcomes in relationship to productivity.

While some NYC interviewees indicated that they do not monitor productivity, those that do reported using different measures, units of analysis, and methods. Some indicated that they measure and assess provider productivity using visits per provider FTE. Others measure

We have a report for physicians and it corrects for their FTE level and then... projects a target for them and shows what their performance is against the target.

and monitor some form of billable units. One factored in acuity through the use of Relative Value Units (RVUs). Interviewees also reported that they measure and monitor productivity on different timeframes (e.g., monthly, weekly, daily). While some of this variation may be related to differences among FQHCs, it also suggests an opportunity to disseminate best practices among FQHCs.

What Impacts Provider Productivity

FQHC interviewees cited a number of factors that impacted provider productivity. The complexity of the patients being served had a significant impact on productivity by lengthening the time it took for each individual visit. This was especially noted by FQHCs that serve special populations. Although not common across all interviewees, some said that provider productivity was impacted by whether or not they serve “traditional” FQHC populations (e.g., mothers and babies) versus serving a larger Medicare population (e.g., the situation for some rural communities) versus serving patients throughout the life cycle. A number of interviewees throughout the State indicated it is difficult to increase productivity because they are doing more for patients, including more care management and using technology to uncover and respond to patients’ needs. Many interviewees said that it was difficult to balance

¹⁰ There are other measures being used in the health care industry that factor in time-consuming and complex patients, procedures, etc. (e.g., Relative Value Units).

Expanding Internal Capacity *(continued)*

productivity targets against the needs of the population. One gave the example of how the need to use language interpreters adds time to the visit, especially when conducting patient needs assessments and providing self-management support.

You're reminded of all this stuff that you would have never remembered otherwise. So it's not just seeing more patients, but it's doing more for each patient you see because of all of the decisions, reports, and reminders and things that get built into the system [EHR].

Many FQHCs indicated that patient no-show rates (e.g., the percentage of appointments where the patient does not show up for the appointment) made increasing provider productivity difficult. Patient no-shows often result in unused capacity and providers seeing fewer patients than they could. FQHCs cited numerous reasons for no shows, including challenges that patients face with transportation, adverse weather conditions, patients with co-morbidities, patients with mental health conditions, and a lack of understanding among patients of the importance of preventive care and ongoing treatment. Interviewees with rurally-remote sites noted that they have difficulty balancing the need for access with the reality that for some of their smaller, more remote sites, the patient population to draw from is so small that it limits their ability to provide a large number of visits.

We're aware that we have microenvironments, small health centers in very small towns where we can't reach that [productivity] expectation and serve the community.

FQHCs also reported that productivity is diminished because they don't have the physical space to see more patients. Some indicated that this is exacerbated by difficulties in accessing capital to expand their facilities.

Strategies for Increasing Provider Productivity

IMPROVING OPERATIONS

Many FQHCs reported that they are making or considering making improvements to their operations to increase provider productivity. Examples include:

Open Access Scheduling: Some FQHCs reported that they use some form of Open Access¹¹

¹¹ Also known as advanced or same-day access.

Expanding Internal Capacity *(continued)*

scheduling. As part of Open Access scheduling, FQHCs reserve a number of appointment slots for same-day appointments and redesign their practices to accommodate the new model. This method has been shown to reduce no-show rates as well as patient wait times.¹² One study showed that implementing the model increased provider productivity from 89% to 122% and new patient volume per month by 22%.¹³

Addressing Patient No-Shows: FQHCs are employing a number of strategies to reduce their no-show rates. Several interviewees identified using automated telephone and text appointment reminders, although some noted that this was challenging as clients' addresses and phone numbers change often. To facilitate clients maintaining their scheduled behavioral health visits, one interviewee indicated a staff Licensed Clinical Social Worker goes to patients' homes.

Refuah Health Center

Transportation issues were the primary reason that patients were not showing up for and being late to appointments at Refuah Health Center. In response, Refuah Health Center partnered with a local non-profit to develop a non-emergency medical transportation (NEMT) system in Rockland County. As part of the system, Refuah provides free transportation to its health centers through four shuttle van services making more than 40 regular stops throughout the County. The system has been shown to cost significantly less than NEMT services in neighboring counties and is so successful that the State agreed to support the continuation of the system through a Medicaid carve out.

Expanded Hours: A number of centers said that they are expanding their weekend and evening hours to accommodate seeing more patients. One FQHC said that it enables them to “get more productivity out of the same physical plant.”

IMPROVING CARE DELIVERY

Many FQHCs reported that they have transformed or are considering changing how they configure their staffing models and deliver care. This approach aims to maximize the use of existing providers and staff and improve the efficiency and quality of care. Examples include:

Team-Based Care: Some FQHCs have implemented or are in the process of implementing some form of team-based care. Team-based care is a significant departure from traditional

¹² Rose KD, Ross JS, Horwitz LI. Advanced access scheduling outcomes: a systematic review. *Arch Intern Med.* 2011 Jul 11;171(13):1150-9. Epub 2011 Apr 25.

¹³ Mallard SD, Leakeas T, Duncan WJ, Fleenor ME, Sinsky RJ. Same-day scheduling in a public health clinic: a pilot study. *J Public Health Manag Pract.* 2004 Mar-Apr;10(2):148-55.

Expanding Internal Capacity *(continued)*

methods of care delivery. It is defined as the “provision of comprehensive health services to individuals, families, and/or their communities by at least two health professionals who work collaboratively along with patients, family caregivers, and community service providers on shared goals within and across settings to achieve care that is safe, effective, patient-centered, timely, efficient, and equitable.”¹⁴

And so what we’re doing is really trying to focus on any number of ways on how to get people to that [productivity] threshold. And that includes practice redesign, clinical team building, constant refresher updates on our EMR because that is an impediment to productivity as well as a boost to it.

Although there is variation in how teams are being configured and which patients are assigned to teams, the goal of team-based care is to move away from solely relying on physicians to deliver care and instead to assign roles and responsibilities among different health professionals and staff, including nurses, medical assistants, licensed practical nurses, care managers, patient navigators/advocates, community health workers, and behavioral health providers. This can create more capacity because there are more people supporting patient care and, collectively, they are able to care for more patients. As some FQHCs stated, it also enables them to do more for their patients (e.g., care coordination, care management, health education, and self-management support).

In order for teams to operate efficiently, each team member should be operating at the “top of their license” (i.e., each provider and clinical staff person focused on the work that is at the highest level of their qualifications, expertise, and professional license). Some FQHCs indicated that they are using clinical support staff instead of a physician to provide self-management support and preventive care. For example, an FQHC said it has nurses provide preventive care using a standard protocol rather than having physicians provide that care. This approach can free up physician time to see more patients because other providers or staff are doing things that a physician does not have to do, such as non-clinical tasks.

¹⁴ Naylor MD, Coburn KD, Kurtzman ET, et al. Team-Based Primary Care for Chronically Ill Adults: State of the Science. Advancing Team-Based Care. Philadelphia, PA: American Board of Internal Medicine Foundation, 2010.

Expanding Internal Capacity *(continued)*

Pre-Visit Planning: Some FQHCs indicated that they have processes in place to prepare for a visit prior to the patient’s arrival. Pre-visit planning includes stocking exam rooms with everything a provider will need based on who they will see that day, identifying and scheduling tests that need to be performed prior to the visit, reconciling medications before the visit, having patients complete forms prior to the visit, etc. Pre-visit planning can increase the number of patients an FQHC can see in a day because it streamlines each visit by eliminating extra time spent on tasks that do not add value to the visit. This creates more time to see more patients. Including pre-visit planning as part of what a care team does also shifts routine, non-clinical tasks from providers to the other staff, which again frees up provider time to see more patients. Some FQHCs said that they are giving their clinical support staff a key role in supporting this pre-visit planning, and some FQHCs said they are using their EHRs and automated flagging systems to plan for visits. They indicated that this enabled them to be more efficient and effective during the visit. For example, one FQHC said their providers go through their schedule on the morning of or the night before each day’s visits to identify what the patients on the schedule will need. They communicate this to the staff, who make sure everything is ready before the provider enters the exam room.

Expanding Internal Capacity Through Filling Provider Vacancies

Recruiting and retaining primary care providers, dentists, and mental health professionals to underserved rural and urban areas is challenging. Despite efforts to fill positions, even positions for which there is already funding, provider vacancies can persist in some FQHCs for extended periods. Expanding capacity of the existing FQHC system requires filling current vacancies.

CHCANYS estimated the potential capacity increases through workforce strategies based on data from the Center for Health Workforce Studies’ 2011 study, “The Community Health Center Workforce in New York,”¹⁵ to provide baseline information about current FQHC staffing and vacancy rates, recruitment, and retention challenges. UDS data were used to calculate productivity within specific categories of staff. (See Table 2.)

¹⁵ Published in August 2011, the report synthesizes a study that was undertaken by the City University of New York, in partnership with CHCANYS and the University at Albany’s Center for Health Workforce Studies. The study was supported by the New York Alliance for Careers in Healthcare. The goal was to understand the health care workforce in FQHCs, both because of anticipated employment growth in these settings and because they are at the forefront of innovation as the health care sector undergoes transformation. They used a mixed-methods approach, incorporating both quantitative (i.e., survey) and qualitative (i.e., interview and focus group) methodologies.

Expanding Internal Capacity *(continued)*

TABLE 2. Estimated Additional Visits at New York FQHCs if Reported Vacancies Were Filled

UDS PROVIDERS*	UDS TOTAL VISITS*	CURRENT FTES*	VISITS/FTE	VACANT FTES ¹⁶	ADDITIONAL VISITS IF VACANT FTES WERE FILLED
Family Physician, General Practice	965,837	277.1	3,485	38.2	133,263
Internists	807,978	231.2	3,494	44.7	156,132
Obstetrician/Gynecologists	381,039	119.9	3,179	27.4	87,163
Pediatricians	811,704	227.7	3,565	17	60,588
Nurse Practitioners	608,143	246.6	2,466	29.9	73,730
Physician Assistants	460,228	162	2,842	16.5	47,015
Certified Nurse Midwives	159,224	50.5	3,155	6.2	19,603
Nurses	205,193	1,034.70	198 ¹⁷	106.2	21,051
Dentists	631,537	275.9	2,289	24.8	56,688
Dental Hygienists	139,031	88.7	1,568	4.7	7,416
Psychiatrists	98,146	51.7	1,899	8.7	16,544
Licensed Clinical Psychologists	33,028	32.4	1,020	2.7	2,706
Licensed Clinical Social Workers	177,107	185.1	957	28.8	27,535
Other Licensed Mental Health, Other Mental Health	106,598	123.5	863	13	11,205
Substance Abuse Services	129,192	79.4	1,628	9.9	16,149
Enabling Services	439,289	972.7	452	89.6	40,466
Other Specialist Physician, Other Professional Services, Vision Services	568,574	253.1	2,246	32	71,922
TOTALS	6,721,844	4,412.10		500.3	849,175

* As reported in UDS Table 5, average of 2010 and 2011.

¹⁶ Vacancy data was provided by Center for Health Workforce Studies, SUNY Albany. Some subcategories in the data were combined. UDS categories 7, 22 and 22d are remaining UDS staffing lines associated with patient visits in Table 5. The vacancy rate for that residual group was set at the average of all other categories.

¹⁷ This low number may be because nurses are performing duties outside of patient visits. Those duties would not be captured in these data.

Expanding Internal Capacity *(continued)*

It is important to note that the UDS total visits also required the services of about 1,900 FTE other program staff¹⁸ (e.g., laboratory and x-ray staff) and the services of about 3,900 FTE administrative and facility staff. Therefore, we estimate that the additional 849,175 visits would require a corresponding increase of 218 FTEs in other program/service positions and 490 FTEs in administrative and facility staff, in addition to the 500 service providers derived above.

The estimates were also based on reported vacancies and do not include assumptions about increased visits that could be achieved through implementing advanced models of care and operations.

KEY FINDING: Filling existing provider vacancies could increase capacity to serve hundreds of thousands more patients, making workforce recruitment and retention issues a top priority. If all vacant positions were filled, capacity would increase by nearly 850,000 visits a year or 12.6% statewide. That additional provider capacity could accommodate 185,000 additional patients, assuming other factors such as space and equipment are adjusted in parallel.

WHAT FQHCs SAID ABOUT RECRUITMENT AND RETENTION ISSUES

Being able to recruit and retain providers and staff is critical to maintaining and increasing the capacity of FQHCs to serve more patients. Several FQHCs indicated that difficulties in recruiting and retaining providers adversely impact productivity. This was especially noted by interviewees from rural areas, many of whom indicated that they face significant recruitment and retention challenges related to isolation and lack of urban access. Many rural and urban FQHC interviewees said that recruiting dental providers is a challenge, and many rural FQHCs said that finding psychiatrists was a challenge. Many rural FQHCs said it is easier to recruit mid-level providers than physicians. Some ROS interviewees expressed the value of registered nurses (RNs) but noted that it was difficult to compete salary-wise with the hospitals. Finding, training, and ultimately keeping clinical support staff, such as medical assistants, was also noted as a challenge. Some rural providers also noted the challenge of finding resources to fund social support staff that would leverage provider staff and support team-based staffing configurations. NYC centers indicated that recruitment was much less of a problem, with some also indicating that they have very little turnover of providers.

¹⁸ UDS lines 12, 13, 14, 18 and 29a

Expanding Internal Capacity *(continued)*

Other interviewees said that they have providers trained and ready to provide care but cumbersome credentialing processes impede their ability to quickly get providers practicing. Some said that they need to provide more mental health services to meet patient demand but cannot increase their services without an Article 31 license.

Many interviewees said that training is another challenge. Some FQHCs indicated that due to the challenges in recruiting providers, they must offer robust training when they bring on new recruits, some of whom are from other countries and/or are right out of training programs. Some FQHCs reported that training is critical for most staff and particularly important for clinical support staff for which the standards of training differ widely. Some FQHCs mentioned the need for targeted training on the Patient Centered Medical Home (PCMH).

Some FQHCs have responded to difficulties in recruiting providers by implementing telehealth/telemedicine.¹⁹ Several FQHCs indicated that this has enabled them to give their patients access to providers who they could not recruit. This was shown to be particularly useful in rural and suburban settings and for difficult-to-access subspecialties. For example, Finger Lakes Community Health has implemented telemedicine programs for dentistry; Ear, Nose, and Throat (ENT); psychiatry; and diabetes retinopathy screening that have expanded access to services for patients living in rural New York. Their teledentistry program increased the percentage of children who received treatment for early childhood cavities from 15% to 95% without having to have the dentist onsite.

PROGRAMS TO SUPPORT RECRUITMENT AND RETENTION

The major programs that support the clinical health care workforce in New York State include the various programs of the federal National Health Service Corps (NHSCI) and the New York State programs Doctors Across New York (DANY)²⁰ and the recently established Primary Care

¹⁹ The New York State Office of the Professions defines telemedicine as the provision of professional services over geographical distances by means of modern telecommunications technology. Telehealth is the delivery of health-related services and information via telecommunications technologies. Telehealth is an expansion of telemedicine and encompasses preventative, promotive, and curative aspects of care.

²⁰ Specifically for physicians, DANY programs include Physician Practice Support, Physician Loan Repayment (including Residency Loan Repayment Tracks, Ambulatory Care Training), and other initiatives. DANY Physician Practice Support provides up to \$100,000 in funding over a two-year period to applicants who can identify a licensed physician who has completed training and will commit to a two-year service obligation in an underserved region within New York State. DANY Physician Loan Repayment provides up to \$150,000 in funding over a five-year period for physicians who commit to a five-year service obligation in an underserved region.
http://www.health.ny.gov/professionals/doctors/graduate_medical_education/doctors_across_ny/background.htm. Accessed January 18, 2013.

Expanding Internal Capacity *(continued)*

Service Corps (PCSC).²¹ All these programs help underserved communities and facilities with shortages of health care providers to recruit and retain providers through scholarship and educational loan repayment opportunities in exchange for service commitments. Only certain providers are eligible for each program.

DANY: This program is for physicians. During its first four years, the Physician Practice Support Program placed 101 physicians in underserved areas, and the Physician Loan Repayment Program placed 57 physicians in underserved areas. The 2012-13 New York State budget included funding to support up to 20 additional Physician Loan Repayment awards and 55 Practice Support slots. By statute, 50% of the funds must go to “non-hospitals,” which translates to approximately 37 slots for non-hospitals, including but not limited to FQHCs. Of the funds allocated for non-hospitals, 16.35% is allocated to New York City and 33.35% to the rest of the State.

PCSC: This program is for providers who are not physicians. The 2012-2013 New York State budget includes funding to support up to 33 slots depending on loan amounts.

FQHC VACANCIES ELIGIBLE FOR EXISTING NEW YORK STATE WORKFORCE PROGRAMS

These programs provide an opportunity to fill vacancies in underserved areas. As indicated in Tables 3 and 4, if 136 vacancies for all providers eligible for DANY were filled, FQHCs could provide more than 454,000 additional visits. If 233 vacancies for providers eligible for PCSC were filled, FQHCs could provide nearly 267,000 additional visits. To fill current vacancies and new positions that will be needed as FQHCs expand, available slots for each program would have to increase significantly.

KEY FINDING: Expanding the State’s existing provider recruitment and retention programs to fill existing vacancies could produce 720,000 more visits for 155,000 patients.

²¹ PCSC provides financial incentives in the form of loan repayment funding for non-physician clinicians practicing primary, oral health and mental health care if they agree to fulfill an obligation of a series of years in federally -designated underserved areas. PCSC is expected to provide for up to 33 loan repayment awards under this program. http://www.health.ny.gov/health_care/medicaid/program/update/2012/2012-05.htm#pcsc. Accessed January 18, 2013.

Expanding Internal Capacity *(continued)*

TABLE 3. Providers²² Eligible for Doctors Across New York

PROVIDERS	VACANT FTES	VISITS/FTE	ADDITIONAL VISITS IF VACANT FTES WERE FILLED
Family Physician, General Practice	38.2	3,485	133,263
Internists	44.7	3,494	156,132
Obstetrician/Gynecologists	27.4	3,179	87,163
Pediatricians	17	3,565	60,588
Psychiatrists	8.7	1,899	16,544
	136	3,335	453,689

TABLE 4. Positions Eligible for Primary Care Service Corps

PROVIDERS	VACANT FTES	VISITS/FTE	ADDITIONAL VISITS IF VACANT FTES WERE FILLED
Nurse Practitioners	29.9	2,466	73,730
Physician Assistants	16.5	2,842	47,015
Certified Nurse Midwives	6.2	3,155	19,603
Nurses	106.2	198	21,051
Dentists	24.8	2,289	56,688
Dental Hygienists	4.7	1,568	7,416
Licensed Clinical Psychologists	2.7	1,020	2,706
Licensed Clinical Social Workers	28.8	957	27,535
Other Licensed Mental Health, Other Mental Health	13	863	11,205
	232.7	1,147	266,950

²² Provider types are those reported in the UDS.

Expanding Internal Capacity *(continued)*

Special Populations

Increasing capacity of community-based primary care providers to serve special populations requires additional considerations. For FQHCs, special populations include Health Resources and Services Administration (HRSA)-defined population categories (i.e., homeless, migratory or seasonal agricultural workers, and individuals living in public housing) as well as those with HIV/AIDS and developmental disabilities, refugees, and children and youth in school settings. FQHCs that serve special populations have had to adopt additional strategies to ensure that patients have access to care and achieve positive health outcomes. For example, many special needs populations have complex medical, mental health, and social needs, which require intense levels of service, more time, and more staff to serve them. Special populations often require a significant amount of coordination among health care and other service providers, need help navigating multiple complex systems, and frequently miss appointments due to work or life circumstances. Many providers who serve special populations have to provide care in community locations, including in shelters or on the street for patients who are homeless and at work sites for agricultural workers.

Therefore, support for expanding the capacity to serve more patients needs to account for the differences with special populations when considering productivity, care delivery, and staffing models. Policy and payment also needs to be adjusted to align with the service intensity and different care delivery models needed for special populations.

Increasing Capacity through Expanding FQHCs

Millions of New Yorkers are without ready access to a primary care provider. Earlier sections of this plan describe the potential to extract more capacity out of existing FQHC sites. Yet in certain regions of the State, there are “primary care deserts.” These areas require the creation of new FQHC sites and/or the expansion of services at existing sites.

For this plan, CHCANYS conducted a quantitative analysis of the relative need for additional FQHC capacity in various geographic areas and the potential sustainability of capacity expansions. Recognizing the almost universal need for additional primary care throughout the State, CHCANYS did not quantify the absolute number of additional visits or patients that FQHCs should serve.

Geographic Framework for Planning

For the analysis, CHCANYS used the following geographic units for comparison:

- New York City (NYC), using the neighborhood boundaries derived by the United Hospital Fund (UHF)²³
- Rest of the State (ROS), including:
 - 31 Fully Rural Counties²⁴
 - 26 Mixed Urban and Rural Counties (geographies with both urban and rural areas within the county),²⁵ analyzed as:
 - 26 Urban Areas within Mixed Counties
 - 22 Rural Areas within Mixed Counties²⁶

²³ An alternative would have been to use the Community Board Districts, which are nearly synonymous with the Census Bureau’s Public Use Microdata Areas in New York City. However, the UHF neighborhoods are more often used for health care assessment (e.g., for the City’s annual Community Health Interview) and are built from ZIP codes, which allow us to more easily aggregate administrative data sets (e.g., hospital records) to these geographic units.

²⁴ Our analysis revealed that 26 of the State’s counties had no urbanized area, 3 had less than 1% of their population in an urbanized area, and 2 had less than 6% in an urbanized area. Therefore, we designated all 31 as “fully rural,” instead of splitting out those small urban populations.

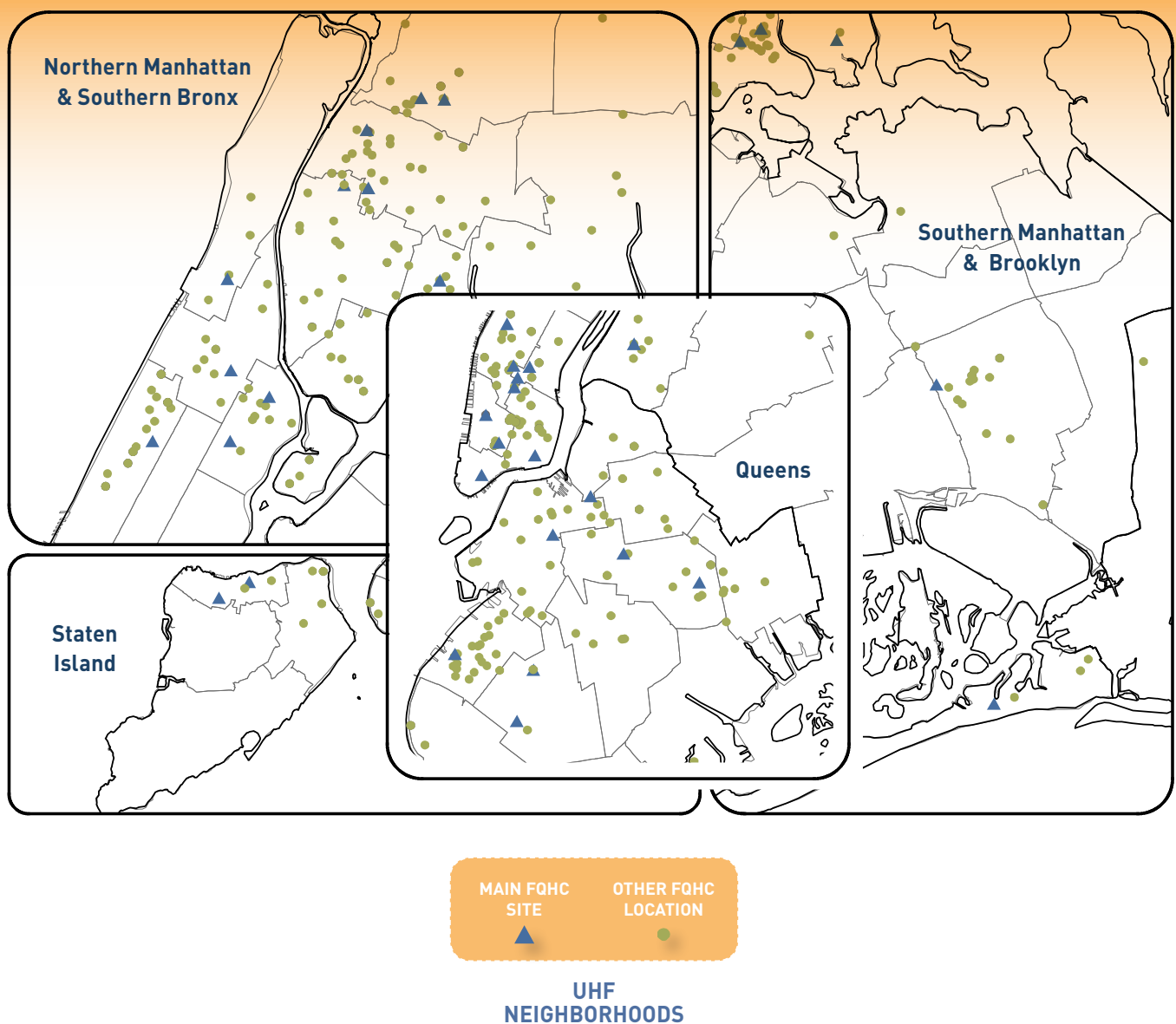
²⁵ Given that many counties in New York have both rural and urban areas that will have different needs and sustainability features, we developed a methodology to account for urban and rural areas within counties. We adopted as our definition of “urban” areas the Census Bureau’s definition of an “urbanized area,” which is a collection of census tracts or blocks associated with a core area of at least 50,000 people.

²⁶ Only 22 of the 26 mixed counties were included when ranking the rural parts of the mixed counties. Four of those counties had very small rural components (i.e., between 0.2% and 4.3% rural population). We therefore decided that those marginally rural areas should not be treated as the equivalent of the substantially rural areas found in the other 22 mixed counties.

Increasing Capacity through Expanding FQHCs *(continued)*

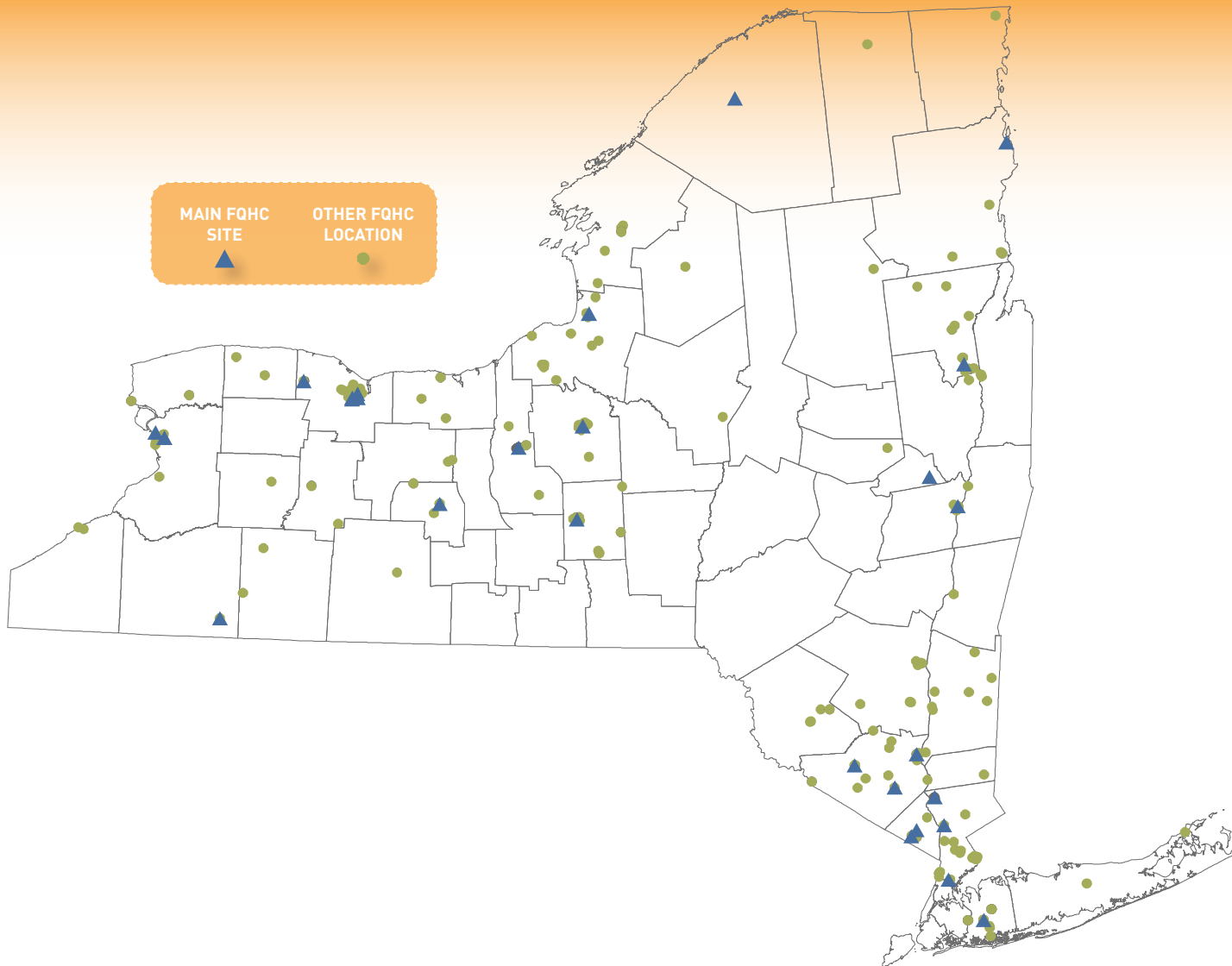
FQHCs are located throughout the State, although there are still many communities where there are no FQHCs. FQHCs exist to provide health care services for low-income populations and to provide a federally-required comprehensive model of care. There may be other primary care providers in those areas. As examples, Appendices C and D provide maps that illustrate where there are FQHCs, hospitals, Diagnostic and Treatment Centers, and hospital extension clinics.

MAP 1. FQHCs in New York City, Main FQHC Sites and Other FQHC Locations



Increasing Capacity through Expanding FQHCs *(continued)*

MAP 2. FQHCs in Rest of State, Main FQHC Sites and Other FQHC Locations



Measuring Need and Sustainability

CHCANYS identified factors commonly associated with the need for additional primary care generally and for FQHC services specifically. CHCANYS also identified factors that might enhance or limit an area's ability to sustain expanded FQHC physical capacity. CHCANYS then identified specific measures associated with such factors for which there were data available statewide and at the required geographic levels.

Increasing Capacity through Expanding FQHCs *(continued)*

CHCANYS identified the following 10 measures of need and 7 measures of sustainability and vetted the measures with FQHC leaders and experts on the project's Expert Panel.²⁷ Appendix A provides detailed descriptions of these measures.

NEED:

- Adjusted rate of preventable hospitalizations
- Percentage of avoidable Emergency Department (ED) visits
- Uninsured rate
- Percentage of population that missed medical care (New York City) or reported having no regular provider (Rest of New York State)
- Percentage racial and ethnic minority
- Percentage low-income (i.e., below 200% of poverty level)
- Percentage elderly (i.e., age 65 and older)
- Percentage non-citizen
- Percentage with limited English proficiency
- Percentage of births with late or no prenatal care

SUSTAINABILITY:

- Community-based primary care doctors (FTEs) per 10,000 population
- Change in population rate from 2000 to 2010
- Percentage of low-income population not served by FQHCs
- Percentage eligible for but not enrolled in publicly-funded health insurance
- Labor force participation rate
- Percentage enrolled in Medicaid or Medicare
- Percentage with urban access (used in rural areas only)

²⁷ Note that some measures of sustainability could also be considered need measures; however, they were included as sustainability because the consensus was that they contributed more for sustainability. Additionally, the measures and analysis did not include assumptions about patients going to another area for care, although this is likely common. The analysis also did not include data or information on existing collaborations among providers and the impact of those collaborations on need or sustainability. The latter two issues speak to the importance of assessing those issues at a community level.

Increasing Capacity through Expanding FQHCs *(continued)*

WEIGHTING MEASURES

Since all measures may not have the same degree of importance or be as reliable as others, CHCANYS weighted each measure based on feedback from the Expert Panel. For example, in building the need index, greater weight was given to measures of preventable hospitalizations and avoidable ED use. In building the sustainability index, greater weight was ascribed to the proportion of low-income residents not already served by FQHCs.

Some measures were only available by county rather than ZIP code or census tract level. Recognizing the possibility of sub-county variation, those measures received less weight when applied to the urban or rural areas of the mixed counties. Certain demographic measures received less weight in rural areas where the range of variation is fairly limited and thus less likely to discriminate degrees of need.

Within each of the geographic areas, a weighted index of need and a weighted index of sustainability were constructed by standardizing the scores on each measure, weighting the measures, and summing the weighted components. The weighted index scores were ranked within each of the four geographic areas and the results used to produce the maps below.

DEVELOPING TIERS

Geographic areas were ultimately grouped into three tiers. To develop the tiers, a single score was developed for each area by combining and weighting the overall scores of need and sustainability, with need having double the weight of sustainability.²⁸ Three tiers of roughly equal size emerged from the analysis. To illustrate the tiers, all areas identified in Tier One had both high need and high sustainability scores. Tiering was done separately for each of the four geographic groupings. Areas are not prioritized within each tier. For NYC, the areas are listed in alphabetical order by borough and within boroughs numerically by UHF neighborhood. For ROS, they are listed alphabetically within each tier.

Key Findings

NEW YORK CITY (NYC)

Sixteen neighborhoods in NYC fall into Tier One: four neighborhoods in the Bronx, five in Brooklyn, three in Manhattan, and four in Queens. There are 13 neighborhoods in Tier Two: three neighborhoods in the Bronx, five in Brooklyn, three in Manhattan, and two in Queens. There are 13 neighborhoods in Tier Three.

²⁸ Sustainability was weighted lower in the combined score because we know that there are many factors that could contribute to sustainability that were not part of our analysis.

Increasing Capacity through Expanding FQHCs *(continued)*

TABLE 5. Tiers Representing Opportunity Targets for FQHC Expansion Among New York City Neighborhoods	
BOROUGH AND UHF NEIGHBORHOOD #	NEIGHBORHOODS
T I E R O N E	
Bronx 103	Fordham • Bronx Park
Bronx 105	Crotona • Tremont
Bronx 106	High Bridge • Morrisania
Bronx 107	Hunts Point • Mott Haven
Brooklyn 203	Bedford Stuyvesant • Crown Heights
Brooklyn 204	East New York
Brooklyn 205	Sunset Park
Brooklyn 207	East Flatbush • Flatbush
Brooklyn 211	Williamsburg • Bushwick
Manhattan 301	Washington Heights • Inwood
Manhattan 302	Central Harlem • Morningside Heights
Manhattan 303	East Harlem
Queens 401	Long Island City • Astoria
Queens 402	West Queens
Queens 403	Flushing • Clearview
Queens 408	Jamaica
T I E R T W O	
Bronx 101	Kingsbridge • Riverdale
Bronx 102	Northeast Bronx
Bronx 104	Pelham • Throgs Neck
Brooklyn 201	Greenpoint
Brooklyn 206	Borough Park
Brooklyn 208	Canarsie • Flatlands
Brooklyn 209	Bensonhurst • Bay Ridge
Brooklyn 210	Coney Island • Sheepshead Bay
Manhattan 306	Chelsea • Clinton
Manhattan 309	Union Square • Lower East Side
Manhattan 310	Lower Manhattan
Queens 405	Ridgewood • Forest Hills
Queens 407	Southwest Queens
T I E R T H R E E	
Brooklyn 202	Downtown • Heights • Slope
Manhattan 304	Upper West Side
Manhattan 305	Upper East Side
Manhattan 307	Gramercy Park • Murray Hill

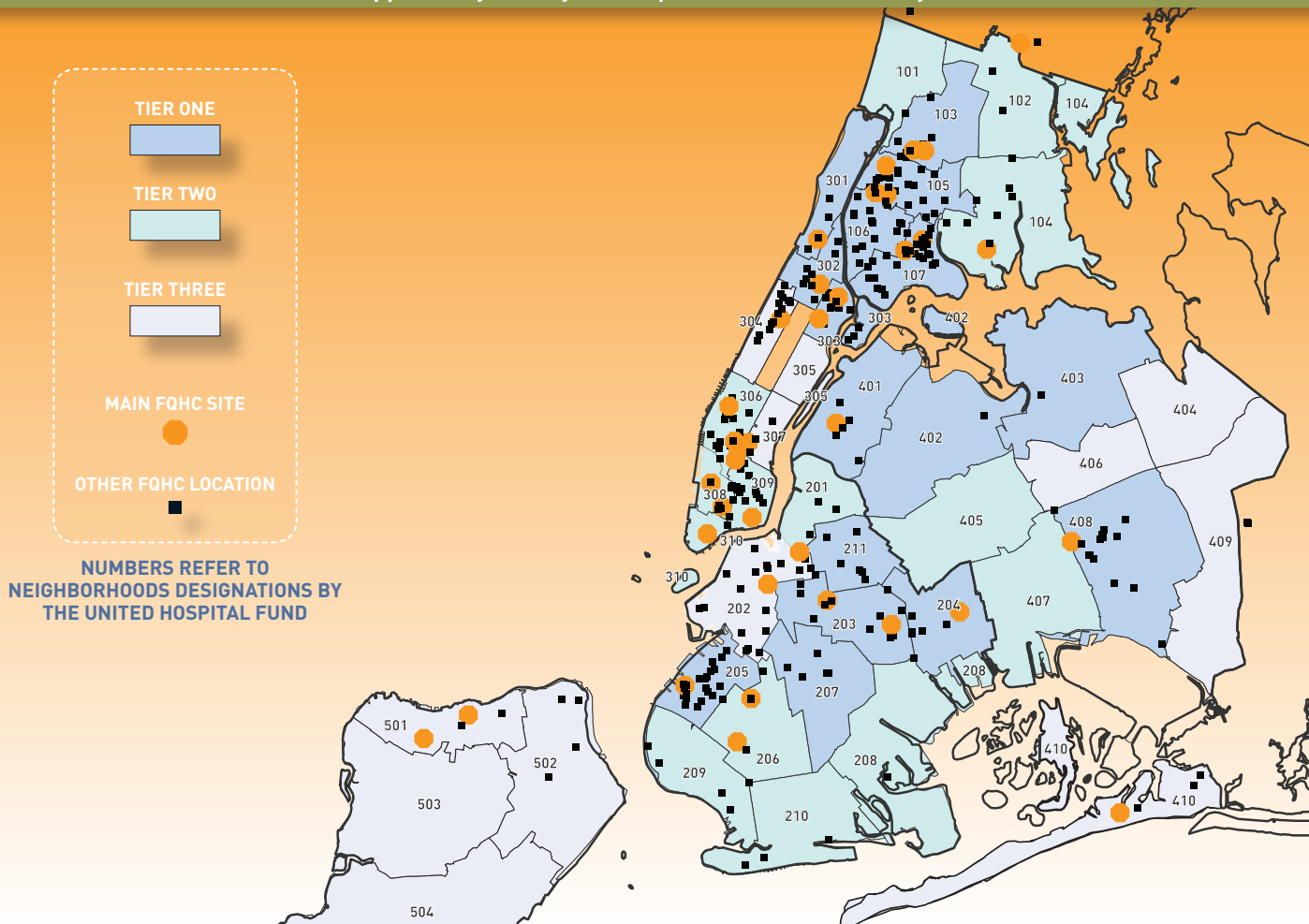
continued

Increasing Capacity through Expanding FQHCs *(continued)*

TABLE 5. Tiers Representing Opportunity Targets for FQHC Expansion Among New York City Neighborhoods

BOROUGH AND UHF NEIGHBORHOOD #	NEIGHBORHOODS
TIER THREE (continued)	
Manhattan 308	Greenwich Village • Soho
Queens 404	Bayside • Little Neck
Queens 406	Fresh Meadows
Queens 409	Southeast Queens
Queens 410	Rockaway
Staten Island 501	Port Richmond
Staten Island 502	Stapleton • St. George
Staten Island 503	Willowbrook
Staten Island 504	South Beach • Tottenville

MAP 3. Levels of Opportunity for Physical Expansion in New York City



Increasing Capacity through Expanding FQHCs *(continued)*

REST OF THE STATE (ROS)

In the ROS, a corridor of Tier One counties for FQHC expansion exists starting in Sullivan County and rising north to St. Lawrence—lying between the more populous Hudson Valley and Capital areas and the greater Syracuse area. Except for Tioga County, there is another corridor of counties in Tiers One and Two starting in Chautauqua and running across the Southern Tier to Broome County. Other North Country counties of Jefferson and Franklin are Tier One, with the neighboring counties of Clinton and Lewis being Tier Two.

The rural areas of Niagara, Ontario, and Wayne Counties are included in Tier One as are the urban areas of Albany, Erie, Orange, Rensselaer, and Westchester Counties.²⁹

TABLE 6. Tiers Representing Opportunity Targets for FQHC Expansion Among Fully Rural Counties

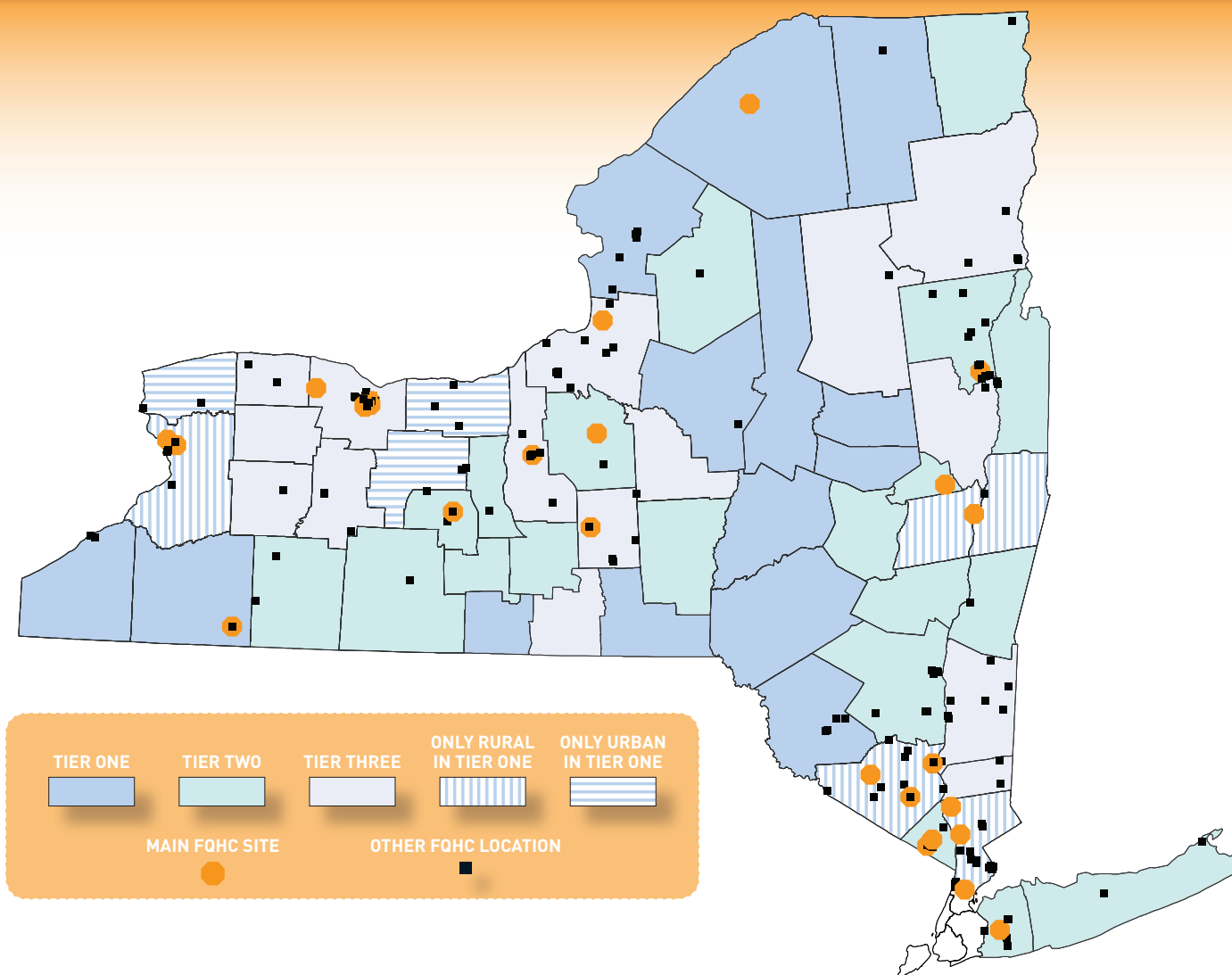
FULLY RURAL COUNTIES		
TIER ONE	TIER TWO	TIER THREE
Cattaraugus	Allegany	Cayuga
Chautauqua	Chenango	Cortland
Delaware	Clinton	Essex
Franklin	Columbia	Genesee
Fulton	Greene	Hamilton
Herkimer	Lewis	Livingston
Montgomery	Schoharie	Madison
Otsego	Schuyler	Orleans
St. Lawrence	Seneca	Oswego
Sullivan	Steuben	Wyoming
	Yates	

²⁹ These counties are crosshatched on the ROS map. The remaining mixed counties had the same tiers for the rural and urban areas, except for Onondaga and Tompkins, where the map shows the higher of the rural or urban tiers.

Increasing Capacity through Expanding FQHCs *(continued)*

TABLE 7. Tiers Representing Opportunity Targets for FQHC Expansion Among Rural and Urban Areas of Mixed Counties		
RURAL AREA OF MIXED COUNTY		
TIER ONE	TIER TWO	TIER THREE
Broome	Albany	Dutchess
Chemung	Orange	Erie
Jefferson	Schenectady	Monroe
Niagara	Tompkins	Onondaga
Oneida	Ulster	Putnam
Ontario	Warren	Rensselaer
Wayne	Washington	Saratoga
		Tioga
		Nassau
		Rockland
		Suffolk
		Westchester
URBAN AREA OF MIXED COUNTY		
TIER ONE	TIER TWO	TIER THREE
Albany	Nassau	Dutchess
Broome	Niagara	Monroe
Chemung	Onondaga	Ontario
Erie	Rockland	Putnam
Jefferson	Schenectady	Saratoga
Oneida	Suffolk	Tioga
Orange	Ulster	Tompkins
Rensselaer	Warren	Wayne
Westchester	Washington	

MAP 4. Levels of Opportunity for Physical Expansion in Rest of State



INTERPRETING THE RANKINGS AND LIMITATIONS

The geographic rankings can help inform, but not dictate, which regions to prioritize for supporting the expansion of community-based primary care, including FQHCs. The rankings can also provide a platform for a more careful exploration of community-level conditions affecting need and sustainability. Areas identified in Tier One scored high in both need and sustainability, and could be strong starting points for expansion efforts. Areas identified in Tiers Two and Three should also receive consideration and support to identify other factors that may

Increasing Capacity through Expanding FQHCs *(continued)*

demonstrate localized need and/or factors that would support sustainable expansion and/or increase their readiness to expand. For example, an area that did not rank high in sustainability but has relatively high need may require support to enhance sustainability factors.

This analysis does not capture all the factors that would determine the prospects for expansion. For example, this analysis does not assess the degree to which the areas have political and/or community support, whether there are existing FQHCs or other community-based primary care providers that are operationally ready to undertake an expansion, if there are capital resources available, or if there are other providers able to serve low-income populations—all of which are examples of critical factors for sustainable FQHC expansion.

Need is not static. Areas throughout New York experience changes in the demographics of their populations, which in turn can change the health care needs of the area. Although the analysis included overall population change as a measure, it did not include an analysis of changing demographics. Some areas also experience significant seasonal shifts in patient population, which impacts capacity as well as services needed. These seasonal changes are not included in this analysis.

This analysis did not include an assessment of the needs of special populations. For FQHCs, special populations include Health Resources and Services Administration (HRSA)-defined population categories such as the homeless, migratory or seasonal agricultural workers, and individuals living in public housing as well as those with HIV/AIDS and developmental disabilities, refugees, and children and youth in school settings. An analysis of special populations will be important for any local health planning effort and should be used to identify appropriate providers for expanding capacity and the type of expansion needed.

Our analysis does not include measures of the overall health and health status of residents within communities or counties, including social determinants of health that impact people's health. Since access to high-quality health care is necessary but not sufficient to produce healthy communities, this type of analysis will be critical to regional health planning. The University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation's 2012 County Health Rankings provide county-level data to help guide these efforts. The rankings assess the overall health of most counties in all states and the factors that affect people's health within the following four categories: health behavior, clinical care, social and economic factors, and physical environment.³⁰

³⁰ www.countyhealthrankings.org.

Increasing Capacity through Expanding FQHCs *(continued)*

THE IMPACT OF FQHC EXPANSIONS

Expanding FQHCs, especially in areas of high need, has been shown to increase the number of patients that FQHCs serve. For example, in November of 2011, Refuah Health Center opened a new site in Spring Valley, New York to respond to the unmet need for health care services in Rockland County. When they applied, the Medicaid population to Medicaid primary care FTE ratio was 9,380:1.³¹ In Spring Valley, the poverty rate was 21.1% compared to New York's rate of 14.5%.³² Since opening, Refuah has provided more than 30,600 visits at the new site and their overall patient volume has increased by 19%. The demand for services has been so great that they are building additional space to be able to accommodate more patients.

In 2009, Urban Health Plan opened a new site in Corona, which is located in West Queens. They opened the site in Corona to address issues related to health disparities and access to health care, including limitations on local primary care physicians accepting Medicaid patients. In 2006, West Queens had ranked in the bottom 10 of New York City neighborhoods in access to a regular doctor, and 1 in 4 residents rated their health as fair or poor.³³ Since it opened in 2012, they have provided approximately 127,000 visits to 17,500 unique users at the new site. Additionally, the new center has employed 70 employees from the neighborhood and has spurred the development of local businesses around the center.

Through HRSA-funded new access point (NAP) awards in 2011 and 2012, 20 FQHCs will greatly expand their ability to serve patients. For example, the Southern Tier Community Health Center Network received NAP funding in June 2012 to serve portions of Allegheny and Cattaraugus Counties. The communities targeted by the NAP are very rural and have limited health care providers in the area. Medicaid population to Medicaid primary care FTE ratio was 7,118:1.³⁴ More than 37% have incomes at or below 200% of the federal poverty level³⁵ and, of these, an estimated 27% are uninsured.³⁶ Not surprisingly the area is plagued by health disparities and has significantly high rates of heart disease, diabetes, obesity, and tobacco use. When their three NAP-funded sites are at capacity, they will be able to serve more than 11,000 patients through 35,000 encounters.

³¹ New York State Department of Health, 2007 Medicaid-eligible individuals by zip codes; 2007 primary care fee-for-service Medicaid visits, provider database.

³² U.S. Census, 2010.

³³ 2006 New York City Community Health Profile, New York City Department of Health and Mental Hygiene.

³⁴ Center for Health Workforce Studies, 2010.

³⁵ Center for Health Workforce Studies, estimate for 2009 based upon 2000 U.S. Census.

³⁶ U.S. Census, Small Area Health Insurance Estimates, 2007.

Recommendations for Expanding Capacity of the Existing and Future System

This plan focuses on two primary goals: **1)** expanding the internal capacity of existing primary care providers to serve more patients, and **2)** expanding physical capacity. To meet these goals, CHCANYS has developed actionable recommendations in four key domains.

1	2	3	4
Development of High-Performing Community-Based Primary Care	Primary Care Workforce Recruitment and Retention	Access to Affordable Capital	Community-Level Planning

1 Development of High-Performing Community-Based Primary Care

All existing and new community-based primary care providers, including FQHCs, should deliver care and operate at the highest level of performance. At a minimum, a primary care provider that is high-performing should adhere to the patient-centered medical home (PCMH) model of care. This includes ensuring access and continuity of care, using data to identify and manage patient populations, planning and managing care for individual patients, providing self-care support and community resources, tracking and coordinating care, and measuring and improving performance.³⁷ Additionally, high-performing primary care providers must operate efficiently, be cost-effective, and optimize both productivity and quality. They must be able to break out of traditional modes of operating and deliver care outside of face-to-face visits and in collaboration with other providers. They also must address community health, the social determinants of health, and health and health care disparities.³⁸

³⁷ Adapted from NCQA. <http://www.ncqa.org/Portals/0/PCMH2011%20withCAHPSInsert.pdf>. Accessed December 4, 2012.

³⁸ This articulation of a high-performing primary care provider mirrors the work of the Commonwealth Fund Commission on a High Performance Health System. In their framework, they indicate that the core goals and priorities for achieving high performance are: high quality care, access and equity for all, efficient care, and system and workforce innovation and improvement—all of which support people living long, healthy, and productive lives. (The Commonwealth Fund Commission on a High Performance Health System, Framework for a High Performance Health System for the United States, The Commonwealth Fund, August 2006.)

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

DEVELOP AND IMPLEMENT A TRAINING AND TECHNICAL ASSISTANCE PROGRAM

The State should support a training and technical assistance program. The program could be developed as a pool of funding—optimally augmented with resources from public and private funders—for community-based primary care providers, including FQHCs, to purchase expert assistance, participate in Learning Collaboratives, and/or develop shared resources and supports. The program should prioritize the following:

- **Assist community-based primary care providers in implementing systems for managing and balancing supply and demand and increasing capacity.** Primary care providers should implement practice redesign strategies that decrease patients' waiting times for appointments, reduce patient no-shows, maximize productivity and patient volume, and eliminate waste in their systems (e.g., risk-adjusted patient panels, Open Access Scheduling, Lean³⁹).

Open Door Family Medical Centers: Developing Patient Panels

Open Door Family Medical Centers wanted to assess and compensate providers and staff based upon quality of care while maintaining a high level of productivity. To achieve this, they focused on creating provider panels. Building off a robust clinical report card system, Open Door leadership underwent a yearlong process to “clean” their patient panels. This involved addressing fundamental questions such as defining appropriate panel sizes that considered acuity and productivity as well as determining the metrics to evaluate providers based upon quality. With little literature to guide their efforts, they had to devise ways of developing accurate panels that reflected true patient/provider assignments. They found that this required significant organizational change, including re-engineering care delivery at all levels of the organization. Open Door also recognized the importance of managing and mining data. “You cannot assess based upon quality considerations if your providers do not believe that data is theirs or you cannot even find the data.” Open Door built upon their significant health information technology (HIT) infrastructure and added key staff members to focus on developing the real-time capacity to assess quality and productivity.

Additionally, Open Door invested substantial time and resources to train providers and clinical and administrative support staff to implement the needed changes. While the process is ongoing, Open Door has maintained a high level of productivity while being able to reflect achievement of quality outcomes in their providers' compensation.

³⁹ Based on manufacturing management principles, Lean is a process applied to health care delivery that seeks to eliminate waste in the delivery process and ensure that all work adds value to patients. <http://www.ihl.org/knowledge/Pages/IHIWhitePapers/GoingLeaninHealthCare.aspx>. Accessed March 21, 2013.

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

Hudson Headwaters Health Network

Hudson Headwaters Health Network (HHHN) operates 15 FQHC sites distributed across five upstate New York counties. They have taken a number of steps to maximize productivity and disseminate practice changes and standards related to care integration. They established threshold productivity expectations for their 137 primary care providers. HHHN also created a team called the Lead Physician Group, which comprises 13 physicians from the various HHHN sites, the Dental Director, and the lead behavioral health provider. During weekly meetings the group assesses and identifies strategies for improving productivity, PCMH implementation, practice efficiency, and coding. They distribute monthly individualized score cards and meet with each provider to discuss productivity targets. Recently, the group also incorporated available data on patient satisfaction, quality of care, and utilization of health care resources to direct efforts to align with their Pay-For-Performance initiative.

HHHN also formed a Work Group, which comprises front office staff, lead nursing staff, care coordinators, and medical directors. During weekly meetings, they focus on how to ensure clinical support staff are working at the highest levels of their licenses. They also design and adapt protocols to standardize task and role delegation.

- **Assist community-based primary care providers in implementing team-based care.** Primary care providers should transition to a model of care where provider-led teams provide care to patients and manage their patient populations, and where all members of the team have defined roles that enable them to operate at the top of their licenses. Providers need assistance in identifying which care team model will work best for their patient populations; designing care teams that are able to manage the health of individuals and populations of patients; developing patient panels; developing care coordination and population management capabilities; developing protocols, workflows, and systems to support the new way of delivering care; and developing the right workforce.
- **Assist community-based primary care providers in enhancing their Health Information Technology capabilities.** Primary care providers should learn how to more efficiently use their EHRs to improve productivity, quality, and outcomes. This should include training centers on how to best capture data in the EHR, run performance reports, understand their data, and develop and monitor interventions. Beyond those skills, FQHCs need to learn how to use their EHRs and other technology systems to do planned care, pre-visit planning, and care management and coordination as well as integrate care across settings. For FQHCs, much of this work can be accomplished through training and technical assistance resources to enhance providers' use of the CPCI data warehouse's automated measures and reports.

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

EXPAND THE USE OF TELEMEDICINE

Telemedicine has been shown to improve access to a range of critical services (e.g., behavioral health, dental, and difficult-to-access subspecialties) in rural as well as suburban and urban areas. It enables providers to augment their capacity without having to hire providers or send patients to other providers, if they are even available. To support the expansion of telemedicine, CHCANYS recommends the following:

- **State and/or private and public funders should support the upfront implementation costs of telemedicine programs.** The upfront equipment and technology costs can often be a deterrent to the adoption or expansion of telemedicine programs, especially when a provider cannot guarantee that they will recover the costs due to an uncertain reimbursement environment for telemedicine services.⁴⁰ To overcome this challenge, the State and/or private and public funders should support the one-time expenses associated with implementing telemedicine programs, including capital funds to acquire the necessary equipment and technology and training on how to use the equipment and deliver effective care through telemedicine.
- **CHCANYS will work with the National Association of Community Health Centers to press for coverage for FQHCs' telemedicine programs in Federal Tort Claims Act (FTCA) policies.** A critical issue for FQHC that want to adopt or expand telemedicine is whether or not the services are covered under the medical malpractice protection FQHCs receive under FTCA. Because telemedicine is not a traditional face-to-face visit, the issue of FTCA coverage is a complex one for FQHCs, and there are many outstanding policy questions, including questions related to whether or not the patient who is being served can be considered an FQHC's patient, if the provider delivering the service remotely is an FQHC employee, and if the service that is being provided is part of the FQHC's approved scope. Further complications arise if the remote service is provided across state lines. To date, HRSA has not released policies on telemedicine and FTCA; however, such policies would help guide FQHCs as they seek to implement these systems.

Additionally, CHCANYS will work with the State and other payers to develop FQHC telemedicine payment methodologies that support the use and expansion of the model and align with federal requirements for FQHC payment.



Primary Care Workforce Recruitment and Retention

Primary care providers must be able to recruit, train, and keep a workforce that is stable and well qualified to serve low-income patients. Filling vacant positions is

⁴⁰ Quality Incentives for Federally Qualified Health Centers, Rural Health Clinics and Free Clinics: A Report to Congress. Prepared by the Department of Health Policy, School of Public Health and Health Services, George Washington University, January 23, 2012

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

an immediate means to expand the capacity of existing providers to serve more patients. In addition, the next generation primary care workforce will need a thorough understanding of and skills for providing advanced models of care, including PCMHs, Accountable Care Organizations, Health Homes, and other forms of integrated care, as well as for the FQHC model of care delivery. This requires ensuring that FQHCs have the right workforce in place now as well as developing a future workforce pipeline. The State has a long-standing history of funding workforce development through its Health Workforce Retraining Initiative.⁴¹ Specifically, CHCANYS recommends the following:

EXPAND NEW YORK'S DOCTORS ACROSS NEW YORK AND THE PRIMARY CARE SERVICE CORPS PROGRAMS

New York State recruitment and retention programs, Doctors Across New York (DANY) and the Primary Care Service Corps (PCSC), help underserved communities and facilities with shortages of health care providers to recruit and retain clinical providers through scholarship and educational loan repayment opportunities in exchange for service commitments. These programs provide an opportunity to fill vacancies in underserved areas. The State's 1115 Waiver application includes \$250 million in funds to expand DANY and the PCSC.⁴² Regardless of the outcome of the Waiver, the State should continue to support and expand the programs. A significant expansion of the programs will be critical to fill current vacancies as well as new positions that will be needed as FQHCs expand. Filling the 369 FQHC vacancies for providers eligible for the programs alone would enable FQHCs to provide more than 720,000 additional visits for more than 155,000 patients.

DEVELOP PROVIDER TEACHING AND TRAINING PROGRAMS IN FQHCS

In the long-term, the State and/or private and public funders should support the development of physician, physician assistant, and nurse residency teaching and training programs in FQHCs. This supports a "grow your own" approach to recruiting and retaining primary care providers. Recent evidence supports this approach. One study showed that family physicians trained in community health centers were almost twice as likely to work in underserved settings than those not trained in health centers (64% versus 37%).⁴³ An analysis of a family

⁴¹ This initiative provides funds for projects that train or retrain health workers to obtain positions in occupations with documented worker shortages and provide employment for workers who need new jobs or skills due to changes in the health care system. <http://www.health.ny.gov/funding/rfa/inactive/1106081010/index.htm>. Accessed January 18, 2013.

⁴² http://www.health.ny.gov/health_care/medicaid/redesign/docs/2012-08-06_waiver_amendment_request.pdf. Accessed January 18, 2013.

⁴³ Morris CG, Johnson D, Kim S, Chen F. Training family medicine residents in community health centers: a health workforce solution. *Fam Med*. 2008;40(4):271–276.

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

medicine residency network⁴⁴ showed that 80% of graduates from residency programs affiliated with health centers worked in underserved areas in the year after graduation.⁴⁵

Institute for Family Health's Residency Program

The Institute for Family Health (IFH) has been at the forefront of developing FQHC residency programs. IFH was one of 12 programs nationally to receive an award from HRSA's Teaching Health Center Graduate Medical Education (THC GME) program in the first year and is currently the only one in New York.

IFH has used THC GME funding to add four residents per year to its existing Mid-Hudson residency program. Two residents per year are training now at their community health center in Ellenville, NY in affiliation with a critical access rural hospital, the Ellenville Regional Medical Center. Two other residents per year are training at their health center in New Paltz, NY. In July 2012, IFH was approved for a second THC GME award for 24 residents (i.e., 8 per year) to be trained at their new facility in Harlem. As of 2013, the program has been approved to expand to 36 residents, which will be accomplished by expanding the primary care training activities to new health center sites in the Bronx.

IFH also has worked with the leadership at Mount Sinai and together opened a new Department of Family Medicine and Community Health there in July 2012, and Dr. Neil Calman, the President and CEO of IFH, became Professor and Chairman of the new department, which is being operated by IFH. This is providing an opportunity for nearly 100 medical students to rotate through IFH sites this year.

The impact is significant. For family practice physicians alone, when their program is full IFH will have a total of 96 residents training in their three programs and in six different FQHC sites and will graduate 32 new FQHC-oriented family practice physicians every year. The impact of their program will be even greater across all the different providers in their programs. Ultimately, IFH could expand its program to place residents at other FQHCs and increase the impact of these programs in the State.

FQHCs are or could be involved in residency programs at three levels:

1. FQHCs could provide a place for month-long experiences for residents as an elective.
2. FQHCs could take an existing hospital-funded and hospital-accredited residency program and move the ambulatory care experience into the FQHC.
3. FQHCs could become an Accreditation Council for Graduate Medical Education (ACGME)-accredited organization that sponsors the residency program. This latter approach would

⁴⁴ WWAMI (Washington, Wyoming, Alaska, Montana, and Idaho) Family Medicine Residency Network

⁴⁵ Morris CG, Johnson D, Kim S, Chen F. Training family medicine residents in community health centers: a health workforce solution. *Fam Med*. 2008;40(4):271-276.

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

enable FQHCs to get direct funding through HRSA's Teaching Health Center Graduate Medical Education program (THC GME).⁴⁶

To support the development of these programs among FQHCs, CHCANYS recommends the following:

- **The federal government should extend funding for HRSA's THC GME program.** The national program directly funds health centers for the training of residents in primary care and dentistry. It was authorized and funded under the ACA for \$230 million over 5 years beginning in 2011. The program only has three years of funding remaining, and it is uncertain if the program will be continued. Extending the program would remove the immediate risk of the program being defunded, which currently creates challenges both for health centers and for recruiting residents and has dampened interest in the program. To date, the Institute for Family Health is the only FQHC currently funded in New York.
- **The State and/or public and private funders should provide support for the start-up costs of developing programs and/or a partnership with hospitals' residency programs.** In order to apply for HRSA's THC GME, FQHCs must have an accredited residency program already in place at the time of application. THC GME funding cannot be used to develop a new residency program or to defray the cost of obtaining accreditation. Funding would assist FQHCs in creating programs that would then be eligible for HRSA's THC GME program, if it is extended. Funding should be directed toward the costs of identifying and assessing the multiple options for developing a program and establishing the program.⁴⁷
- **Public and private funders should provide funding to evaluate the programs.** Evaluation should include assessing the impact of the programs and identifying opportunities for replication and improvement.

⁴⁶ Payments are made for direct expenses associated with sponsoring an approved graduate medical or dental residency training program and indirect expenses associated with the additional costs related to training residents in such programs. <http://bhpr.hrsa.gov/grants/teachinghealthcenters/index.html>. Access January 18, 2013.

⁴⁷ Start-up costs for developing a program include identifying and assessing options for developing a program, assessing organizational capacity and the impact on patient care, developing the scope of the program (including number of residents and the mix levels [e.g., what year of residency they are in]), conducting financial due diligence, defining the allocation of authorities, developing curricula and practice requirements, and preceptor/faculty training. Start-up costs for developing a partnership with a hospital include many of the same costs as developing a program as well as negotiating a contract with hospitals (including Graduate Medical Education reimbursement, funds from the hospital offset non-reimbursable costs), developing billing procedures, and addressing legal issues [e.g., insurance medical malpractice].

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

INSTITUTIONALIZE ADVANCED CARE MODELS INTO EDUCATIONAL PROGRAMS

Educational institutions need to embed new care delivery models into their clinical training programs. In addition, they also must develop and provide programs for care coordinators, case managers, community health workers, health coaches, and others. As a long-term option, the State and/or private and public funders should fund the enhancement, development, and provision of these programs through diverse partnerships that could include CHCANYS, the Healthcare Association of New York State (HANYS), Area Health Education Centers, the Center for Health Workforce Studies, and institutions that provide education and training such as community colleges and labor union training funds.

3 Access to Affordable Capital

As this plan illustrates, there is a need to build a larger system of FQHCs and other community-based primary care providers in many regions of the State. This will become increasingly important as more people obtain insurance coverage through the implementation of the Health Benefit Exchange. To support that expansion, providers will need access to affordable capital. The capital funds will help providers build new sites, expand their existing sites, purchase health information technology, renovate outdated facilities, and increase access through the use of telemedicine and mobile medical vans. The findings identified in this report should guide short- and long-term decisions about where to apply capital support.

The State's 1115 Waiver application recognizes the importance of capital investment in the primary care sector, including FQHCs. It rightly calls for traditional asset-based capital funding for primary care providers that need up-front investment in facilities in areas with high need; debt relief and restructuring that will enable financially distressed primary care providers to pursue capital for expansion, including through taking on debt; and a permanent, revolving capital fund that will provide access to affordable public/private financing for primary care providers. It also includes various forms of operational assistance and technology funds to support primary care expansion. Regardless of the outcome of the Waiver, these strategies could accelerate the expansion of community-based primary care.

MAXIMIZE CAPITAL FUNDS THROUGH LEVERAGING PUBLIC AND PRIVATE FUNDS

As the State determines how to invest funds to support the capital needs of the primary care sector, it should ensure that priority is given to projects that leverage other funds and attract other investments. For example, the State could issue grants that encourage investment by

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

lenders by reducing their risk; support credit enhancement costs; and use the revolving capital loan fund to supplement and encourage credit enhancement from local, State, and federal governments (e.g., the State of New York Mortgage Agency and HRSA and US Department of Agriculture loan guarantee programs). As providers apply for funds, the State should consider the provider's ability to leverage outside sources of capital, including loans, foundation grants, and owner's equity.

DEVELOP A CENTRALIZED CAPITAL TECHNICAL ASSISTANCE PROGRAM

Many community-based primary care providers do not have the in-house expertise to accurately assess their capital needs, assess their risks, and identify and secure capital financing for expansions. This often results in long delays in expansions, with projects sometimes delayed for many years until a provider can develop a project and put together a patchwork of financing. This process could be accelerated through the development of a centralized technical assistance program to support community-based primary care providers in accessing capital and managing capital projects. A centralized program could also help produce more cost-effective projects that are based on reliable data analyses and financially-sound models.

In response to this need, CHCANYS is establishing a Capital Development Program for New York's FQHCs and other community-based primary care providers. The program can identify and drive existing and emerging financing options for providers (e.g., loans, bonds, grants, credit enhancements, etc.) and broker arrangements with financing organizations (e.g., Community Development Financial Institutions, banks, federal and State government). The program would also provide direct technical assistance from capital finance professionals to evaluate financing options for providers, develop short-term and long-term financial plans, and assist them in executing particular steps of the capital financing project such as market demand and feasibility analysis, preparation, and grant applications. It would also offer assistance in managing the capital projects after financing is secured.

SUPPORT FOR NON-CAPITAL EXPANSION COSTS

There are many non-capital costs associated with expansion, such as business planning, architectural fees, and regulatory filings but few sources of funding to cover those expenses. The New York State Health Foundation (NYSHealth) has provided funding to increase the capacity and expansion of community health centers in medically underserved regions. The funding included support for the non-capital costs of expansion. NYSHealth also provided funding to CHCANYS for the development of New Access Points in high-need communities throughout the State. An investment of \$400,000 for 12 health centers yielded 11 New Access Point awards

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

and \$25.6 million in federal grants over a 5-year period.⁴⁸ CHCANYS recommends that NYSHealth expand these programs and that other funders make similar investments.

4 Community-Level Planning

This plan should be supplemented by additional and ongoing planning efforts at the community level. This level of planning will support the development of community-specific expansion plans that are feasible and sustainable and will be an important complement to the regional planning efforts. The State is leading this effort and has outlined the need to assess multiple factors, including the supply and distribution of health care resources; the demand for health care; and strategies to improve population health, reduce preventable hospitalization and Emergency Department utilization, and address health and health care disparities. The Public Health and Health Planning Council (PHHPC), which has developed regional health planning recommendations, calls for the establishment of multi-stakeholder Regional Health Improvement Collaboratives (RHICs) to conduct the health planning. They have also proposed 11 planning regions,⁴⁹ which take into account multiple factors relevant to health planning. The PHHPC has asserted the importance of sub-regional planning activities.⁵⁰ Sub-regional—or community-based planning—is critical because there are challenges to applying regional or even county-level findings to local settings.⁵¹ Community-level planning will support the development of plans that are relevant and actionable at the local level and will be an important complement to the regional planning efforts.

This report outlines strategies for increasing community-based primary care capacity. Since access to high-quality health care is necessary but not sufficient to produce healthy communities, there is also a need for additional analysis related to social determinants of health, which have a profound impact on people's health. This type of analysis will be particularly important to regional health planning efforts and should be conducted at community levels to understand local issues and develop effective strategies.

⁴⁸ Sandman D and Cozine M. New York State Health Foundation Grant Helps Health Centers Win Federal Expansion Funds. Health Affairs, November 2012 vol. 31 no.11 2583-2587

⁴⁹ http://www.health.ny.gov/facilities/public_health_and_health_planning_council/docs/con_redesign_report.pdf. Accessed January 18, 2013.

⁵⁰ Ibid.

⁵¹ In this analysis, we did separate analyses for the rural and urban portions of counties since those differences would reflect differences in need and sustainability. The analysis also used UHF-defined neighborhoods instead of New York City as a whole or boroughs to assess the need and sustainability in the City. Even at that level, it is likely that some significant need or sustainability was masked by how neighborhoods were constructed (e.g., Staten Island and Long Island), which underscores the need for community-level planning.

Recommendations for Expanding Capacity of the Existing and Future System *(continued)*

PROVIDE RESOURCES FOR COMMUNITY-LEVEL PLANNING

Community-level planning efforts will require resources to develop the infrastructure for and support the implementation of this level of planning. They should rely on existing health and health care planning tools and data and support new data collection where there are gaps in community-level information and data. These efforts should use a common set of core indicators to allow for comparisons and augment those with additional indicators to capture data specific to the community. In addition to conducting data analyses on needs and opportunities, the community planning work should also include conducting environmental assessments, soliciting input from all stakeholders, and facilitating the community planning process. The community planning processes could be led by an entity selected by the community and the RHIC and leverage data and tools developed by CHCANYS' CPCI⁵² and other sources.

⁵² To support community-level planning, CHCANYS' CPCI has assembled a rich repository of geographically-referenced data on health conditions, social determinants of health, existing service sites, and clinical data on the populations served in those sites. These resources will be critical as the plan is implemented. (See Appendix F for an overview of the data resources developed in our planning effort.)

APPENDIX A:

Measures of Need and Sustainability

Measures of Need

Prevention Quality Indicators (PQI) – Observed-to-Expected: This is the ratio of the observed (actual) number of preventable hospitalizations to the expected number based on statewide results for a population matched to this area on age and sex. Because timely and effective primary care can reduce preventable hospitalizations, this measure is often seen as an indicator of the need for additional primary care resources. These values were obtained from a third-party analysis of 2010 SPARCS hospital inpatient records from the New York State Department of Health.

Emergency Department – Percentage Primary Care Treatable: This is the percentage of all treated-and-released ED visits that are evaluated as non-emergencies or as treatable in a primary care setting, using a well-known classification developed at New York University (NYU). While overall ED use is subject to many factors, the proportion of such use that could have been handled in a primary care setting is often cited as a measure of the need for additional primary care resources. These values were obtained from a third-party analysis of the 2010 SPARCS hospital inpatient records from the New York State Department of Health.

Uninsured: Because FQHCs are a critical resource for the uninsured, the proportion of an area's residents without health insurance can be a factor in assessing an area's need for FQHCs. This measure was not available for the rural and urban components of the 26 mixed counties, but it was available at the county level from the Census Bureau's 2008-2010 American Community Survey and at the NYC neighborhood level from the 2010 New York City Department of Health and Mental Hygiene's Community Health Interview.

Percentage No Regular Provider: Providing a regular source of care is a strength of FQHCs and a factor in promoting effective primary care. The proportion of residents who indicate that they have no regular provider may be a sign of the need for additional FQHCs. This measure was not available for the rural and urban components of the 26 mixed counties, but it was available at the county level from the 2009 Behavioral Risk Factor Surveillance Survey (BRFSS) conducted by the New York State Department of Health.

Percentage Missed Medical Care: Available from the 2010 Community Health Interview for the NYC neighborhoods, the percentage who say they missed necessary medical care last year may be an indicator of the need for additional primary care resources.

APPENDIX A: Measures of Need and Sustainability *(continued)*

Percentage Minority, Percentage < 200% Poverty, Percentage >= Age 65, Percentage Non-Citizens, Percentage Limited English: Each of these demographic measures addresses a group for whom timely and effective primary care may be especially problematic. The minority, age, and non-citizen values are available from the 2010 Census, and the other two were estimated from the 2006-2010 American Community Survey. A greater prevalence of any of them may indicate a greater need for FQHCs, which are well suited to address these populations.

Percentage Late/No Prenatal: The lack of timely prenatal care may indicate a need for FQHCs, both because they target such care and because poor performance on this measure is often associated with other deficits in primary care resources. The measure was available for 2008-2010 from the New York State Department of Health at the ZIP code level statewide.

Measures of Sustainability

EXCEPT AS NOTED BELOW, THESE MEASURES WERE AVAILABLE FOR ALL GEOGRAPHIC AREAS.

Community-Based Primary Care Physicians/100,000 (C-B PC Docs/100K): This measure is the number of full-time equivalent community-based primary care doctors per 100,000 of population, based on 2010 data from the SUNY Center for Health Workforce Studies (School of Public Health, University at Albany). The expectation is that areas where such doctors are more abundant may offer better prospects for sustainable growth than areas where there is a relative shortage of such doctors.

Population Change Percentage: Areas where the population increased from the 2000 to 2010 Censuses may be better able to support expansion than areas of decline. The data were taken from the Census Bureau website.

Percentage Low-Income not in FQHC: This measure subtracts the area's FQHC enrollees (2010 HRSA UDS) from its population below 200% of the poverty level (2006-2010 American Community Survey) and divides the result by the population under 200% of the poverty level. The result is a measure of the opportunity to enroll more FQHC patients: a measure of the area's ability to absorb more FQHCs.

Percentage Medicaid Eligible and Uninsured: This estimates the percentage of a county's population that is below the income level for publicly funded coverage through Medicaid, Child Health Plus, or Family Health Plus and is uninsured. A larger percentage on this measure could indicate an opportunity to enroll new patients. Based on the 2008-2010 American Community Survey, the measure was not available below the county level (therefore, it was not used in the NYC estimates).

APPENDIX A: Measures of Need and Sustainability *(continued)*

Labor Force Participation Percentage: Labor force participation can be a gateway to health insurance; higher rates may indicate greater opportunity for FQHCs. The measure was estimated from the 2006-2010 American Community Survey.

Medicaid/Medicare Percentage: The percentage of the population covered by Medicaid and Medicare may be related to better funding opportunities for FQHCs. This measure was not available for the rural and urban components of the 26 mixed counties, but it is available at the county level from the 2008-2010 American Community Survey and for NYC neighborhoods (from the 2010 Community Health Interview).

Urban Access: Access to an urban area may be related to the ability to attract a workforce to rural areas of the state. Using data from the Rural Health Research Center at the University of Washington, this measure is an estimate of the percentage of the area's population that lives in a ZIP code where at least 30% of people commute to an urban area with at least 50,000 people within 30 minutes of the ZIP code. A higher percentage indicates a more accessible area that may be better able to attract workers.

APPENDIX B:

Qualitative Methodology

To augment the quantitative analyses, CHCANYS conducted a qualitative study of capacity among New York’s FQHCs. CHCANYS conducted interviews with New York State FQHC executive leaders to explore how FQHCs are considering capacity-related issues and what they are doing to address capacity.

Qualitative Interview Site Selection

In order to select a representative set of FQHCs for qualitative interviews, CHCANYS developed a set of selection criteria, which included:

- **Location.** CHCANYS used the same location classification for sites as the August 2011 CHWS report, *Community Health Center Workforce in New York*. Based on the location of their main site, sites were categorized according to three geographic groupings: NYC, Rural ROS, and Urban ROS.
- **Size.** CHCANYS also used the site size classification from the CHWS 2011 report, which determined size based on number of total full-time equivalent (FTE) staff. Based on UDS, sites that had greater than 50.0 FTEs were categorized as *Large*; sites that had between 30.0 and 50.0 FTEs were categorized as *Medium*; and sites that had less than 30.0 FTEs were categorized as *Small*.
- **Visits per Physician FTE Ratio.** In order to ensure that information was captured from sites throughout the spectrum of this fundamental productivity measure, CHCANYS categorized sites based on the ratio of visits per physician FTE. Because of documented variation in visits per physician FTE across settings, this ratio was analyzed based on size of facility and location. The average and median ratio was determined by category to identify sites that fell within the high, average, and low range in order to ensure adequate representation for this measure.
- **Average Ratio of Physicians to Mid-Level Providers.** In order to capture sites that may be utilizing non-physician care models (such as care teams) that could impact productivity, sites were also arrayed based on the average ratio of physician FTEs to mid-level provider FTEs. Again, this ratio was analyzed based on size of facility and location. The average and median ratio was determined by category to identify sites that fell within the high, average, and low range in order to ensure adequate representation for this measure.

APPENDIX B: Qualitative Methodology *(continued)*

- **Other Considerations.** CHCANYS also included criteria related to hospital affiliation, FQHCs serving special populations, and FQHCs with Look-Alike status. Two FQHC Look-Alikes were included: one for NYC and one for ROS.

A potential FQHC interview list was developed based on the criteria. The potential interviewee list was reviewed and finalized by the project team and CHCANYS leadership.

Interviews

CHCANYS developed an interview protocol and interview guide. The lead interviewer conducted a training on the protocol and interview guide with the second interviewer. CHCANYS conducted 20 interviews with FQHC executive and clinical leaders: 10 in NYC, 6 FQHCs in ROS Urban, and 4 FQHCs in ROS Rural. Sites were contacted to schedule interviews, and interviews were conducted during April and May 2012. All interviews were recorded and transcribed except for one; notes were taken at the non-recorded interview.

Thematic Analysis

The analysis was conducted through an iterative process with a team of reviewers, including the two interviewers. Six of the transcripts were provided to a review team to develop initial content themes. The review team met as a group to compare and clarify themes and develop a condensed list of common themes. The review team then reviewed all transcripts using the list of themes and noted any new potential themes. The review team then met to compare findings and select quotes and examples of common themes. The findings were captured in an Excel spreadsheet. The review team met and used the information in the spreadsheet to discuss the common perspectives and experiences reported by the interviewees. Based on that discussion, they revised the spreadsheet to capture more detailed findings. The spreadsheet and this process were used to construct the findings in this report.

APPENDIX C:

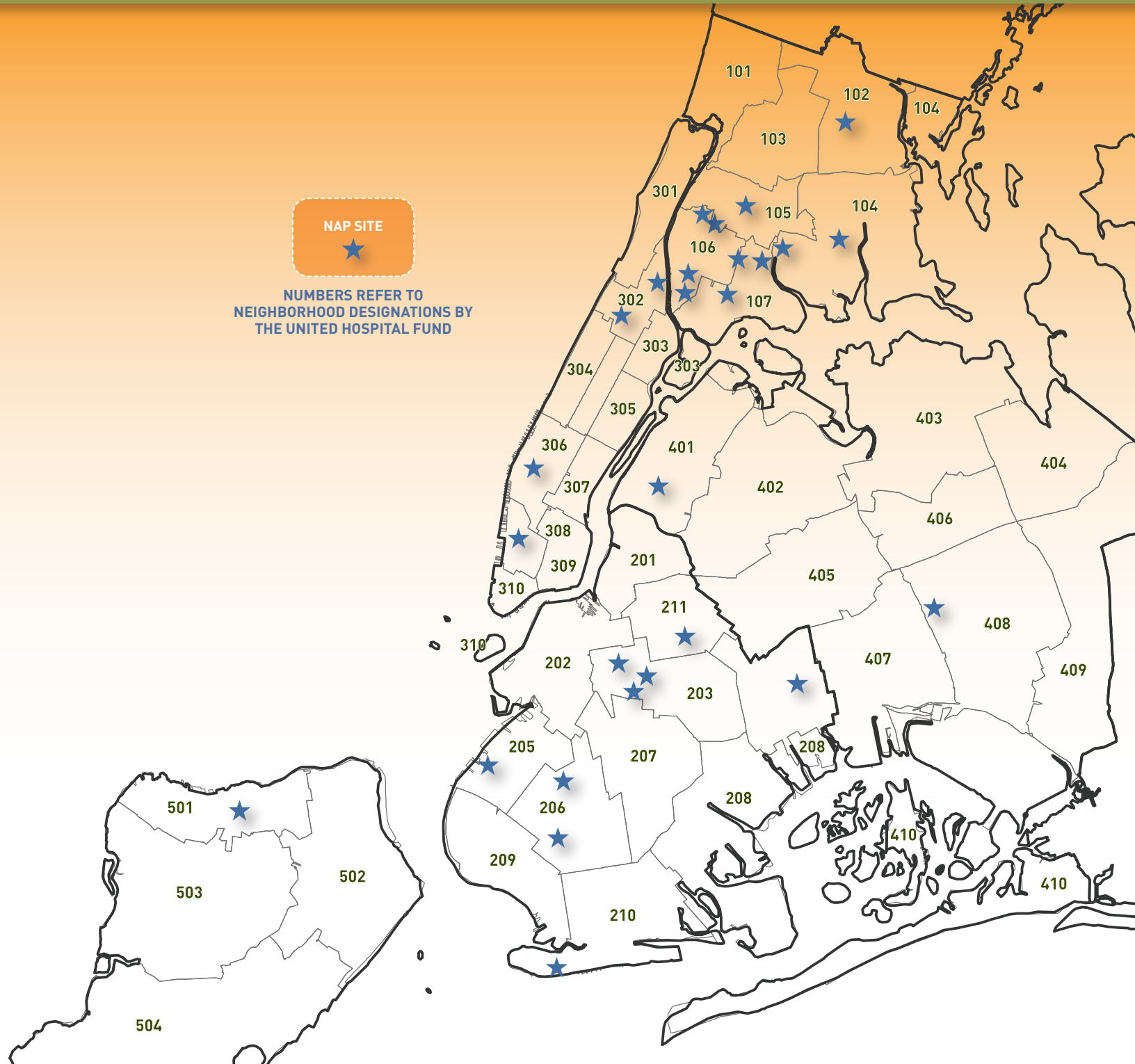
FQHC New Access Points

ACA-Funded New Access Points (NAPs), 2011 and 2012

AUGUST 2012
Anthony L. Jordan Health Center
Care for the Homeless
Finger Lakes Community Health
Harlem United / Upper Room AIDS Ministry, Inc.
Housing Works, Inc.
ICL Health Care Choices, Inc.
Lutheran Family Health Centers
Project Renewal, Inc.
JUNE 2012
Bronx Community Health Network, Inc.
Community Health Center of Buffalo
Community Health Center of Richmond
East Hill Family Medical, Inc.
Ezra Medical Center
Ezras Choilim Health Center, Inc.
HELP/PSI Services Corporation
Hudson Headwaters Health Network
Hudson River HealthCare / Long Island FQHC
North Country Children's Clinic, Inc.
Northern Oswego County Health Services, Inc.
Northwest Buffalo Community Health Center
Oak Orchard Community Health Center
Open Door Family Medical Centers, Inc.
Southern Tier Community Health Center Network / Universal Primary Care
The Chautauqua Center
The Floating Hospital
The Greater Hudson Valley Family Health Center, Inc.
Urban Health Plan, Inc.
William F. Ryan Community Health Network

APPENDIX C: FQHC New Access Points (continued)

MAP 5. ACA-Funded New Access Points (NAPs) in New York City



APPENDIX C: FQHC New Access Points (continued)

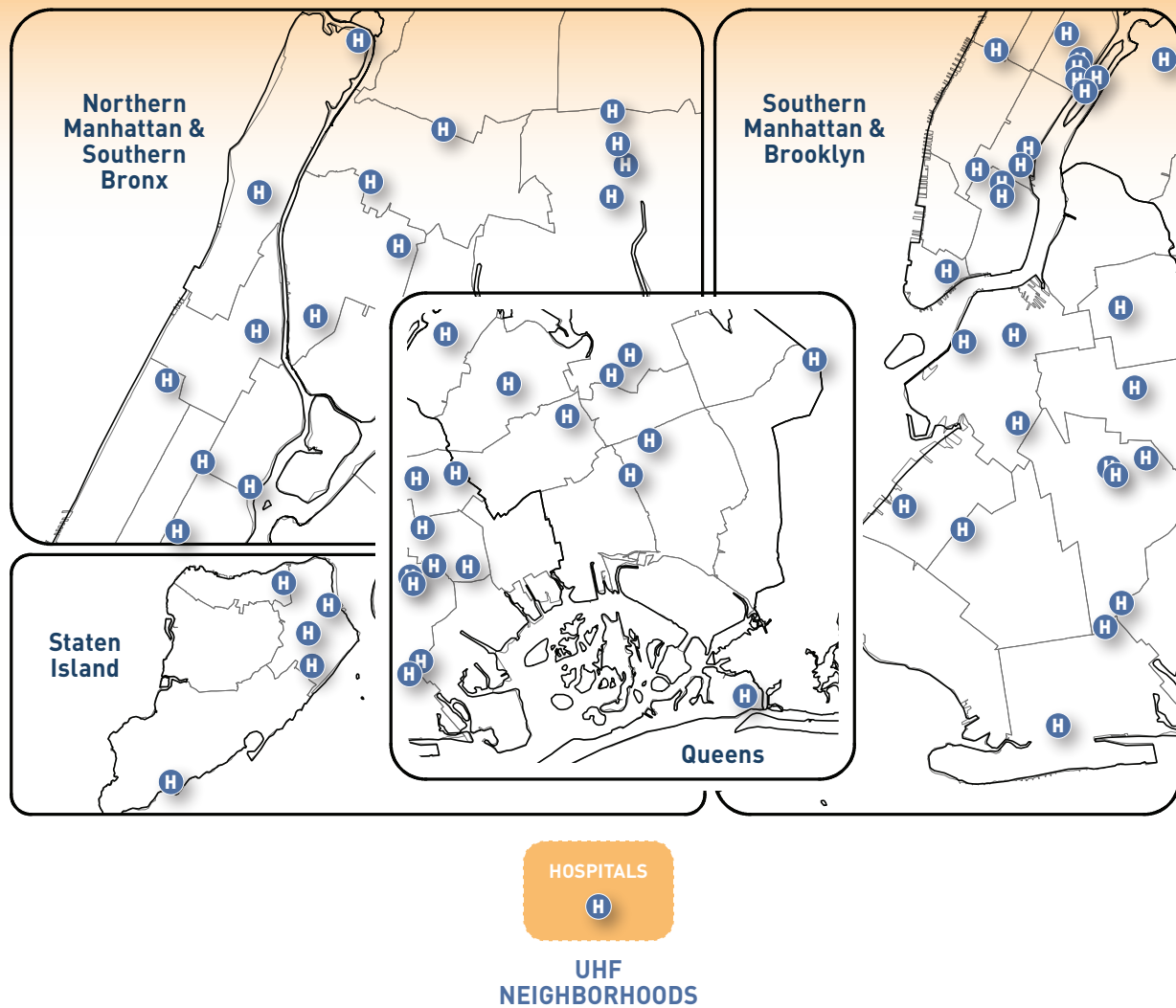
MAP 6. ACA-Funded New Access Points (NAPs) in Rest of State



APPENDIX D: Other Primary Care Providers in New York

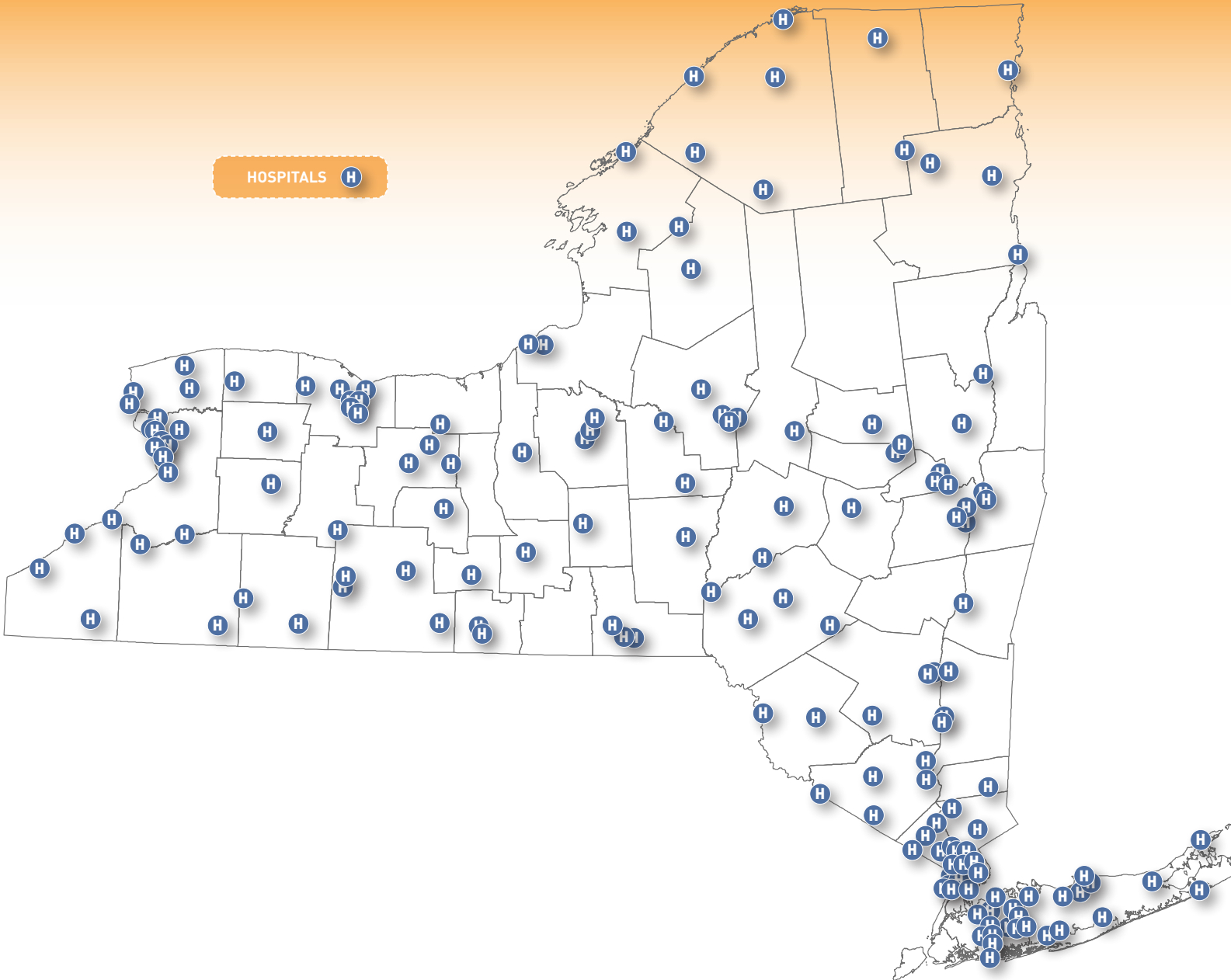
The following maps show the locations of other primary care providers. Although this analysis focused on FQHCs, CHCANYS recognizes that there may be other providers who could provide community-based primary care to communities in areas of need.

MAP 7. Hospitals in New York City



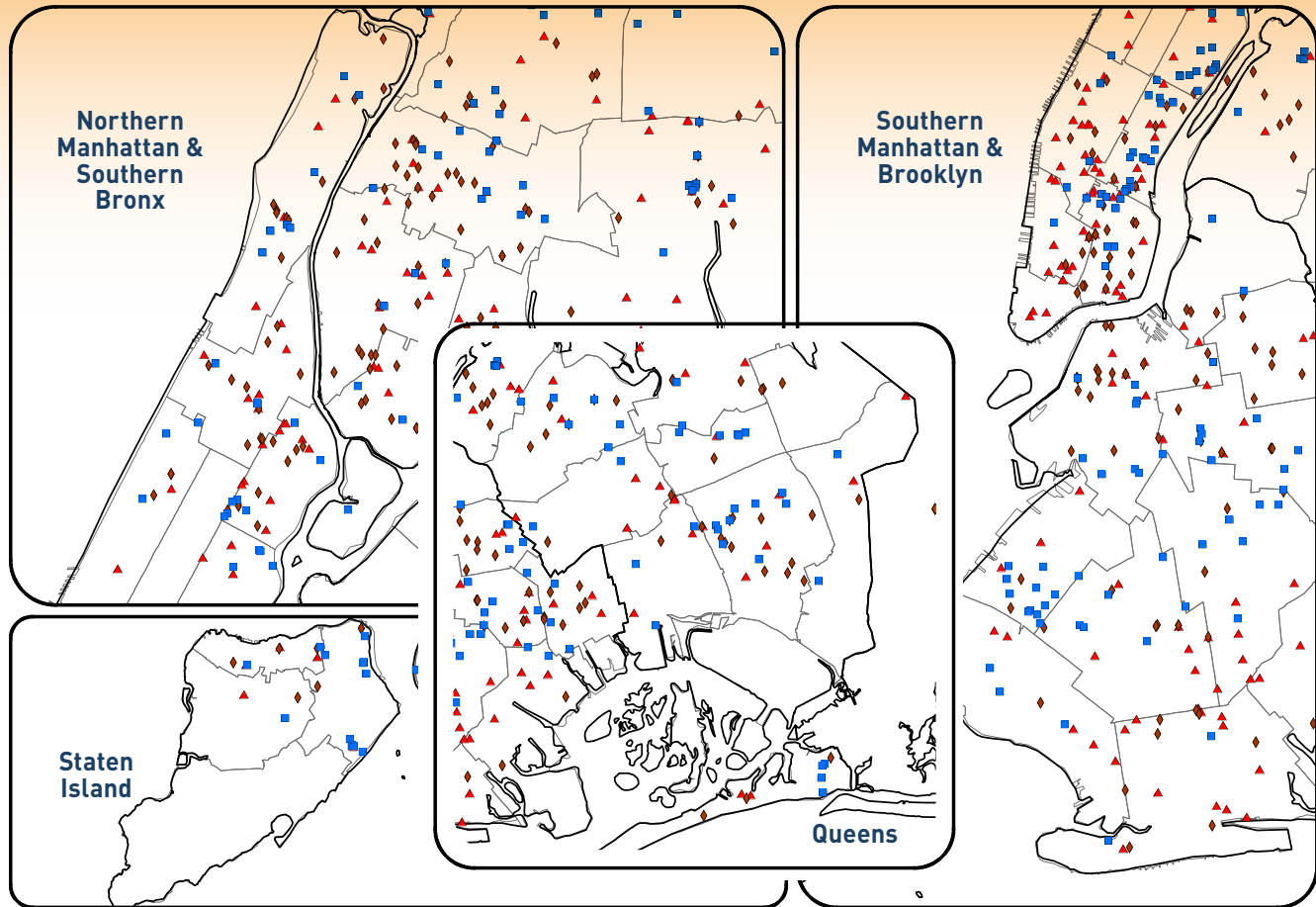
APPENDIX D: Other Primary Care Providers in New York (continued)

MAP 8. Hospitals in Rest of State



APPENDIX D: Other Primary Care Providers in New York (continued)

MAP 9. Diagnostic & Treatment Centers and Extensions and Hospital Extensions in New York City

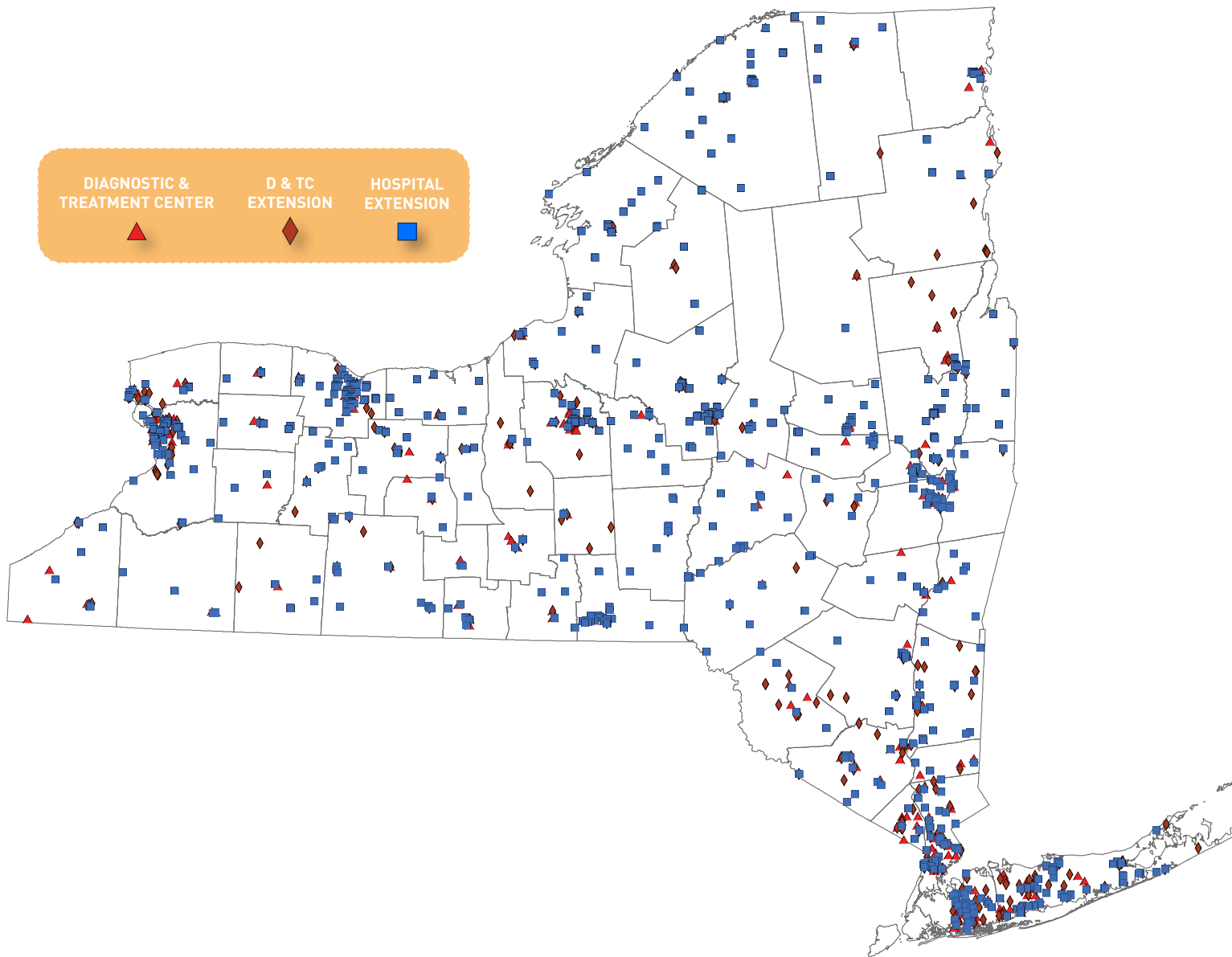


DIAGNOSTIC & TREATMENT CENTER	D & TC EXTENSION	HOSPITAL EXTENSION
▲	◆	■

UHF NEIGHBORHOODS

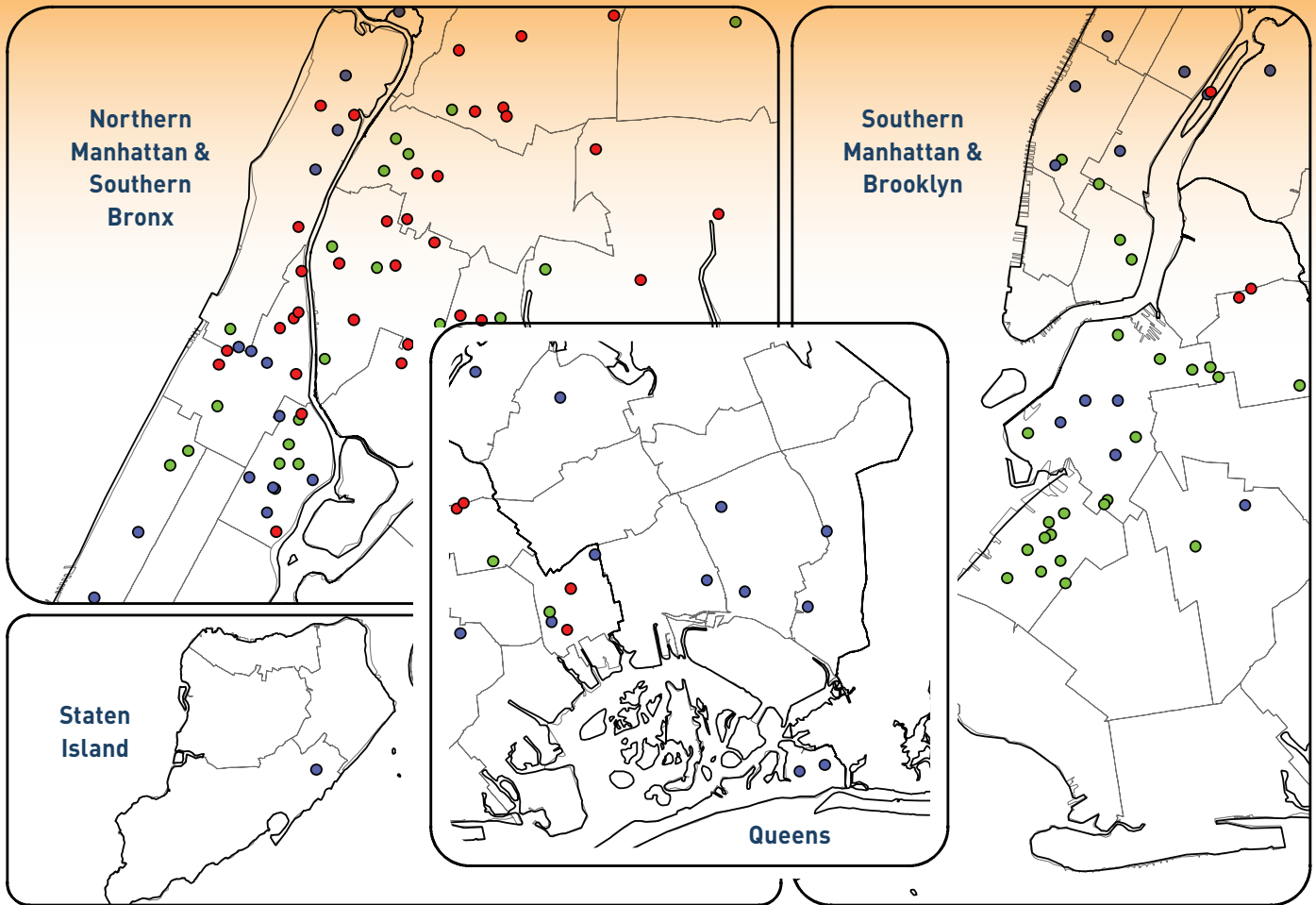
APPENDIX D: Other Primary Care Providers in New York (continued)

MAP 10. Diagnostic & Treatment Centers and Extensions and Hospital Extensions in Rest of State



APPENDIX D: Other Primary Care Providers in New York *(continued)*

MAP 11. School-Based Health Centers in New York City



ASSOCIATED WITH...

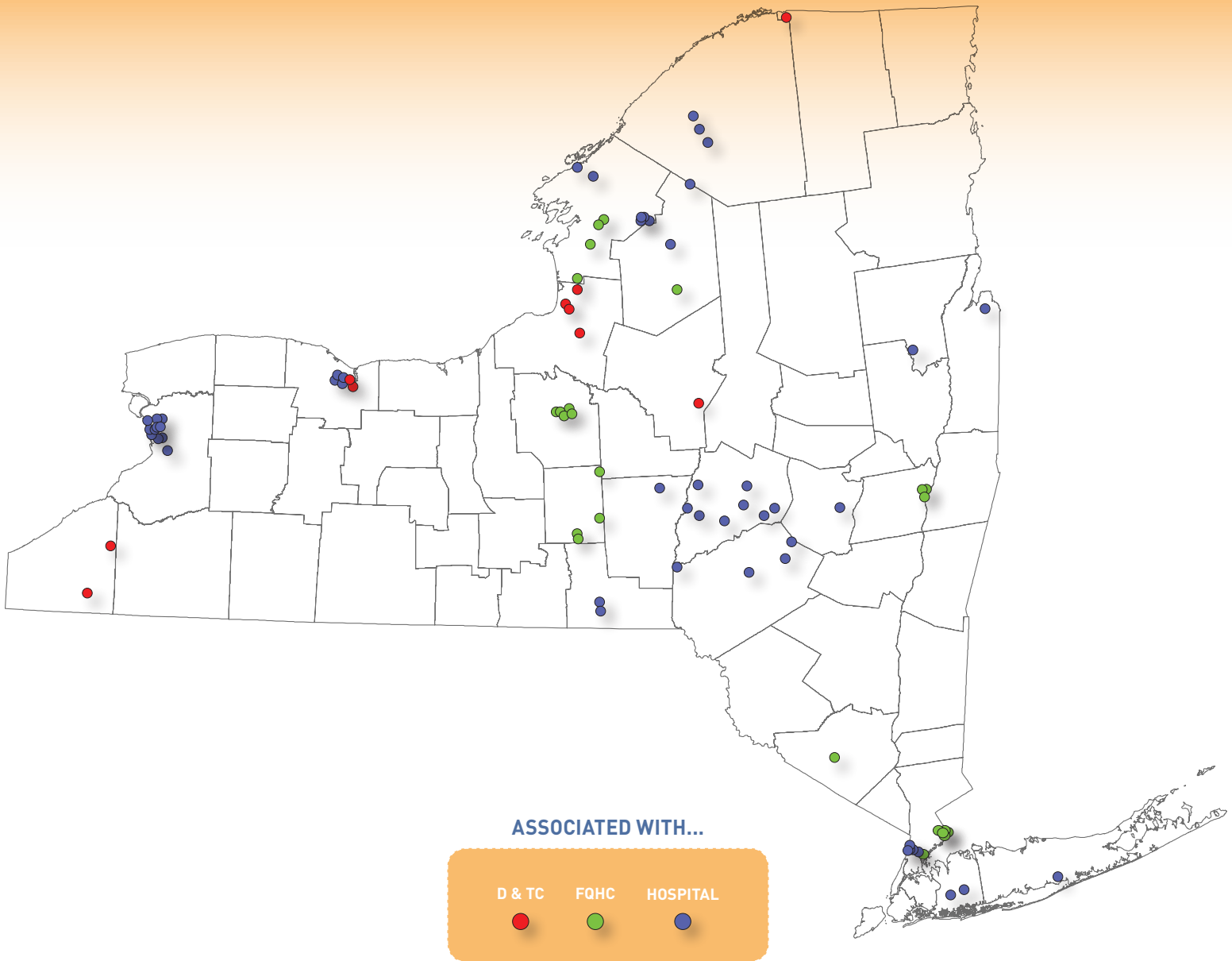
D & TC FQHC HOSPITAL



**UHF
NEIGHBORHOODS**

APPENDIX D: Other Primary Care Providers in New York *(continued)*

MAP 12. School-Based Health Centers in Rest of State



APPENDIX E:

Need and Sustainability Rankings

New York City

TABLE 8. Rankings of Need and Sustainability in UHF Neighborhoods in New York City

The following two tables show the rankings of the UHF neighborhoods in New York City by need and by sustainability. The highest-ranking neighborhood is listed first.

RANK ORDERED BY NEED: Neighborhood with Highest Need for FQHC Expansion Listed First		RANK ORDERED BY SUSTAINABILITY: Neighborhood with Highest Potential to Sustain FQHC Expansion Listed First	
RANKING	NEIGHBORHOOD	RANKING	NEIGHBORHOOD
1	Bronx 106: High Bridge • Morrisania	1	Manhattan 310: Lower Manhattan
2	Bronx 105: Crotona • Tremont	2	Manhattan 308: Greenwich Village • Soho
3	Bronx 107: Hunts Point • Mott Haven	3	Manhattan 307: Gramercy Park • Murray Hill
4	Brooklyn 211: Williamsburg • Bushwick	4	Bronx 103: Fordham • Bronx Park
5	Manhattan 303: East Harlem	5	Manhattan 306: Chelsea • Clinton
6	Brooklyn 205: Sunset Park	6	Queens 408: Jamaica
7	Manhattan 301: Washington Heights • Inwood	7	Manhattan 301: Washington Heights • Inwood
8	Queens 402: West Queens	8	Queens 405: Ridgewood • Forest Hills
9	Bronx 103: Fordham • Bronx Park	9	Brooklyn 210: Coney Island • Sheepshead Bay
10	Brooklyn 204: East New York	10	Manhattan 305: Upper East Side
11	Brooklyn 207: East Flatbush • Flatbush	11	Manhattan 303: East Harlem
12	Manhattan 302: Cent. Harlem • Morningside	12	Queens 402: West Queens
13	Queens 401: Long Island City • Astoria	13	Brooklyn 204: East New York
14	Brooklyn 203: Bed. Stuyvesant • Crown Heights	14	Brooklyn 211: Williamsburg • Bushwick
15	Queens 403: Flushing • Clearview	15	Brooklyn 207: East Flatbush • Flatbush
16	Bronx 102: Northeast Bronx	16	Queens 407: Southwest Queens
17	Queens 407: Southwest Queens	17	Brooklyn 206: Borough Park
18	Bronx 104: Pelham • Throgs Neck	18	Brooklyn 202: Downtown • Heights • Slope
19	Queens 408: Jamaica	19	Bronx 106: High Bridge • Morrisania

continued

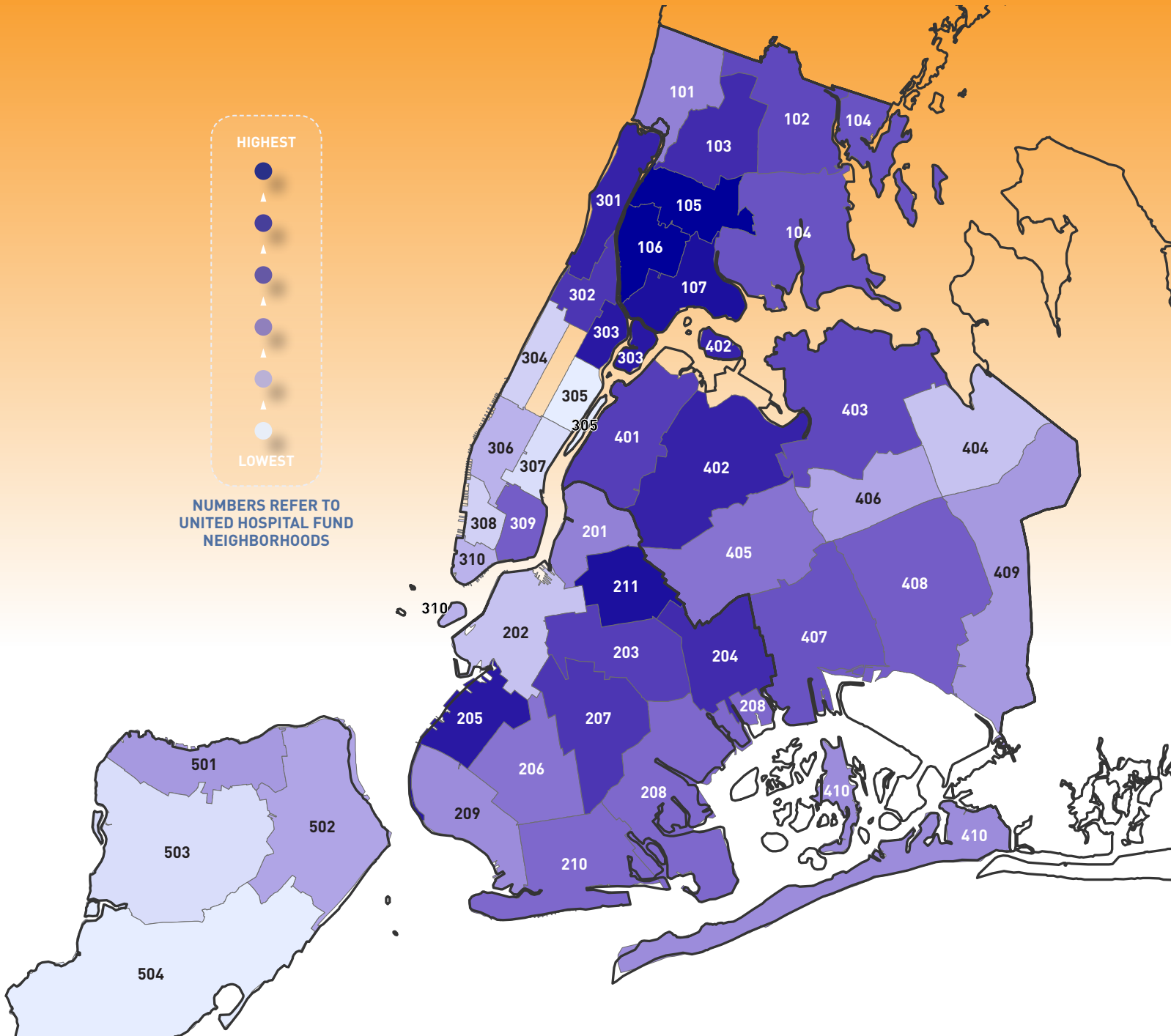
APPENDIX E: Need and Sustainability Rankings *(continued)*

TABLE 8. Rankings of Need and Sustainability in UHF Neighborhoods in New York City			
The following two tables show the rankings of the UHF neighborhoods in New York City by need and by sustainability. The highest-ranking neighborhood is listed first.			
RANK ORDERED BY NEED: Neighborhood with Highest Need for FQHC Expansion Listed First		RANK ORDERED BY SUSTAINABILITY: Neighborhood with Highest Potential to Sustain FQHC Expansion Listed First	
RANKING	NEIGHBORHOOD	RANKING	NEIGHBORHOOD
20	Manhattan 309: Union Square • Lower East Side	20	Brooklyn 201: Greenpoint
21	Brooklyn 210: Coney Island • Sheepshead Bay	21	Queens 403: Flushing • Clearview
22	Brooklyn 208: Canarsie • Flatlands	22	Manhattan 302: Cent. Harlem • Morningside
23	Brooklyn 206: Borough Park	23	Staten Island 502: Stapleton • St. George
24	Queens 405: Ridgewood • Forest Hills	24	Bronx 105: Crotona • Tremont
25	Brooklyn 201: Greenpoint	25	Bronx 101: Kingsbridge • Riverdale
26	Bronx 101: Kingsbridge • Riverdale	26	Brooklyn 208: Canarsie • Flatlands
27	Queens 410: Rockaway	27	Brooklyn 205: Sunset Park
28	Brooklyn 209: Bensonhurst • Bay Ridge	28	Queens 401: Long Island City • Astoria
29	Queens 409: Southeast Queens	29	Bronx 107: Hunts Point • Mott Haven
30	Staten Island 501: Port Richmond	30	Manhattan 309: Union Sq • Lower East Side
31	Queens 406: Fresh Meadows	31	Manhattan 304: Upper West Side
32	Staten Island 502: Stapleton • St. George	32	Brooklyn 209: Bensonhurst • Bay Ridge
33	Manhattan 306: Chelsea • Clinton	33	Staten Island 504: South Beach • Tottenville
34	Manhattan 310: Lower Manhattan	34	Queens 409: Southeast Queens
35	Brooklyn 202: Downtown • Heights • Slope	35	Queens 404: Bayside • Little Neck
36	Queens 404: Bayside • Little Neck	36	Queens 406: Fresh Meadows
37	Manhattan 304: Upper West Side	37	Queens 410: Rockaway
38	Manhattan 308: Greenwich Village • Soho	38	Staten Island 503: Willowbrook
39	Staten Island 503: Willowbrook	39	Brooklyn 203: Bed. Stuyvesant • Crown Heights
40	Manhattan 307: Gramercy Park • Murray Hill	40	Bronx 104: Pelham • Throgs Neck
41	Manhattan 305: Upper East Side	41	Staten Island 501: Port Richmond
42	Staten Island 504: South Beach • Tottenville	42	Bronx 102: Northeast Bronx

APPENDIX E: Need and Sustainability Rankings (continued)

MAP 13. Relative Need in UHF Neighborhoods in New York City

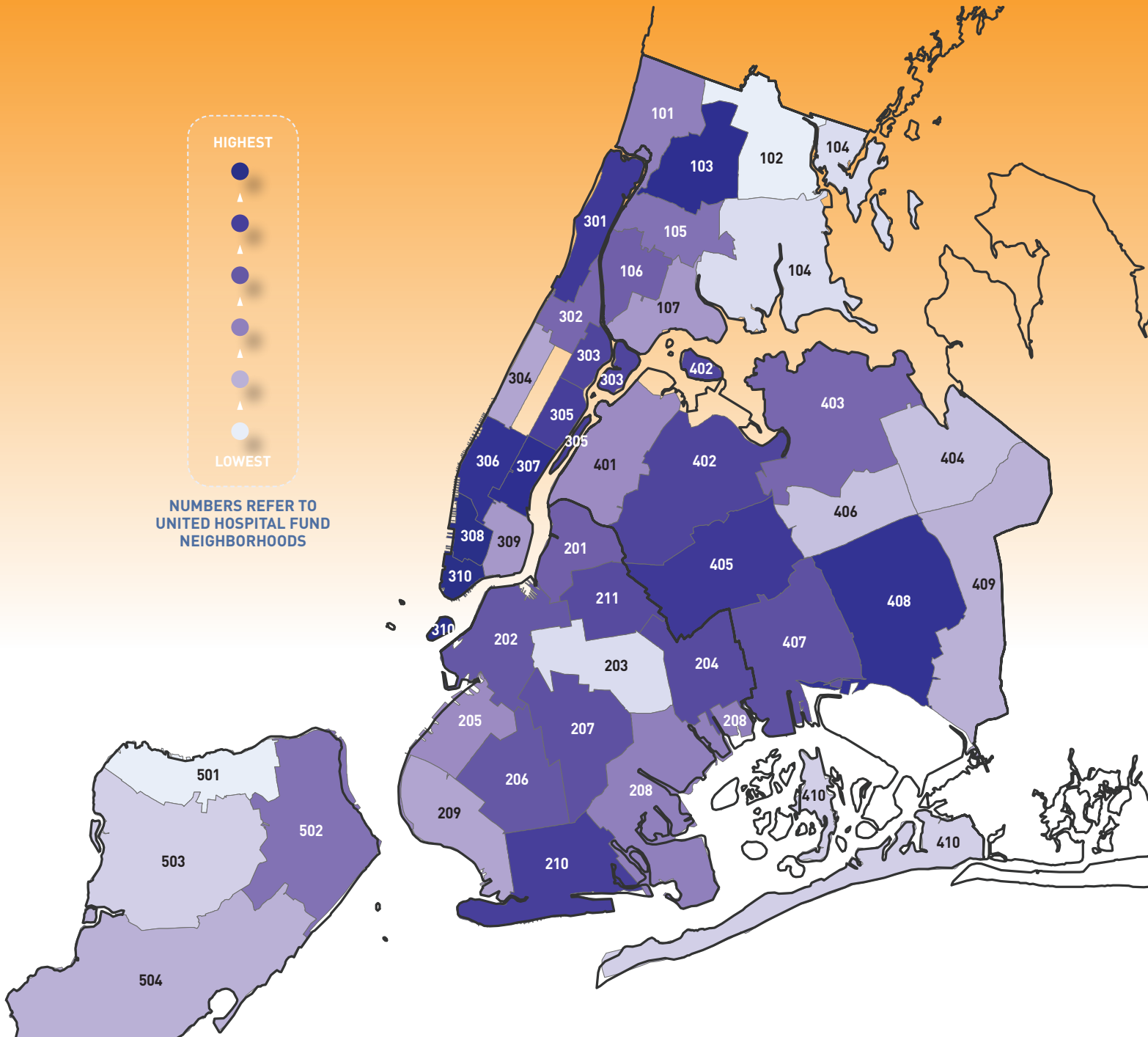
The following map shows relative need (according to the rankings) of the UHF neighborhoods in New York City.



APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 14. Relative Sustainability in UHF Neighborhoods in New York City

The following map shows relative sustainability (according to the rankings) of the UHF neighborhoods in New York City.



APPENDIX E: Need and Sustainability Rankings *(continued)*

Rest of State

TABLE 9. Ranking of Need and Sustainability in Fully Rural Counties

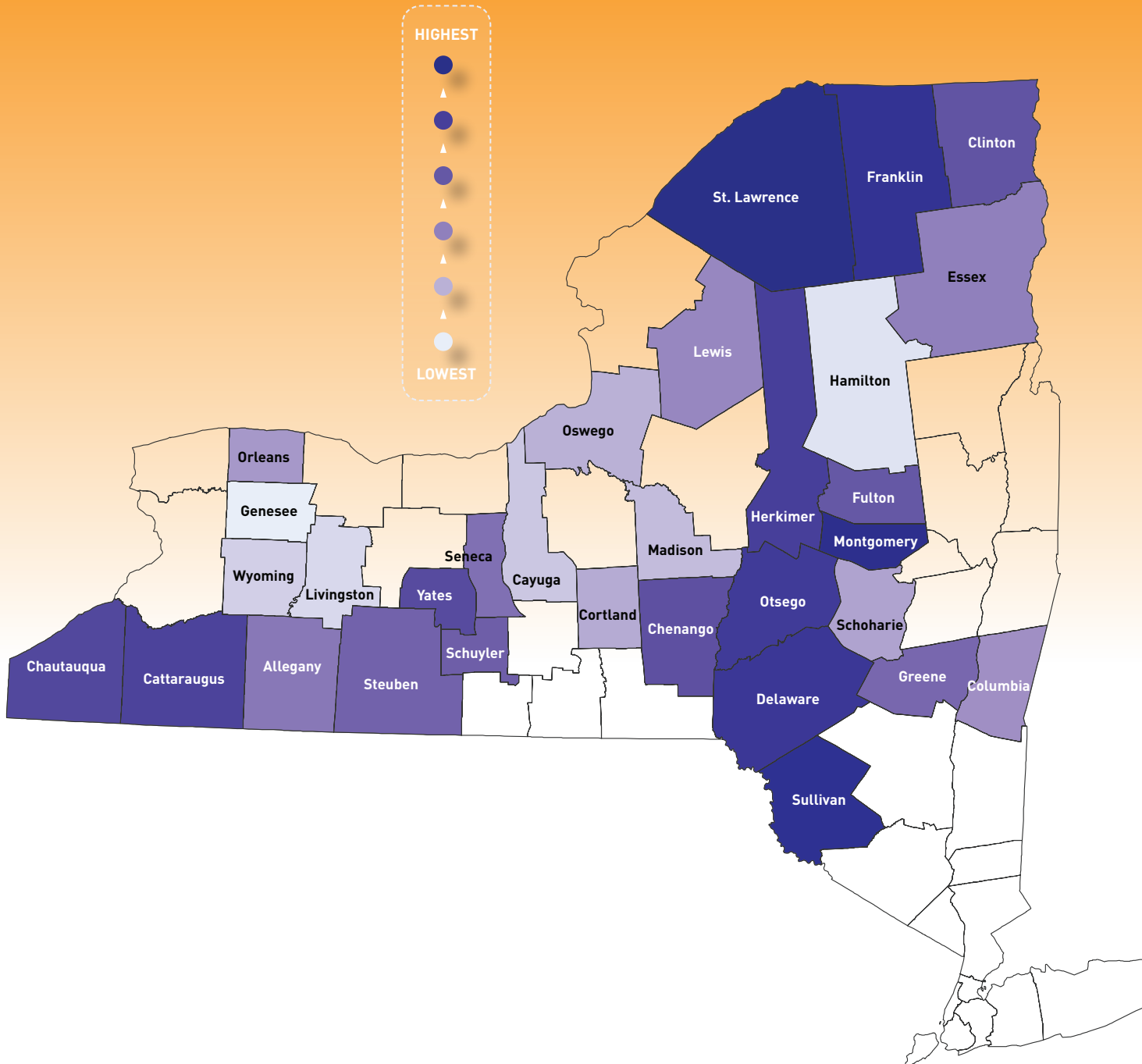
The following two tables show the rankings of the fully rural counties in the Rest of State by need and by sustainability. The highest-ranking county is listed first.

RANK ORDERED BY NEED: County with Highest Need for FQHC Expansion Listed First		RANK ORDERED BY SUSTAINABILITY: County with Highest Potential to Sustain FQHC Expansion Listed First	
RANKING	COUNTY	RANKING	COUNTY
1	St. Lawrence	1	Fulton
2	Montgomery	2	Montgomery
3	Sullivan	3	Otsego
4	Franklin	4	Sullivan
5	Delaware	5	Chautauqua
6	Otsego	6	Steuben
7	Herkimer	7	St. Lawrence
8	Cattaraugus	8	Schoharie
9	Chautauqua	9	Herkimer
10	Yates	10	Delaware
11	Chenango	11	Clinton
12	Clinton	12	Chenango
13	Fulton	13	Cattaraugus
14	Schuyler	14	Franklin
15	Steuben	15	Madison
16	Greene	16	Schuyler
17	Seneca	17	Seneca
18	Allegany	18	Lewis
19	Essex	19	Columbia
20	Lewis	20	Oswego
21	Columbia	21	Greene
22	Orleans	22	Yates
23	Schoharie	23	Genesee
24	Cortland	24	Cayuga
25	Oswego	25	Allegany
26	Madison	26	Cortland
27	Cayuga	27	Livingston
28	Wyoming	28	Wyoming
29	Livingston	29	Essex
30	Hamilton	30	Orleans
31	Genesee	31	Hamilton

APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 15. Relative Need in Fully Rural Counties

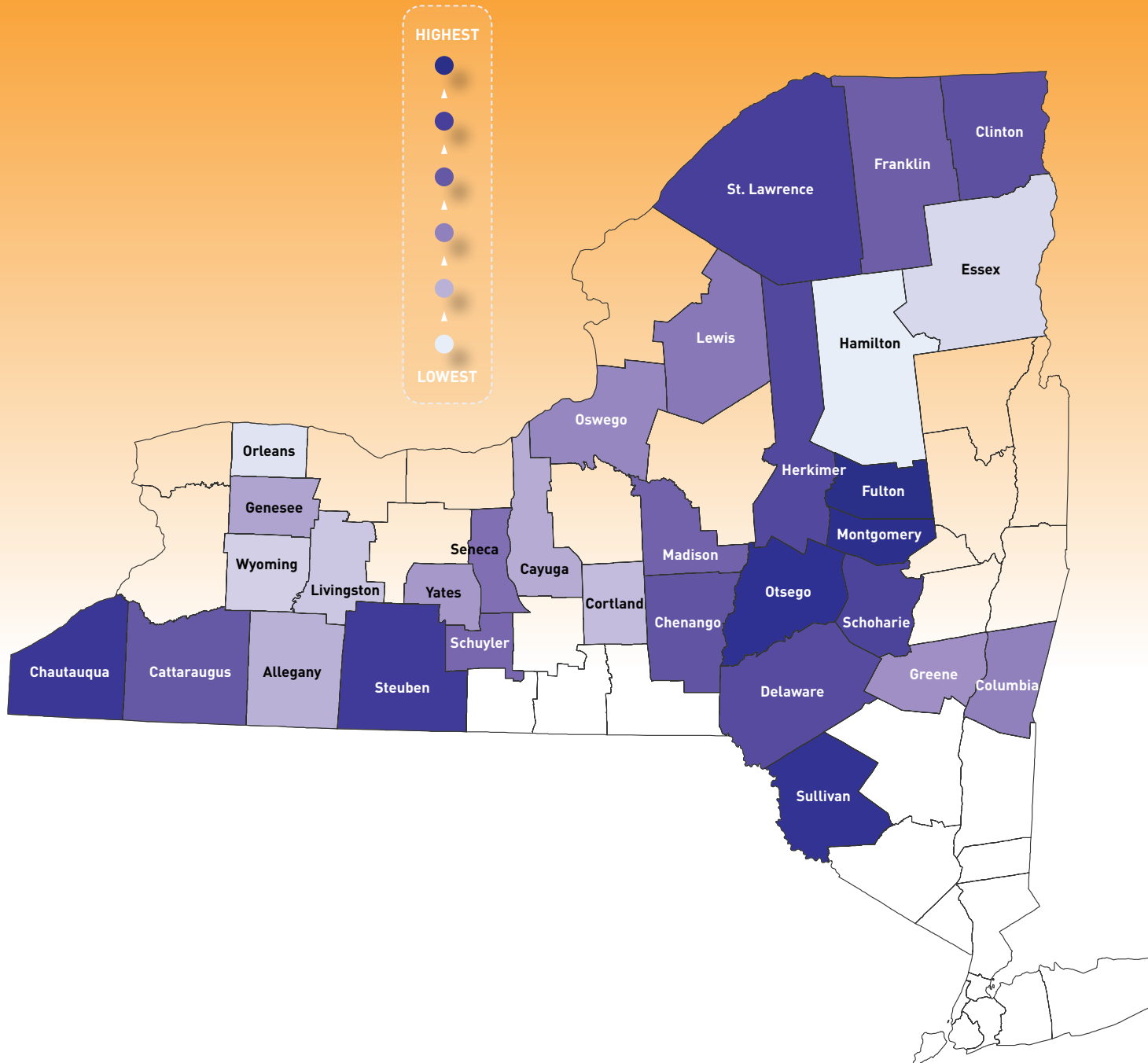
The following map shows relative need (according to the rankings) of the fully rural counties in Rest of State.



APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 16. Relative Sustainability in Fully Rural Counties

The following map shows relative sustainability (according to the rankings) of the rural counties in Rest of State.



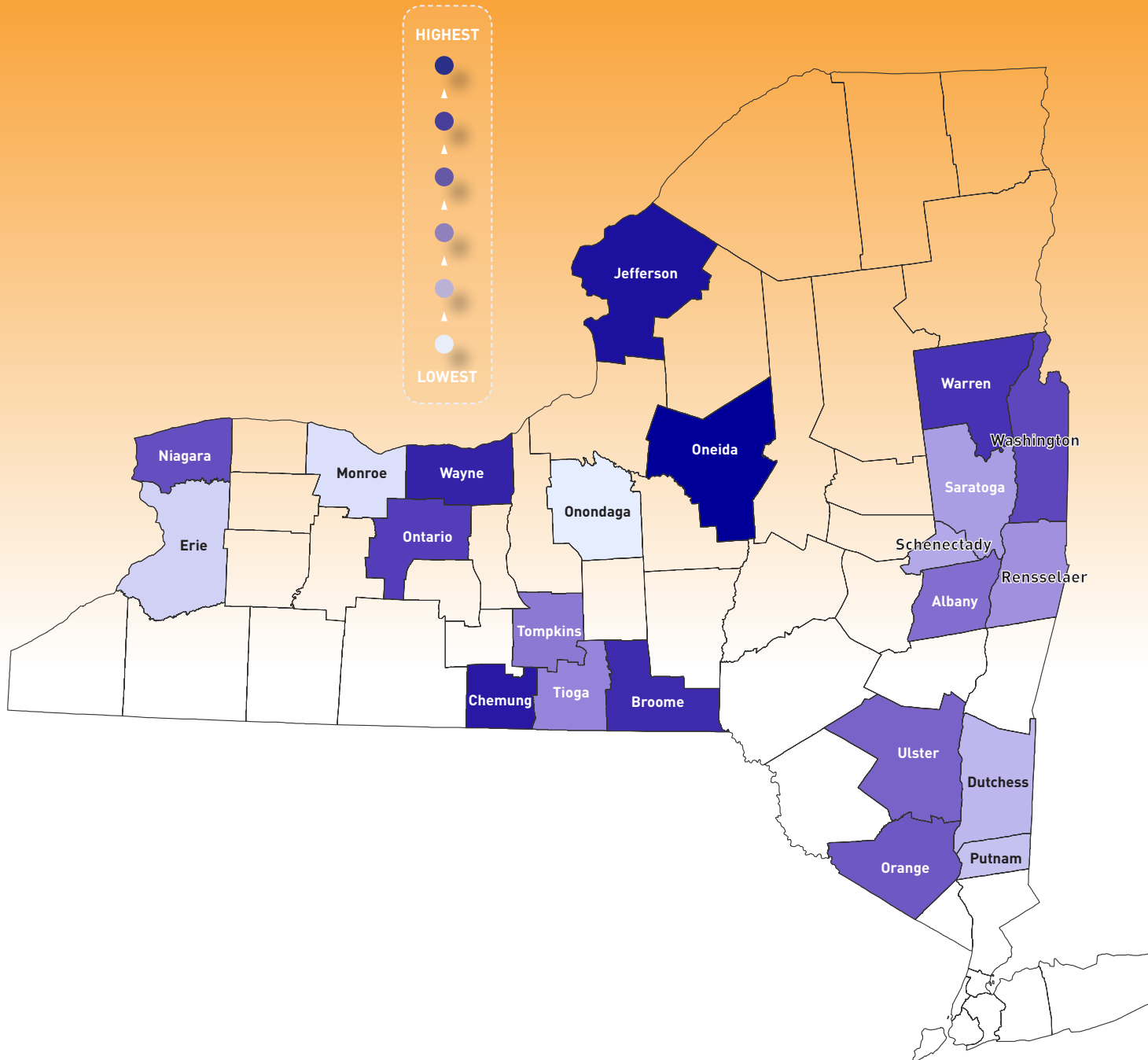
APPENDIX E: Need and Sustainability Rankings *(continued)*

TABLE 10. Ranking of Need and Sustainability in Rural Areas within Mixed Counties The following two tables show the rankings of the rural areas within mixed counties in the Rest of State by need and by sustainability. The highest-ranking county is listed first.			
RANK ORDERED BY NEED: County with Highest Need for FQHC Expansion Listed First		RANK ORDERED BY SUSTAINABILITY: County with Highest Potential to Sustain FQHC Expansion Listed First	
RANKING	COUNTY	RANKING	COUNTY
1	Oneida	1	Ontario
2	Jefferson	2	Onondaga
3	Chemung	3	Schenectady
4	Wayne	4	Erie
5	Broome	5	Broome
6	Warren	6	Niagara
7	Ontario	7	Chemung
8	Washington	8	Monroe
9	Niagara	9	Orange
10	Orange	10	Putnam
11	Ulster	11	Oneida
12	Albany	12	Rensselaer
13	Tompkins	13	Wayne
14	Tioga	14	Ulster
15	Rensselaer	15	Jefferson
16	Saratoga	16	Saratoga
17	Schenectady	17	Tompkins
18	Dutchess	18	Washington
19	Putnam	19	Tioga
20	Erie	20	Albany
21	Monroe	21	Dutchess
22	Onondaga	22	Warren

APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 17. Relative Need in Rural Areas within Mixed Counties

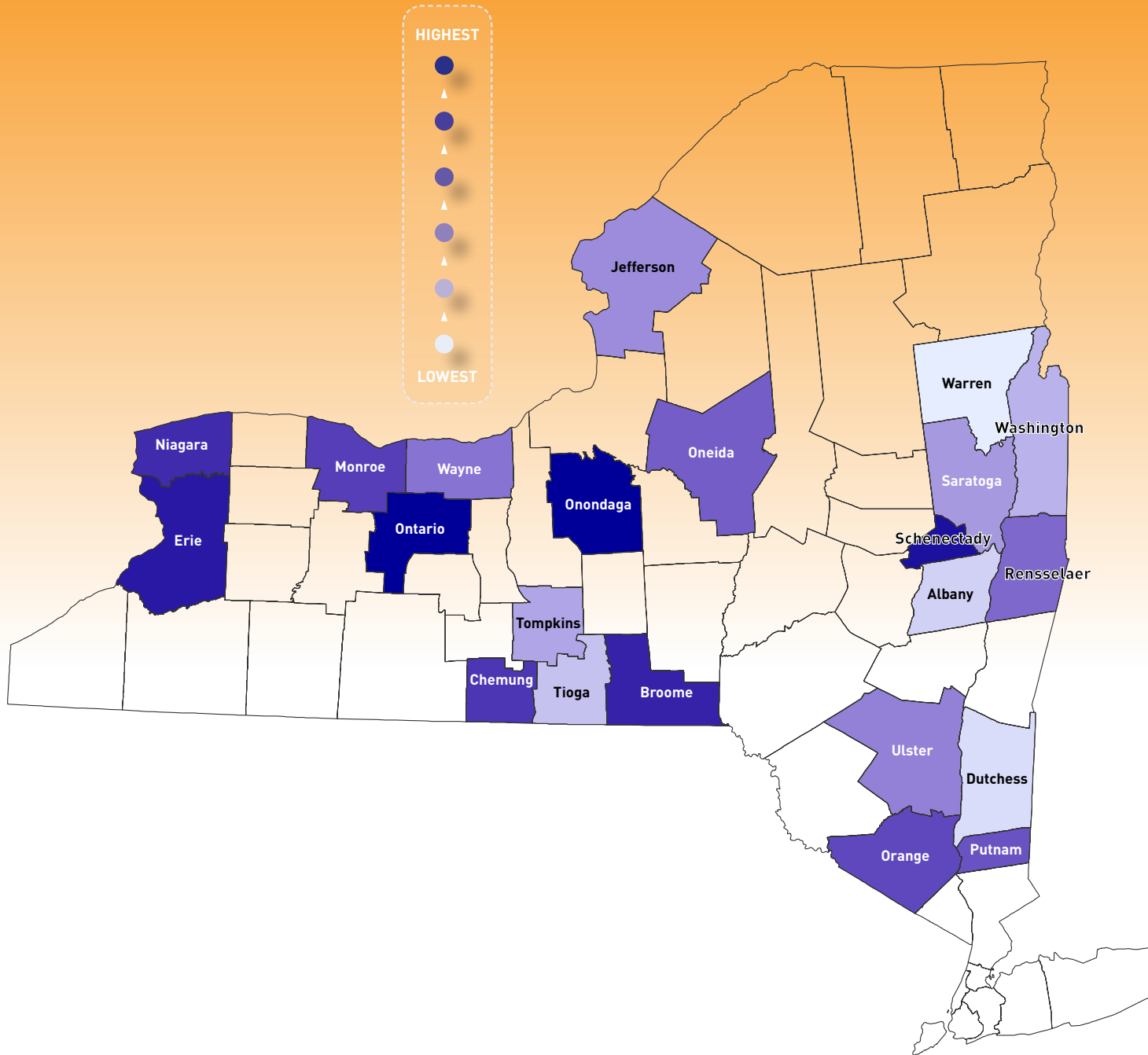
The following map shows relative need (according to the rankings) of the rural areas within mixed counties in Rest of State.



APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 18. Relative Sustainability in Rural Areas within Mixed Counties

The following map shows relative sustainability (according to the rankings) of the rural areas within mixed counties in Rest of State.



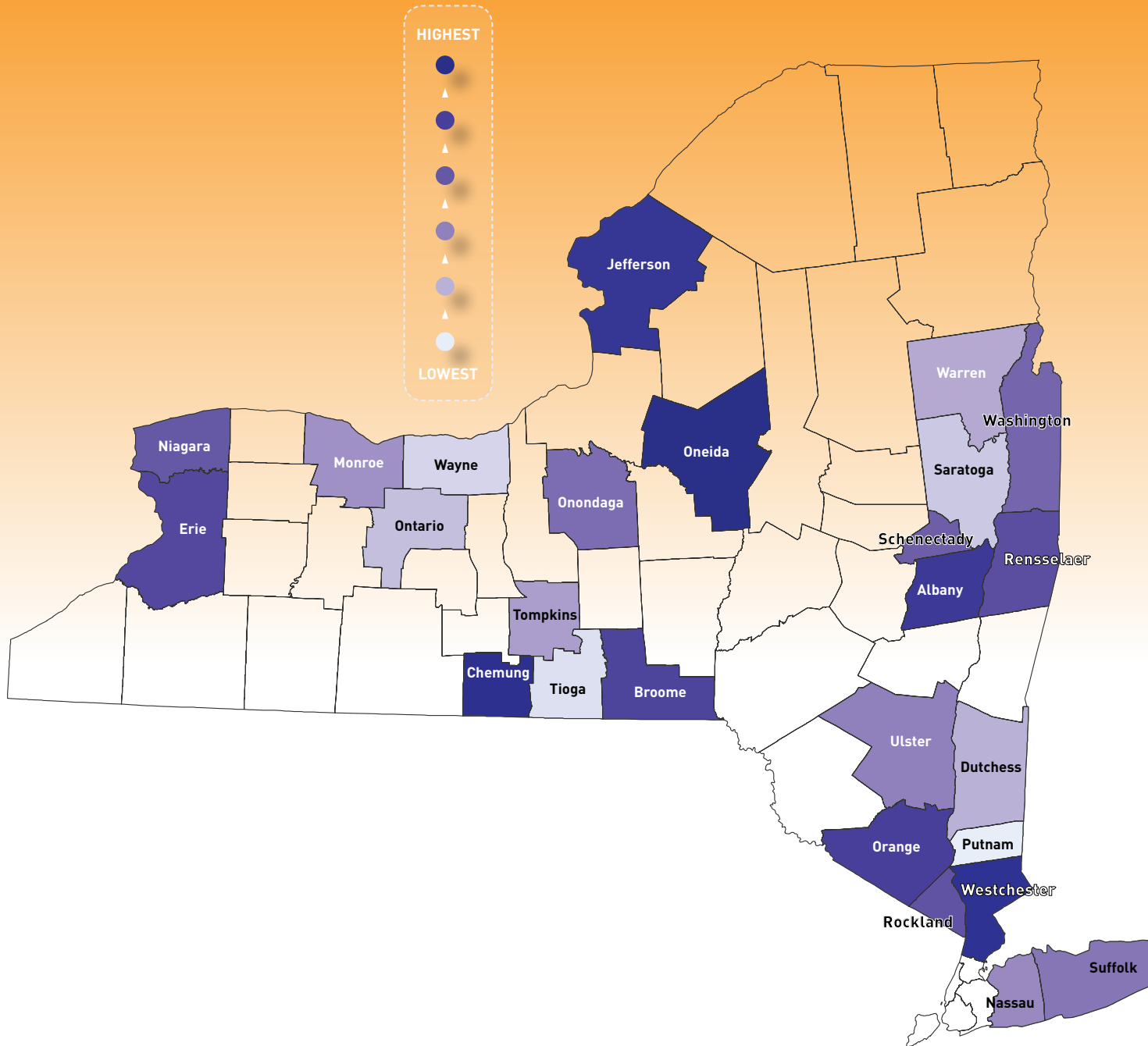
APPENDIX E: Need and Sustainability Rankings *(continued)*

TABLE 11. Ranking of Need and Sustainability in Urban Areas within Mixed Counties			
The following two tables show the rankings of the urban areas within mixed counties in the Rest of State by need and by sustainability. The highest-ranking county is listed first.			
RANK ORDERED BY NEED: County with Highest Need for FQHC Expansion Listed First		RANK ORDERED BY SUSTAINABILITY: County with Highest Potential to Sustain FQHC Expansion Listed First	
RANKING	COUNTY	RANKING	COUNTY
1	Oneida	1	Chemung
2	Chemung	2	Jefferson
3	Westchester	3	Ontario
4	Jefferson	4	Broome
5	Albany	5	Wayne
6	Orange	6	Oneida
7	Broome	7	Albany
8	Erie	8	Warren
9	Rensselaer	9	Rensselaer
10	Rockland	10	Schenectady
11	Niagara	11	Orange
12	Schenectady	12	Ulster
13	Washington	13	Erie
14	Onondaga	14	Rockland
15	Suffolk	15	Onondaga
16	Ulster	16	Monroe
17	Nassau	17	Dutchess
18	Monroe	18	Nassau
19	Tompkins	19	Niagara
20	Warren	20	Saratoga
21	Dutchess	21	Suffolk
22	Ontario	22	Tompkins
23	Saratoga	23	Putnam
24	Wayne	24	Washington
25	Tioga	25	Westchester
26	Putnam	26	Tioga

APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 19. Relative Need in Urban Areas within Mixed Counties

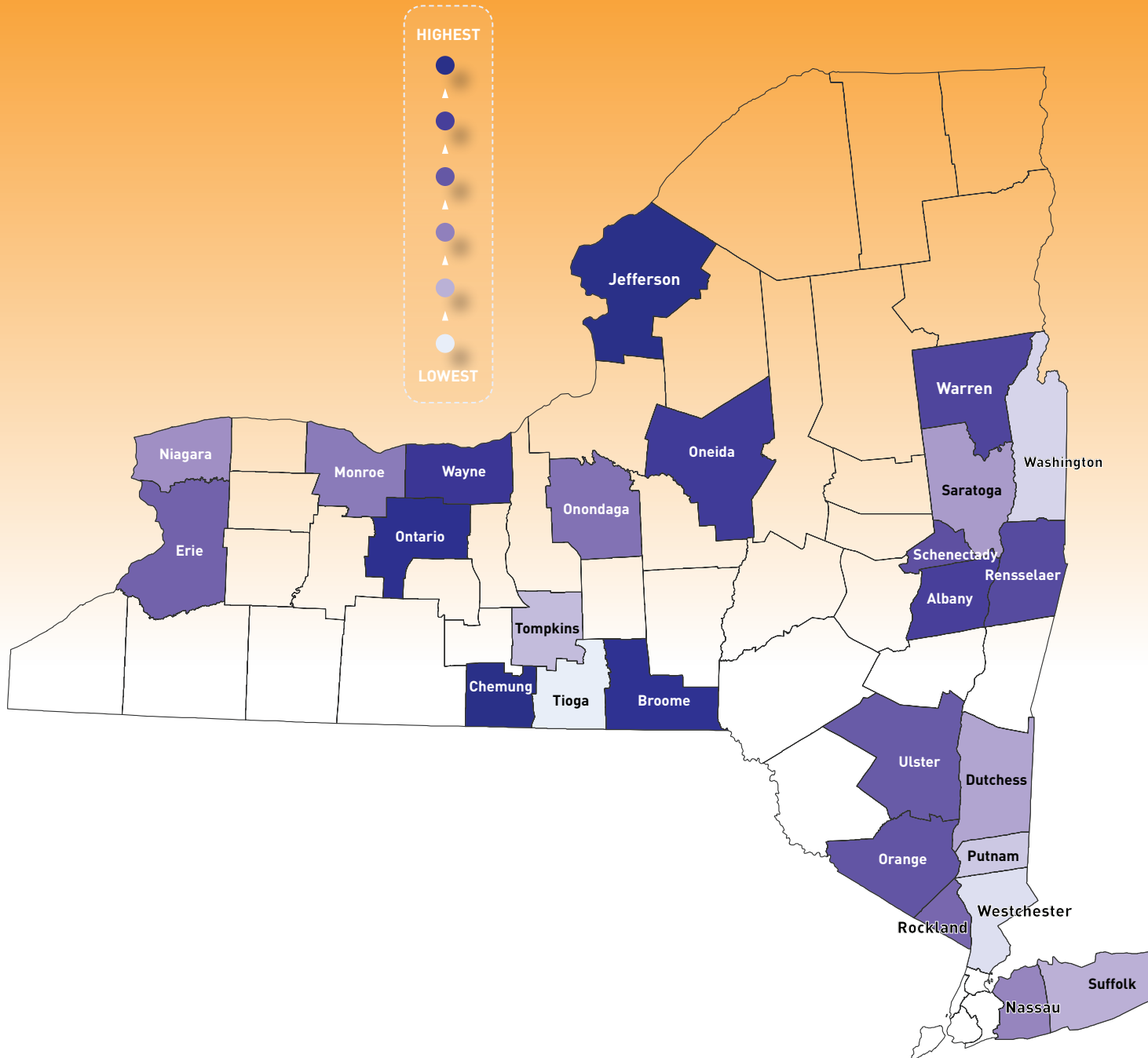
The following map shows relative need (according to the rankings) of the urban areas within mixed counties in Rest of State.



APPENDIX E: Need and Sustainability Rankings *(continued)*

MAP 20. Relative Sustainability in Urban Areas within Mixed Counties

The following map shows relative sustainability (according to the rankings) of the urban areas within mixed counties in Rest of State.



APPENDIX F:

Data Resources to Support Local Planning

As CHCANYS considered available measures of need and sustainability, CHCANYS acquired or developed a considerable collection of detailed, geographically referenced information about health conditions, social determinants, and program or facility locations. When joined to geographic reference files, this information offers a rich background for geographic display and analysis that can inform local planning. Although the individual variables are too numerous to list, the following overview suggests their breadth.

- CHCANYS created electronic files of tract-level population data from the 2010 Census to assess changes in the distribution of age and race-ethnicity, as well as general shifts in the concentration of population in various locales.
- CHCANYS accessed the most recent data from the Census Bureau's American Community Survey (ACS), including social and demographic factors, and "barriers to care" such as lack of health insurance and problems with English. These data are available by county and subcounty areas known as Public Use Microdata Areas (PUMAs). In addition, CHCANYS acquired ACS estimates of social and demographic characteristics at the ZIP code level from the website of the Missouri Census Data Center. Their estimates allowed us to examine these characteristics in advance of the Census Bureau's release of ZIP-level ACS data this Fall. CHCANYS also acquired de-identified records of individual ACS responses, to create our own tables for the subcounty PUMAs.
- CHCANYS downloaded the Health Resources and Services Administration's (HRSA) Uniform Data System (UDS) files, which provide demographic, financial, and clinical information on each FQHC in the state. UDS files for 2008, 2009, 2010, and 2011 are now available in Excel and ZIP-level UDS data by FQHC, to visualize the spread of enrollment over time and underserved areas. These files also support comparative assessments of patient volume by service line and comparisons of clinical outcomes across centers and geographic areas.
- Complementing the ZIP view of current FQHC enrollment, CHCANYS acquired statewide data on the number of preventable hospitalizations (PQIs), comparing their observed-to-expected prevalence by ZIP code.
- Similarly, CHCANYS acquired statewide, ZIP-level estimates of avoidable ED visits, based on a widely used coding scheme developed at NYU.

APPENDIX F: Data Resources to Support Local Planning *(continued)*

- In New York City, CHCANYS downloaded the neighborhood summary indicators from the Community Health Interview, which estimates health conditions and health outcomes for the neighborhoods defined by the United Hospital Fund. As the neighborhoods are drawn by aggregating ZIP codes, these data are readily related to many other ZIP-based measures.
- From the Center for Health Workforce Studies (CHWS), CHCANYS acquired statewide survey data on FQHC staffing patterns and vacancies.
- CHWS also provided a statewide data file of the distribution of primary care physicians and FTEs by ZIP code.
- CHCANYS obtained HRSA's Area Resource File (ARF), an extensive and authoritative collection of Excel tables covering a broad range of workforce planning data (and other topics) by county.
- County level indicators in the warehouse include the recent New York State update from the County Health Rankings and Roadmaps project of the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin Population Health Institute. The County Health Rankings project sets baselines for community health based on factors such as longevity, education, disease, and health care access. It then indicates in what ways individual counties deviate from those baselines and establishes County Health Rankings.
- Complementing those recent rankings, CHCANYS acquired the county-level Community Health Indicators produced by the federal Health and Human Services agency.
- To understand the distribution of facilities, CHCANYS acquired geocoded files for all hospitals, diagnostic and treatment centers, School-Based Health Centers, and hospital extension clinics from New York State Department of Health licensing files.
- CHCANYS has acquired and frequently updated HRSA's master list of some 600 FQHC service sites in the state, with accompanying characteristics codes, and CHCANYS has geocoded them to their exact locations for mapping.
- CHCANYS obtained the CMS Provider of Service files to canvass the locations of various programs and facilities and the New York State Department of Health's Provider files submitted by all health plans in the State.

APPENDIX F: Data Resources to Support Local Planning *(continued)*

- As a participant in the New York State Department of Health’s Statewide Health Improvement Project, CHCANYS acquired data sets for prevention planning, including county level Behavioral Risk Factor Surveillance Survey files, ZIP-level perinatal indicators, asthma data, etc.
- To better understand issues of remoteness and isolation in rural areas, CHCANYS acquired the ZIP-level Rural and Urban Commuting Area (RUCA) codes developed for HRSA by the Rural Research Center at the University of Washington and a file of travel times from rural to urban areas developed by the Dartmouth Institute for Health Policy.
- To allocate data for rural areas, CHCANYS acquired the Census Bureau’s latest geographic files designating urban and rural components of counties and the location of every census block in the state.

About the Authors

Community Health Care Association of New York State

Founded 40 years ago, CHCANYS is New York State’s Primary Care Association. CHCANYS’ mission is to ensure that all New Yorkers, including those who are medically underserved, have continuous access to high-quality, community-based health care services, including a primary care home. To do this, CHCANYS serves as the voice of community health centers as leading providers of primary health care in New York State. CHCANYS works closely with the more than 60 federally qualified health centers (FQHCs) that operate approximately 600 sites across the state. These community health centers are not-for-profit, patient-centered medical homes located in medically underserved areas. They provide high quality, cost-effective primary health care to anyone seeking care, regardless of the patients’ insurance status or ability to pay. Health centers serve 1.5 million New Yorkers annually and are central to New York’s health care safety net. CHCANYS works to increase access to health care for all New Yorkers through a program of health policy leadership, regulatory reform, and grassroots advocacy and to support FQHCs with tools and information necessary to maintain and improve existing programs, strengthen core services, and build new programs. CHCANYS has a proven track record of addressing the needs of FQHCs by providing technical assistance and training that enables FQHCs to improve patient care and outcomes, strengthen their operations and finances, meet reporting obligations, and address regulatory changes. www.chcanys.org

Project Team

CHCANYS LEADERSHIP AND STAFF

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Defining New Directions

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