PRIMARY CARE DEVELOPMENT CORPORATION

RURAL ACCESS TO PRIMARY CARE IN NEW YORK STATE

2019 REPORT

pcdc.org

CONTENTS

RURAL PRIMARY CARE ACCESS

SECTION 1.0

1.1 INTRODUCTION

Primary care is the foundation of the health care system and a cornerstone of healthy, thriving communities. Increasing primary care access across New York State (NYS), as in other states, creates healthy communities, ensures health equity, and reduces health care costs.

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

Inequalities in primary care access and delivery alike are largely driven by economics, including insurance coverage, reimbursement, and social determinants of health.

Geographic, demographic, and socioeconomic characteristics impact where primary care providers (PCPs) are located. Within communities where providers are available, disparities in access may remain.

The **Primary Care Development Corporation (PCDC)** has identified key measures of primary care access. This report utilizes existing data, scholarly research, and qualitative information gained from rural health partners to describe key issues facing rural communities across New York. Through the identification of these issues, we promote strategies for policy makers to improve rural access to primary care.

1.2 RURAL PRIMARY CARE & WHY IT MATTERS

+ Access to care is one of the most frequently cited and urgent health problems faced by rural populations,[1,2] and reflects the intersection of socioeconomic and health disparities within a community.

+ Access barriers vary across rural populations; pressing issues include shortages and poor retention in the primary care workforce,[3] lack of resources for population-specific needs,[2,4] and threats to financial sustainability for rural practices.[5,6]

+ Effective management of chronic conditions such as diabetes, hypertension, and cancer is a substantial challenge for both rural residents and providers, particularly in locations where residents have limited transportation options or disabilities.[7-9]

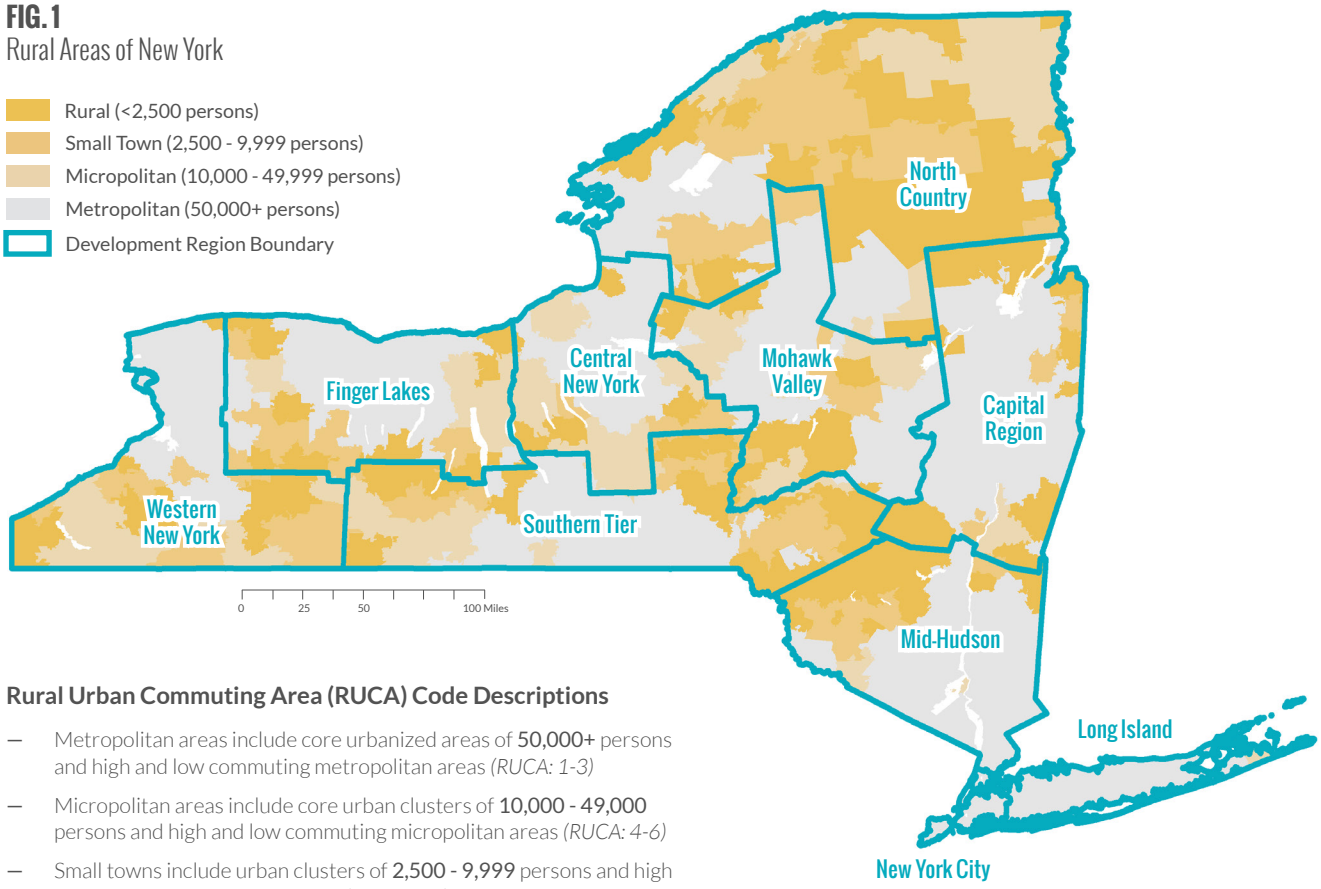
+ Preventive care utilization is often lower in rural areas, including lower rates of vaccination and reproductive health services,[10,11] and is associated with poor access to primary care.

RURAL NEW YORK STATE

SECTION 2.0

2.1 DEFINING RURAL NEW YORK STATE

FIG. 1
Rural Areas of New York



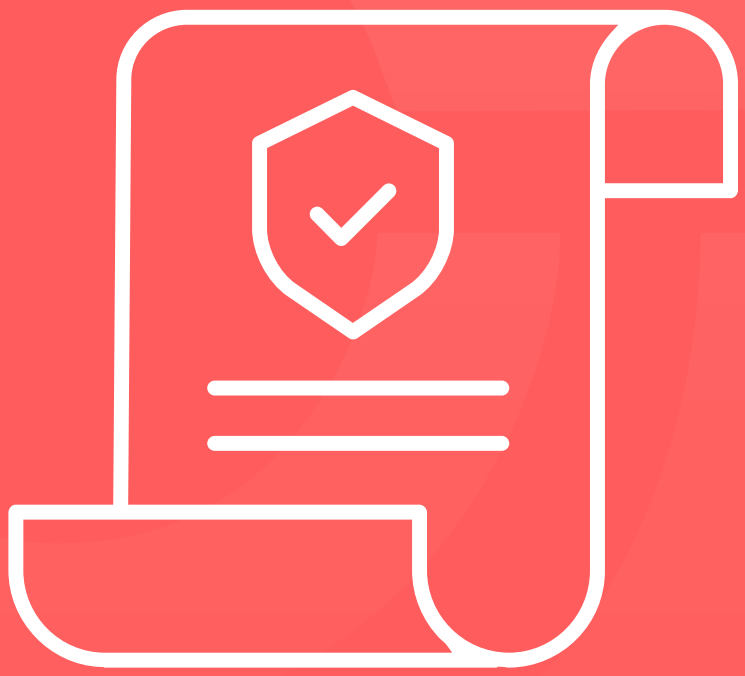
Rural Urban Commuting Area (RUCA) Code Descriptions

- Metropolitan areas include core urbanized areas of **50,000+** persons and high and low commuting metropolitan areas *(RUCA: 1-3)*
- Micropolitan areas include core urban clusters of **10,000 - 49,000** persons and high and low commuting micropolitan areas *(RUCA: 4-6)*
- Small towns include urban clusters of **2,500 - 9,999** persons and high and low commuting small towns *(RUCA: 7-9)*
- Rural areas include clusters of **<2,500** persons *(RUCA: 10)*

At present, there is not a shared definition or methodology used to determine rural areas in the United States or New York State.

To examine primary care access at a sub-county level for this report, PCDC used the rural-urban commuting area (RUCA) codes classification of US census tracts. The 10 RUCA codes are measures of population density, urbanization, and daily commuting, ranging from one to 10. Here, the RUCA codes were aggregated into four categories: rural, small town, micropolitan, and metropolitan for analysis at the ZIP Code Tabulation Area (ZCTA)-level.

POLICY RECOMMENDATIONS



SECTION 3.0

Redefine Geographic Designations for Reimbursement

Currently there are only two geographic designations for setting Medicaid base rate reimbursement in New York State: Upstate and Downstate.[12] This is an overly simplistic system which does not account for multiple factors that may additionally impact reimbursement. Creating reimbursement policies would encourage provider access and public health, including region-specific payment adjustments and sustained support for programs that increase access in these areas.

Recommendation:
Add a third tier *(based on rural area)* for Medicaid base rate reimbursement in New York.

Expand Rural Workforce Incentives

Attracting new primary care health workers to rural counties should be a priority of the Department of Health in New York and the Health Resources Services Administration (HRSA) at the national level, among others. Programs that allow for loan forgiveness, scholarships, or financial aid for the commitment of time in a rural community have shown to be valuable in recruiting new providers.

Recommendation:
Extend and strengthen tuition reimbursement and loan forgiveness programs to draw PCPs to work in rural NYS.

Medical school residency programs are often focused on acute care settings in major urban areas. Working with academic medical centers to increase community health and rural exposure in both medical school and residency training would allow students and doctors to better understand the needs of the rural community and work in more diverse care settings.

Recommendation:
Promote medical school residency in rural areas; encourage medical schools to partner with rural providers.

Preserve Coverage Gains from the Affordable Care Act

The Affordable Care Act (ACA) expanded Medicaid for childless adults with an annual income up to 138% of the federal poverty line (FPL). Many beneficiaries of this expansion were residents of rural areas where there were few private insurers in the market or options that were previously unaffordable. Federal attempts to limit or repeal the ACA put coverage for rural New Yorkers at risk if the federal match for the Medicaid expansion population or subsidies for those under 400% of FPL were to cease.

Recommendation:
Preserve coverage gains and subsidies in the ACA.

Increase Reimbursement Rates

Primary care has historically been undervalued and underfunded. Increased spending on primary care is essential to reducing costs elsewhere in the health care system. In fact, while primary care accounts for more than half of health encounters nationwide, it receives only an estimated 5-8% of the total health care spend.[13,14] When primary care providers in rural areas are paid less than their urban colleagues and overburdened because of undersupply of providers, it is even harder to retain providers in these areas.

Recommendation:
Measure the primary care spend in NYS and designate a percentage of health care spending to go toward primary care.

Recommendation:
Adjust and increase Medicaid and Medicare reimbursement rates for primary care across the board.

Standalone primary care providers practicing in designated rural areas do not get cost-based reimbursement such as with Critical Access Hospital or Rural Health Clinic programs. Providing an increase in reimbursement as a recognition of the additional burdens on sole providers in rural areas would incentivize providers to stay in the community, easing travel times and other obstacles to care.

Recommendation:
Create a designation for 'sole community provider' to allow for cost-based reimbursement, similar to the Critical Access Hospital or Rural Health Clinic programs.

Eliminate Barriers to Care

Telemedicine has become a key method for overcoming transportation and mobility barriers for rural residents. Advances in telemedicine have led to improved access and quality of care for many rural residents. Travel time can be reduced substantially, which is of particular importance for patients with chronic conditions that require frequent encounters with their providers. Through telemedicine, rural providers and residents alike can connect with specialists who would otherwise be out of reach.[15-18]

Recommendation:
Encourage policies and reimbursement to expand the use of telemedicine in New York State. Evidence indicates that integration of behavioral health practitioners in rural primary care offices can reduce the need for and utilization of costly services like emergency visits and labs.[19]

Transportation is often a limiting factor when seeking medical care, especially in areas of the state that experience harsh winter weather and for people without access to private transportation, particularly older adults.

Recommendation:
Expand home visit models for those with limited mobility including the use of visiting primary care providers.

Recommendation:
Expand funding for programs that provide transportation to medical appointments for those without vehicles.

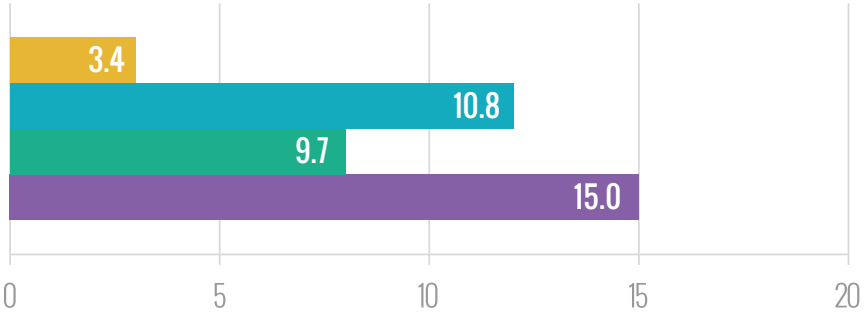
PRIMARY CARE ACCESS DATA

SECTION 4.0

4.1 PRIMARY CARE ACCESS MEASURES

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

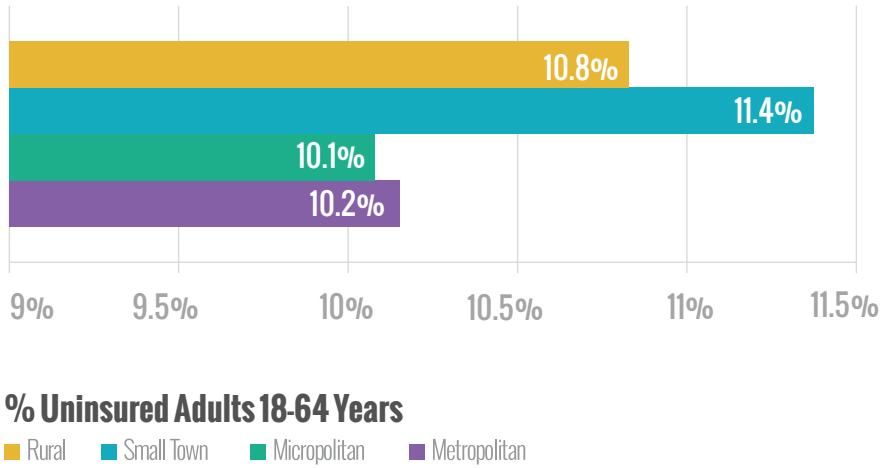
FIG. 2
Provider Availability by RUCA Category



Availability of primary care providers (PCPs) within communities has been associated with positive health outcomes and increases in health care service utilization.[11,20] People who live in areas with fewer primary care providers may have to travel farther or wait longer to be able to access primary care services.[21]

Rural areas of NYS had the fewest PCPs per 10,000 persons

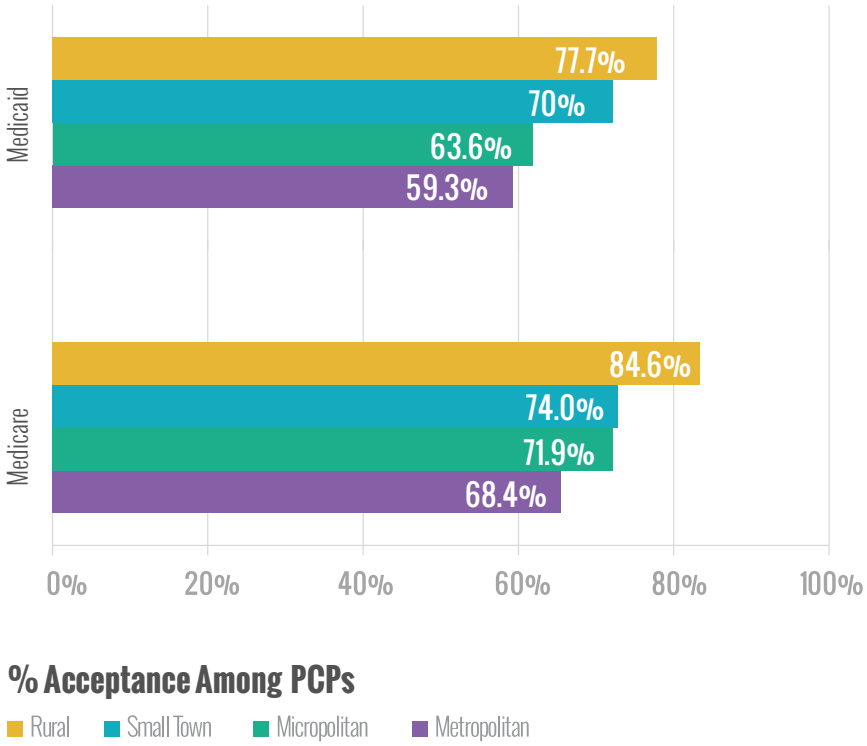
FIG. 3
Percent Uninsured by RUCA Category



Health insurance coverage is essential to the ability to access primary care. Persons who are uninsured are often sicker,[22] spend a greater proportion of their income on out-of-pocket health care costs, have greater difficulty accessing services,[23,24] and are more likely to lack a usual source of care than their insured counterparts.[25]

Rural and small town areas had higher rates of uninsured adults

FIG. 4
Percent Medicaid, Medicare Acceptance by RUCA Category

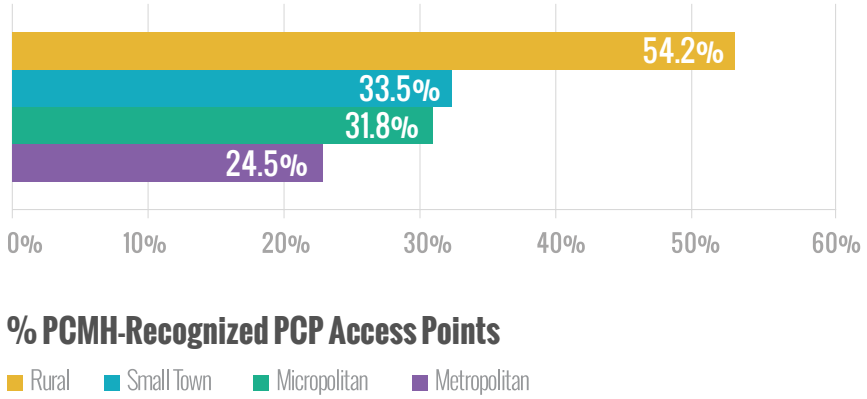


Medicaid acceptance measures the proportion of primary care providers that accept patients on Medicaid, a public insurance program for low-income people. For low-income communities with large Medicaid-eligible and Medicaid-insured populations, an insufficient supply of neighborhood-based providers accepting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

Medicare acceptance measures the proportion of primary care providers that accept patients on Medicare, which includes people who are ages 65+ and certain younger persons with disabilities. Primary care is particularly important for Medicare beneficiaries, as older adults are more likely to be living with and managing multiple chronic conditions.[26]

Rural and small town areas had the highest percentages of PCPs accepting Medicaid and accepting Medicare

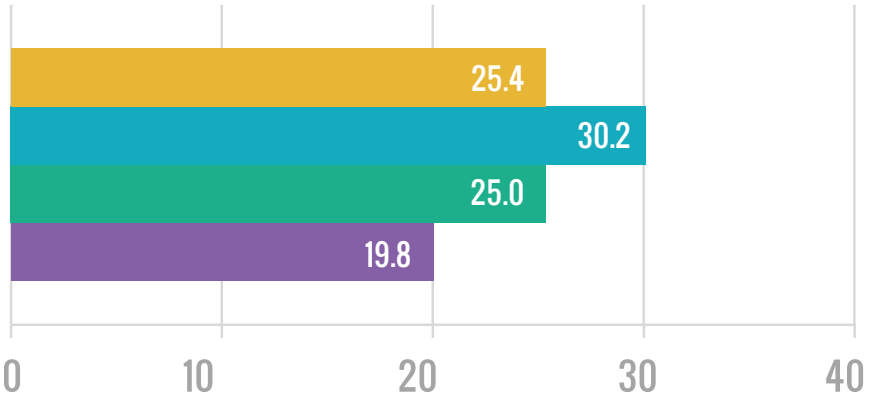
FIG. 5
Percent PCMH-Recognized Access Points by RUCA Category



The Patient-Centered Medical Home (PCMH) is a care model aimed at transforming the delivery of primary care through a commitment to quality improvement and a patient-centered care approach.[27] In New York State's Medicaid program, PCMH-enabled primary care practices receive additional reimbursement.

Rural and small town areas had the highest percentage of PCMH-recognized access points

FIG. 6
Potentially Preventable ED Visits by RUCA Category



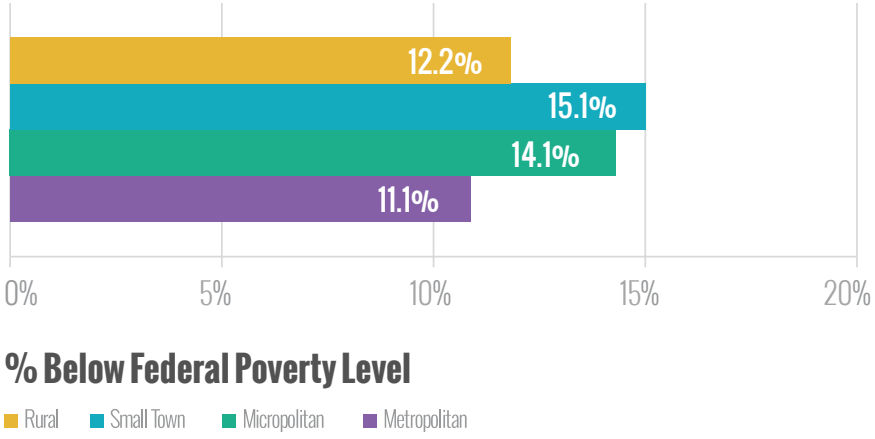
Preventable emergency department (ED) visit rates are widely used to measure need for additional primary care access, or higher quality and more comprehensive care that appropriately addresses the health needs of local residents. High rates of preventable ED visits may indicate a strain on health care system costs and resources.[28,29]

Small town areas had the highest rates of potentially preventable ED visits, followed by rural areas

4.2 SOCIOECONOMIC INDICATORS

Examining socioeconomic position in conjunction with primary care access is essential to understanding underlying factors upon which access hinges. Socioeconomic position refers to social and economic factors that influence a person's position within a larger, socially stratified population and contribute to inequities in the quality and availability of primary care.

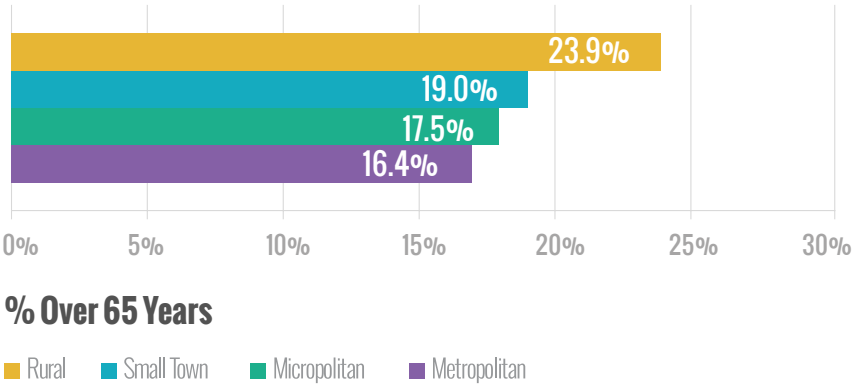
FIG. 7
Percent of Adults Living in Poverty by RUCA Category



Poverty is measured by the percent of residents at or below the Federal Poverty Line, and is a key component of access. Beyond associations between poverty and many health and quality of life measures, poverty is indicative of the level of need for affordable primary care services and for providers who accept public insurance.

Small town areas had the highest percent of adults living in poverty

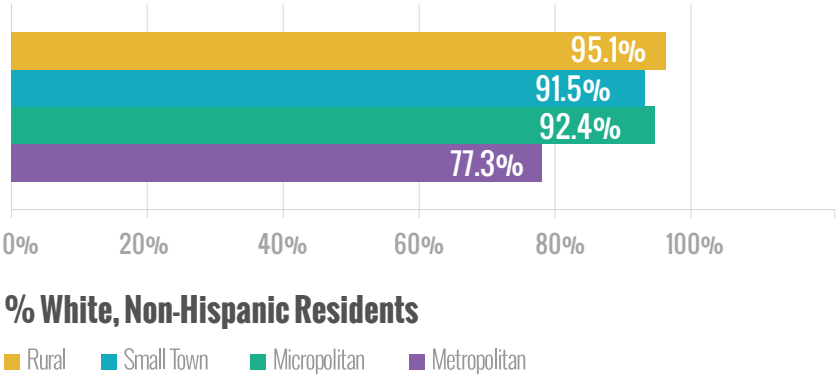
FIG. 8
Percent of Population over 65 Years by RUCA Category



Older residents and those with disabilities represent vulnerable populations that often benefit most from continuous primary care. These same populations experience more pronounced transportation barriers,[9,30,31] which result in missed visits or delayed treatment, poor adherence to medications, and potentially preventable emergency department visits.[32,33]

Rural areas had the highest percentage of the population over 65 years of age

FIG. 9
Percent of White Residents by RUCA Category



The proportion of **white, non-Hispanic residents** is a measure of the racial and ethnic composition of a community.

Rural areas had the highest percent of white residents

KEY ISSUES IN RURAL PRIMARY CARE

SECTION 5.0

5.1 RURAL PRIMARY CARE WORKFORCE SHORTAGES

Specific characteristics of New York State's rural and small town communities make them more sensitive to primary care workforce shortages. These include higher uninsured rates, poverty rates, and percentages of patients enrolled in Medicaid.[34,35]

Health outcomes already worsened by socioeconomic factors are put at further risk by the growing national shortage of primary care providers.[20] In rural areas, primary care practices are heavily supported by, and, in some cases, only sustained with the support of non-physician health care professionals such as Nurse Practitioners (NPs), Physician Assistants (PAs), and Registered Nurses (RNs).

However, even a heavy reliance on these allied health care practitioners cannot offset the increasing shortages in the rural primary care workforce.

On average, PCPs earn less in salary than other specialists. This is one reason why medical students are often drawn to higher-paid specialties and away from primary care.

Low investment, including reimbursement, in primary care throughout the United States health care system has further driven this wage disparity.[13] Programs including loan forgiveness and other financial subsidies for professionals working in High Professional Shortage Areas (HPSAs) are essential to draw PCPs to high-need rural areas.[37,38]

There are strong reasons for investing in programs to increase the primary care workforce in rural communities. Key among them are:

+ Higher PCP availability in a community is associated with a higher likelihood of residents reporting that they have a PCP. Higher availability was also found to have a positive effect on preventive care utilization.[11]

+ A larger supply of PCPs is associated with improved health outcomes, including all-cause cancer, heart disease, stroke, infant mortality, low birth weight, life expectancy, and self-rated good health.[20,38]

+ The salary difference between urban and rural PCPs is minimal for most primary care specialties, e.g., Internal Medicine, General Practice, etc. However, rural PCPs have a greater workload, work longer hours, see more patients, and provide care for patient populations with higher percentages of Medicaid recipients.[39,40]

> *"If you're in a rural practice, you really have to see everybody. You can't tell someone to go down the road. There's nothing down the road."*
>
> – Dr. John Rugge
> Hudson Headwaters Health Network

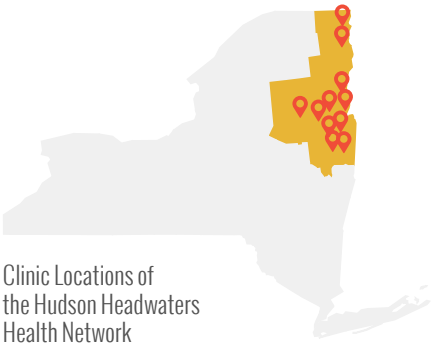
Success Story: Hudson Headwaters Health Network (HHHN)

One successful example of tackling the problem of primary care provider shortages in rural areas is Hudson Headwaters Health Network. Founded in 1974 to serve rural communities surrounding the Adirondacks, HHHN provides health care to people in Saratoga, Washington, Schenectady, Warren, Essex, Hamilton, Fulton, and Franklin counties.

With 17 community health centers, HHHN is a nonprofit system designed to meet the primary health care needs of this largely rural and underserved area of the state. Part of HHHN's mission is to provide care to all in the communities it serves, regardless of income or insurance, as it is often the sole primary care safety-net provider.

Provider recruitment has been a persistent issue, due to students' lack of exposure to rural practices and the challenge of providing competitive salaries. By forming partnerships with institutions like SUNY Albany and the University of Vermont, HHHN has brought in more regional medical students for rotations. These students are more likely to stay in rural practice once they graduate because of personal ties to the communities. Embedding students, including NPs and PAs, in rural health settings early in their studies—even as early as high school—familiarizes them with the opportunities in rural primary care. The promotion of such practices across NYS may help increase the number of primary care providers encouraged to work in rural and small town communities.

> *"Rural providers know it not only takes a willingness, but an understanding of rural New York's heritage of providing amazing support. It really is community health"*
>
> – Dr. John Rugge
> Hudson Headwaters Health Network



Clinic Locations of the Hudson Headwaters Health Network

5.2 SPECIAL POPULATIONS IN RURAL HEALTH

Rural and small town populations and communities differ in terms of cultural, social, and demographic composition from those in metropolitan areas, resulting in primary care providers encountering special populations with unique health care needs. For this report, we have chosen to profile two specific populations facing special challenges in rural New York: substance users and migrant workers.

5.2.1 Special Population: Substance Use

An estimated 1.2 million New York State residents did not receive needed treatment for substance use, and about half as many are estimated to misuse pain relievers, including opioids.[41] Rural areas have higher rates of opioid prescriptions partly because they are composed of older populations who suffer from chronic pain.[42,43]

Higher prescription rates have led to greater availability of opioids in regions with typically lower access to basic health services, and where specialty treatment is less available.

Rural populations also face a higher risk of mental and behavioral health issues, including depression and substance abuse, due to socioeconomic factors.[44] Rural residents have poorer access to mental health services compared with their urban counterparts, and often pay more out of pocket for these services.[45]

Small town economies and rural health centers, strained even before the opioid crisis, urgently need a broader response to address the needs of their communities. Current government funding and insurance coverage are inadequate as the number of rural residents seeking treatment continues to grow, and as the burden on an already strained workforce is compounded.

To secure a path to sustained recovery for residents and patients, local practitioners are calling for more comprehensive integration of substance use treatment and behavioral health with high-quality primary care.

> *"One of the challenges to opioid epidemics in rural communities is that when you call an ambulance, you might be waiting 20 to 30 minutes before anybody arrives."*
>
> – Robert Ross
> St. Joseph's Addiction Treatment & Recovery Centers

The opioid addiction crisis is an especially urgent problem for rural New York:

+ While opioid prescription rates are declining both regionally and nationally, patients in rural counties between 2014-2017 were 87% more likely to receive an opioid prescription, compared with persons in large metropolitan counties.[46]
+ Rural counties have higher rates of opioid-related deaths compared with metropolitan counties.[47]
+ As of 2015, rural counties had about half the number of physicians per 100,000 residents with the DEA Drug Addiction Treatment Act (DATA) waivers required to prescribe buprenorphine for medication-assisted addiction treatment, compared to metropolitan counties.[48]

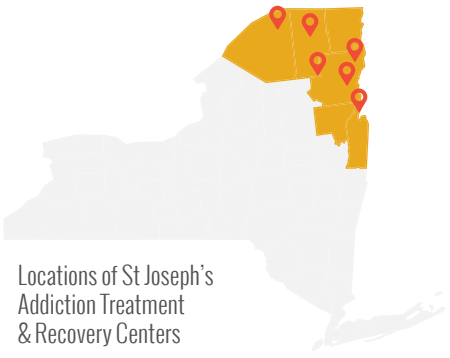
Success Story: St. Joseph's Addiction Treatment & Recovery Centers

No one understands the opioid crisis better than those on the front lines of caring for the individuals and communities affected by this epidemic. St. Joseph's Addiction Treatment & Recovery Centers continue to build on its success in serving the North Country region, primarily Essex, St. Lawrence, Clinton, Franklin, Warren, and Washington counties. Given the overwhelming demand for treatment, patients come from across the state to access services.

St. Joseph's has used four strategies to address substance use in their communities:

+ **Expand Organizational Capacity.** St. Joseph's continues to build space in response to shifting demands. In the past year, it has added seven adolescent beds for 12- to 16-year-olds and shifted seven men's beds to women's beds to significantly reduce the wait time for women. Increasing capacity and maintaining flexibility have helped St. Joseph's serve patients who otherwise would have been passed over for this treatment and recovery opportunity.
+ **Collaborate with Community Partners.** When St. Joseph's is at maximum capacity, working with local partners provides additional resources to meet community needs. Support from qualified partners to supplement treatment beds during upticks in opioid cases can help more patients access treatment and recovery.

> *"We had a situation a few weeks ago where there was somebody coming out of detox. We didn't have a bed opening for three weeks. We made arrangements with one of our fellow agencies in the North Country for an inpatient stay in their crisis unit while the patient received outpatient services until we had an open bed."*
>
> – Robert Ross
> St. Joseph's Addiction Treatment & Recovery Centers



Locations of St Joseph's Addiction Treatment & Recovery Centers

+ **Increase Naloxone Use.**
St. Joseph's has been a strong early adopter in the use of Naloxone, the drug that reverses overdoses from opioids such as heroin and fentanyl. Official first responders may not arrive quickly, making people trained in administering Naloxone especially helpful. In rural communities where residents can be many miles from health centers and buprenorphine providers, expanding education and use of Naloxone can provide the precious time needed to connect residents to longer-term care.

+ **Reduce Stigma.**
Treatment is often delayed because of the stigma associated with substance use. St. Joseph's staff has done extensive work with stigma reduction to persuade people in the community to seek treatment earlier.

> *Reducing stigma leads to earlier treatment, and ideally, earlier recovery."*
>
> – Robert Ross
> St. Joseph's Addiction Treatment & Recovery Centers

5.2.2 Special Population: Migrant Workers

Agriculture is central to many rural and small town economies. As in other states, many New York farms employ thousands of migrant and seasonal agricultural workers.

Beyond the intense physical demands and occupational hazards involved in farm work, there are social and economic inequities that increase health disparities for migrant workers and their families. Gaps in cultural understanding and intensifying political hostilities toward immigrants magnify health differences. For the more than 90% of farmworkers born outside the United States,[46] the current sociopolitical landscape deters many from seeking health and social services. For those without visas, fear of deportation is an additional worry.[50] Lack of trust in the health and social services systems compounds existing socioeconomic problems, deterring access to health care for migrant workers. Preventable communicable and chronic diseases often remain unaddressed.

The passage of the Affordable Care Act and Medicaid expansion in the state have helped reduce the percentage of migrant workers without health insurance coverage.[4,49] However, the cost of care, provider availability, and cultural and linguistic competency remain persistent barriers to care.[50] Primary care providers can be a part of the solution addressing health disparities for migrant workers.

Key factors impacting migrant and agricultural workers' access to health services:

- Low primary care utilization among migrant and seasonal farmworkers is not indicative of fewer health needs.[50] This population has high rates of communicable diseases such as HIV and tuberculosis as well as chronic conditions such as diabetes and hypertension.[4]
- Roughly 85% of migrant adults and 90% of migrant children in the eastern migration stream, which includes New York's migrant population, lacked health insurance in 2000. By 2014, after the ACA implementation, uninsured rates dropped to an estimated 76% and 32%, respectively.[4]
- Most migrant farmworkers are excluded from New York State labor laws relating to disability insurance, day of rest, paid sick time, and collective bargaining. To avoid losing pay, many forego seeing a doctor when feeling sick; non-traditional hours further impede them from accessing care in rural regions.[50]
- Health organizations often lack cultural and linguistical competencies, resulting in poor communication between providers and patients. Patient experiences with providers are mixed.[50]

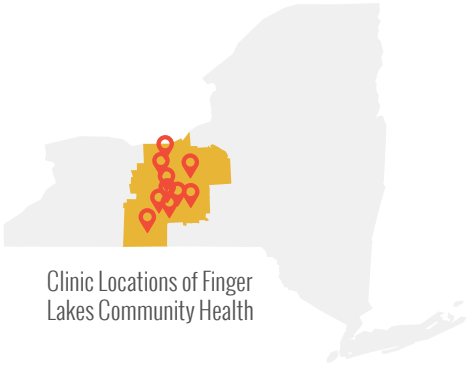
Success Story: Finger Lakes Community Health (FLCH)

Innovative and culturally sensitive care can help to increase health care access for migrant workers. Finger Lakes Community Health has been serving rural communities in the Finger Lakes and Southern Tier regions since 1989, including Cayuga, Ontario, Seneca, Steuben, and Wayne counties.

Enhancing care coordination and care management capacity is a top priority for FLCH to provide appropriate care for agricultural workers. These workers make up one-third of FLCH's patient population and 60% of patients requesting services in a language other than English. FLCH's programs include patient navigators, financial advocates, and patient advocates to support patient access. For those without transportation, FLCH provides mobile medical units to visit migrant worker housing areas and school-based mobile dental services for children of workers.

Some providers are not able to see patients without an interpreter, which is where community health workers, interpreters, and telehealth help. In conjunction with a team of community workers, the Migrant Voucher Program has enabled FLCH to expand the reach of its telehealth, interpretation services, referrals, and financial subsidies for farmworkers seeking care outside of the immediate FLCH network. Now including over 150 providers across 42 counties, this program has been instrumental in improving access to higher-quality, culturally competent care for many in New York's agricultural workforce.

> *"Having enough providers that are aware of our patients' culture and their cultural needs is a challenge."*
>
> – Mary Zelazny
> Finger Lakes Community Health



Clinic Locations of Finger Lakes Community Health

5.3 FINANCIAL SUSTAINABILITY OF PRIMARY CARE IN RURAL AREAS

Financial sustainability is a pressing challenge for many primary care providers in rural and small town communities. A higher proportion of primary care providers in a region's community of providers is associated with lower overall Medicare spending per recipient.[51]

Rural areas have a higher percentage of their population on Medicare, making the rural health system more dependent on reimbursement from public payers compared with metropolitan areas. Overreliance on the lower reimbursement rates from public, rather than private, insurance place at risk the financial viability of rural primary care practices.

> *"It is disappointing to have to add more billing staff instead of clinical staff, but otherwise, we fall even further behind in collecting payment for services we've already provided."*
>
> – Robert Ross
> St. Joseph's Addiction Treatment & Recovery Centers

Roots of Financial Stress

Problems with Public Insurance

Medicaid and Medicare cover a disproportionate percentage of rural patients, making public insurance rates and rules a major factor in rural primary care financial viability.

+ **A 2007 change in Medicare reimbursement was intended to produce a 37% increase for primary care visits, but the net increase was only 5%:** This change assigned greater value to evaluation and management services typically performed by primary care physicians relative to procedural and imaging procedures usually performed by other physicians.[52]
+ **Billing for same-day services:** Rural patients often find it more convenient to access multiple visits/services on the same day. However, Medicaid currently prevents payment for multiple visits/services within the same day at Federally Qualified Health Centers (FQHCs).
+ **Artificially low Medicaid caps:** The fee-for-service rates have not been updated recently by NYS Medicaid, with no inflation adjustments for the addition of services that are now required by providers.[53]
+ **Low cost-sharing rate between Medicaid and Medicare in New York:** Cost-sharing restrictions for dual eligible patients may disproportionately burden rural primary care practices treating these patients.[54]

Rural Hospital Closures

Many factors contribute to rural hospital closures, including populations that are aging, poor, and shrinking, plus high uninsured and publicly insured rates.

- **High rates of uninsured patients and patients with public insurance:** With fewer privately insured patients, rural hospitals disproportionately rely on Medicaid and Medicare reimbursement rates that are often below cost of care.[55]
- **Changes to Medicaid and Medicare reimbursement:** The changes can have a more significant impact on rural hospitals, which rely more heavily on these payments.[55]
- **Hospital closures redirect patient to PCPs:** The closure of critical access hospitals (CAHs) has redirected patients to primary care practices in rural areas, yet the financial incentives/subsidies available to CAH facilities are not available for other practices.[56,57]

Factors Related to Rural Primary Care Practice

Primary care practices face specific challenges that are compounded in rural areas.

- **Primary care practitioners' reimbursement rates are inadequate** in all regions. This is further exacerbated by:
  - A current reimbursement system that often discourages the most effective and convenient approaches for patients, such as telehealth.[58]
  - The higher percentage of older patients with higher rates of chronic diseases and complex comorbidities who are served by rural PCPs. Low Medicare reimbursement combined with the absence of cross subsidization characteristic of larger and academic medical centers creates difficulties with financial feasibility.[58]
- **Fewer commercial insurance options** are available in rural regions,[59] which may contribute to higher uninsured rates.

TECHNICAL NOTES

SECTION 6.0

6.1 RURAL HEALTH PARTNERS

Dr. John Rugge is the founding CEO and now Executive Chairman of Hudson Headwaters Health Network (HHHN). Through opening the first health center in Chestertown in 1974 and growing the nonprofit HHHN system to 17 community health centers, Dr. Rugge has had ample experiences to share about improving access to primary care for rural New Yorkers. Collectively, these FQHCs provide "safety-net" primary care for over 1,000 patients per day across 5,600 square miles of the Adirondack North Country and Glen Falls region, a predominantly rural, medically underserved area. HHHN strives to provide the best health care, and access to that care, for everyone in its community.

hhhn.org

Mary Zelazny is the CEO of Finger Lakes Community Health (FLCH) and has worked with this organization since its founding in 1989. Ms. Zelazny shared the many successes and challenges in providing primary care for agricultural workers, one of the high-need rural populations in the region, and detailed the ongoing expansion of the FQHC system from its first location in Sodus, New York, to several other access points across the region: Penn Yan, Bath, Dundee, Geneva, Newark, Ovid, and Port Byron. In addition to advocating for the health of surrounding communities, FLCH offers affordable, coordinated, team-based care to ensure that all patients are comfortable throughout the health care process, and that all their health needs are met.

localcommunityhealth.com

Robert Ross is the CEO of St. Joseph's Addiction Treatment & Recovery Centers, now in its 48th year and based in Saranac Lake, New York. Mr. Ross and his team shared their extensive experiences providing comprehensive care for residents across many areas in New York State, including Malone, Elizabethtown, Schenectady, Ticonderoga, Lake Placid, Saranac Lake, Keeseville, Poughkeepsie, and Massena. While focused primarily on addiction treatment and recovery, St. Joseph's integrates its inpatient, outpatient, and residential services with behavioral health, primary care, and supportive housing to improve care continuity for its clients and improve their chances of a sustained recovery. Today, St. Joseph's upholds the mission of the organization's original founders, the Franciscan Friars of the Atonement, while working to heal individuals, restore families, and strengthen communities.

stjoestreatment.org

6.2 METHODOLOGY

Primary Care Provider:

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

Methods

Rural-Urban Commuting Area (RUCA) code category designation of New York State ZIP Code Tabulated Areas (ZCTA)

Each ZCTA was categorized by RUCA Code:

+ Metropolitan areas include core urbanized areas of **50,000+** persons and high and low commuting metropolitan areas *(RUCA codes: 1-3)*
+ Micropolitan areas include core urban clusters of **10,000 - 49,999** persons and high and low commuting micropolitan areas *(RUCA codes: 4-6)*
+ Small towns include urban clusters of **2,500 - 9,999** persons and high and low commuting small towns *(RUCA codes: 7-9)*
+ Rural areas include clusters of **<2,500** persons *(RUCA code: 10)*.

Mean ratio of primary care providers per 10,000 persons ages 18 years and older, by RUCA category in New York State

+ Number of PCPs with a practice location in the ZCTA multiplied by **10,000**, and then divided by the population of persons 18 years of age and older residing in a ZCTA, averaged by RUCA category
+ PCPs with multiple practice locations in one ZCTA were counted once within the ZCTA

Mean percent of persons ages 18–64 who are uninsured, by RUCA category in New York State, 2012–2016

+ Number of persons **ages 18-64** in the ZCTA with no insurance divided by the total number of persons **ages 18-64** residing in the ZCTA, averaged by RUCA category

Mean percent of primary care providers that accept Medicaid, by RUCA category in New York State

+ Number of PCPs in the ZCTA that accept Medicaid divided by the total number of PCPs in the ZCTA, averaged by RUCA category
+ Only ZCTAs with one or more PCP were included

Mean percent of primary care providers that accept Medicare, by RUCA category in New York State

+ Number of PCPs in the ZCTA that accept Medicare divided by the total number of PCPs in the ZCTA, averaged by RUCA category
+ Only ZCTAs with one or more PCP were included

Mean percent of primary care sites that are recognized as Patient-Centered Medical Homes, by RUCA category in New York State

+ Number of PCP sites identified as PCMH-recognized divided by the total number of PCP sites in each ZCTA, averaged by RUCA category

Note on Primary Care Access Measures:

Each of the primary care measures presented in the report serve to compare access along the rural-urban continuum in New York State. These comparisons do not establish a threshold for adequate access for the measures.

Note on Key Informant interviews:

Key informants with extensive experience in rural primary care practice in New York State were selected. Telephone and face-to-face interviews were conducted with a semi-structured interview guide to gain information to supplement the current dearth of New York-specific topical literature. Interviews were recorded and transcribed. The main themes were extracted for the report to synthesize literature review findings.

6.3 DATA SOURCES

Figure 1. Map of Rural Area in New York State

WWAMI Rural Health Research Center, 2004.
New York State Civil Boundaries, New York State GIS Data, 2018.
New York State Streets, New York State GIS Data, 2019.

Figure 2. PCP Availability

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

Figure 3. % Uninsured

United States Census via the American Community Survey, 2016 five-year estimate, ID: S2701.

Figure 4. % PCPs Accepting Medicaid, Medicare

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

Figure 5. % PCMH-Recognized PCP Access Points

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

Figure 6. Potentially Preventable Emergency Department Visits

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

Figure 7. % Below Federal Poverty Line

United States Census via the American Community Survey, 2017 five-year Estimate, ID: B17001.

Figure 8. % Over 65+ years

United States Census via the American Community Survey, 2017 five-year Estimate, ID: S0101.

Figure 9. % White

United States Census via the American Community Survey, 2017 five-year Estimate, ID: C02003.

6.4 CITATIONS

1. Bolin, J. N., Bellamy, G. R., Ferdinand, A. O., Vuong, A. M., Kash, B. A., Schulze, A., & Helduser, J. W. (2015). Rural healthy people 2020: new decade, same challenges. The Journal of Rural Health, 31(3), 326-333.
2. National Public Radio, Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health. (2018). Life in Rural America.
3. Parlier, A. B., Galvin, S. L., Thach, S., Kruidenier, D., & Fagan, E. B. (2018). The road to rural primary care: A narrative review of factors that help develop, recruit, and retain rural primary care physicians. Academic Medicine, 93(1), 130-140.
4. National Center for Farmworker Health. (2014). Regional Migrant Health Profile: An Analysis of Migrant & Seasonal Agricultural Worker Patients, 2014.
5. Ortiz, J., Meemon, N., Zhou, Y., & Wan, T. T. (2013). Trends in rural health clinics and needs during US health care reform. Primary health care research & development, 14(4), 360-366.
6. Collins, S. (2012). Primary care shortages: strengthening this sector is urgently needed, now and in preparation for healthcare reform. American health & drug benefits, 5(1), 40.
7. Baldwin, L. M., Cai, Y., Larson, E. H., Dobie, S. A., Wright, G. E., Goodman, D. C., ... & Hart, L. G. (2008). Access to cancer services for rural colorectal cancer patients. The Journal of Rural Health, 24(4), 390-399.
8. Arora, S., Kalishman, S., Dion, D., Som, D., Thornton, K., Bankhurst, A., ... & Komaramy, M. (2011). Partnering urban academic medical centers and rural primary care clinicians to provide complex chronic disease care. Health Affairs, 30(6), 1176-1184.
9. Iezzoni, L. I., Killeen, M. B., & O'Day, B. L. (2006). Rural residents with disabilities confront substantial barriers to obtaining primary care. Health services research, 41(4p1), 1258-1275.
10. Chuang, C. H., Hwang, S. W., McCall‐Hosenfeld, J. S., Rosenwasser, L., Hillemeier, M. M., & Weisman, C. S. (2012). Primary care physicians' perceptions of barriers to preventive reproductive health care in rural communities. Perspectives on sexual and reproductive health, 44(2), 78-83.
11. Continelli, T., McGinnis, S., & Holmes, T. (2010). The effect of local primary care physician supply on the utilization of preventive health services in the United States. Health & place, 16(5), 942-951.
12. New York State Department of Health. (2015). Freestanding APG Base Rates Using Full APG Investment. Retrieved from https://www.health.ny.gov/health_care/medicaid/rates/apg/rates/dtc/dtc_base_rates_inv.htm.
13. Koller, C. F., & Khullar, D. (2017). Primary care spending rate—a lever for encouraging investment in primary care. New England Journal of Medicine, 377(18), 1709-1711.
14. Reid, R., Damberg, C., & Friedberg, M. W. (2019). Primary Care Spending in the Fee-for-Service Medicare Population. JAMA Intern Med. doi:10.1001/jamainternmed.2018.8747
15. --Uscher-Pines, L., Mulcahy, A., Cowling, D., Hunter, G., Burns, R., & Mehrotra, A. (2016). Access and quality of care in direct-to-consumer telemedicine. Telemedicine and e-Health, 22(4), 282-287.
16. Stingley, S., & Schultz, H. (2014). Helmsley trust support for telehealth improves access to care in rural and frontier areas.
17. Grubaugh, A. L., Cain, G. D., Elhai, J. D., Patrick, S. L., & Frueh, B. C. (2008). Attitudes toward medical and mental health care delivered via telehealth applications among rural and urban primary care patients. The Journal of nervous and mental disease, 196(2), 166-170.
18. Daniel, H., & Sulmasy, L. S. (2015). Policy recommendations to guide the use of telemedicine in primary care settings: an American College of Physicians position paper. Annals of internal medicine, 163(10), 787-789.
19. Peterson, M., Turgesen, J., Fisk, L., & McCarthy, S. (2017). Integrated care in rural health: Seeking sustainability. Families, Systems, & Health, 35(2), 167.
20. Basu, S., Berkowitz, S. A., Phillips, R. L., Bitton, A., Landon, B. E., & Phillips, R. S. (2019). Association of primary care physician supply with population mortality in the United States, 2005-2015. JAMA internal medicine.
21. Brown, E. J., Polsky, D., Barbu, C. M., Seymour, J. W., & Grande, D. (2016). Racial disparities in geographic access to primary care in Philadelphia. Health Affairs, 35(8), 1374-1381.
22. Wilper, A. P., Woolhandler, S., Lasser, K. E., McCormick, D., Bor, D. H., & Himmelstein, D. U. (2009). Health insurance and mortality in US adults. American journal of public health, 99(12), 2289-2295.
23. Costs, H. (2003). Value Lost: Uninsurance in America. Institute of Medicine of the National Academies.
24. Cook, N. L., Hicks, L. S., O'Malley, A. J., Keegan, T., Guadagnoli, E., & Landon, B. E. (2007). Access to specialty care and medical services in community health centers. Health Affairs, 26(5), 1459-1468.
25. Pleis, J. R., & Lethbridge-Çejku, M. (2007). Summary health statistics for US adults: National Health Interview Survey, 2006.
26. National Center for Chronic Disease Prevention and Health Promotion. (2018). Multiple Chronic Conditions. Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/chronicdisease/about/multiple-chronic.htm.
27. National Committee for Quality Assurance. (2018). Patient-Centered Medical Home (PCMH) Overview. Retrieved from https://www.ncqa.org/programs/health-care-providers-practices/patient-centered-medical-home-pcmh/.
28. Cunningham, A., Mautner, D., Ku, B., Scott, K., & LaNoue, M. (2017). Frequent emergency department visitors are frequent primary care visitors and report unmet primary care needs. Journal of evaluation in clinical practice, 23(3), 567-573.
29. Harris, M. J., Patel, B., & Bowen, S. (2011). Primary care access and its relationship with emergency department utilisation: an observational, cross-sectional, ecological study. Br J Gen Pract, 61(593), e787-e793.
30. Haggerty, J. L., Roberge, D., Lévesque, J. F., Gauthier, J., & Loignon, C. (2014). An exploration of rural–urban differences in healthcare-seeking trajectories: Implications for measures of accessibility. Health & place, 28, 92-98.
31. Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling towards disease: transportation barriers to health care access. Journal of community health, 38(5), 976-993.
32. Wroth, T. H., & Pathman, D. E. (2006). Primary medication adherence in a rural population: the role of the patient-physician relationship and satisfaction with care. J Am Board Fam Med, 19(5), 478-486.
33. Schroen, A. T., Brenin, D. R., Kelly, M. D., Knaus, W. A., & Slingluff Jr, C. L. (2005). Impact of patient distance to radiation therapy on mastectomy use in early-stage breast cancer patients. Journal of clinical oncology, 23(28), 7074-7080.
34. Pathman, D. E., Ricketts III, T. C., & Konrad, T. R. (2006). How adults' access to outpatient physician services relates to the local supply of primary care physicians in the rural southeast. Health services research, 41(1), 79-102.
35. Meit, M., Knudson, A., Gilbert, T., Yu, A. T. C., Tanenbaum, E., Ormson, E., & Popat, S. (2014). The 2014 update of the rural-urban chartbook. Bethesda, MD: Rural Health Reform Policy Research Center.
36. Pathman, D. E., Konrad, T. R., King, T. S., Spaulding, C., & Jr, D. H. T. (2000). Medical training debt and service commitments: the rural consequences. The Journal of Rural Health, 16(3), 264-272.
37. Renner, D. M., Westfall, J. M., Wilroy, L. A., & Ginde, A. A. (2010). The influence of loan repayment on rural healthcare provider recruitment and retention in Colorado. Rural Remote Health, 10(4), 1605.
38. Macinko, J., Starfield, B., & Shi, L. (2007). Quantifying the health benefits of primary care physician supply in the United States. International journal of health services, 37(1), 111-126.
39. Weeks, W. B., & Wallace, A. E. (2008). Rural–urban differences in primary care physicians' practice patterns, characteristics, and incomes. The Journal of Rural Health, 24(2), 161-170.
40. Weigel, P. A., Ullrich, F., Shane, D. M., & Mueller, K. J. (2016). Variation in Primary Care Service Patterns by Rural‐Urban Location. The Journal of Rural Health, 32(2), 196-203.
41. SAMHSA (2017). 2016-2017 National Surveys on Drug Use and Health: Model-Based Estimated Totals (in Thousands) (50 States and the District of Columbia). 25-53.
42. Keyes, K. M., Cerdá, M., Brady, J. E., Havens, J. R., & Galea, S. (2014). Understanding the rural–urban differences in nonmedical prescription opioid use and abuse in the United States. American journal of public health, 104(2), e52-e59.
43. Hoffman, P. K., Meier, B. P., & Council, J. R. (2002). A comparison of chronic pain between an urban and rural population. Journal of Community Health Nursing, 19(4), 213-224.
44. Ziller, E. C., Anderson, N. J., & Coburn, A. F. (2010). Access to rural mental health services: service use and out‐of‐pocket costs. The Journal of Rural Health, 26(3), 214-224.
45. Ziller, Erika C., Andrew F. Coburn, and Anush E. Yousefian. "Out-of-pocket health spending and the rural underinsured." Health Affairs 25, no. 6 (2006): 1688-1699.
46. García, M. C., Heilig, C. M., Lee, S. H., Faul, M., Guy, G., Iademarco, M. F., ... & Gray, J. (2019). Opioid Prescribing Rates in Nonmetropolitan and Metropolitan Counties Among Primary Care Providers Using an Electronic Health Record System—United States, 2014–2017. Morbidity and Mortality Weekly Report, 68(2), 25.
47. Scholl, L., Seth, P., Kariisa, M., Wilson, N., & Baldwin, G. (2019). Drug and opioid-involved overdose deaths—United States, 2013–2017. Morbidity and Mortality Weekly Report, 67(5152), 1419.
48. Rosenblatt, R. A., Andrilla, C. H. A., Catlin, M., & Larson, E. H. (2015). Geographic and specialty distribution of US physicians trained to treat opioid use disorder. The Annals of Family Medicine, 13(1), 23-26.
49. Rosenbaum, S. J., & Shin, P. (2005). Migrant and seasonal farmworkers: health insurance coverage and access to care.
50. New York State Department of Health AIDS Institute. (2007). Migrant and Seasonal Farmworkers Health Care Access and HIV/AIDS in this Population. Statewide AIDS Services Delivery Consortium Advisory Group.
51. Chernew, M. E., Sabik, L., Chandra, A., & Newhouse, J. P. (2009). Would having more primary care doctors cut health spending growth?. Health Affairs, 28(5), 1327-1335.
52. Bodenheimer, T., & Laing, B. Y. (2007). The teamlet model of primary care. The Annals of Family Medicine, 5(5), 457-461.
53. Adapted from interviews.
54. Zheng, N. T., Hoover, S., & Feng, M. Z. (2014). Effect of State Medicaid Payment Policies for Medicare Cost Sharing on Access to Care for Dual Eligibles.
55. Wishner, J., Solleveld, P., Rudowitz, R., Paradise, J., & Antonisse, L. (2016). A look at rural hospital closures and implications for access to care: three case studies. Kaiser Family Foundation [Internet].
56. United States Government Accountability Office. (2018). Rural hospital Closures: Number and Characteristics of Affected Hospitals and Contributing Factors.
57. Laditka, J. N., Laditka, S. B., & Probst, J. C. (2009). Health care access in rural areas: evidence that hospitalization for ambulatory care-sensitive conditions in the United States may increase with the level of rurality. Health & place, 15(3), 761-770.
58. Council on Graduated Medical Education. (2010). Council on Graduate Medical Education Twentieth Report Advancing Primary Care.
59. New York State Department of Health. (2016). County Directory of Managed Care Plans. Division of Managed Care and Program Evaluation. Retrieved from https://www.health.ny.gov/health_care/managed_care/pdf/cnty_dir.pdf.

PRIMARY CARE DEVELOPMENT CORPORATION **ABOUT US**

SECTION 7.0

Primary Care Development Corporation

PCDC IS A NATIONALLY RECOGNIZED NONPROFIT THAT CATALYZES EXCELLENCE IN PRIMARY CARE THROUGH STRATEGIC COMMUNITY INVESTMENT, CAPACITY BUILDING, AND POLICY INITIATIVES TO ACHIEVE HEALTH EQUITY.

IN NEW YORK STATE, PCDC HAS WORKED WITH HUNDREDS OF PRIMARY CARE ORGANIZATIONS TO EXPAND ACCESS TO HIGH-QUALITY PRIMARY CARE.

As a Community Development Financial Institution (CDFI), PCDC provides low-interest capital and expertise to build, renovate, and expand community-based health care facilities, supporting providers in delivering quality care to their patients in settings that promote dignity, respect, and wellness. PCDC also provides expert consulting, training, and coaching to help primary care practices adopt patient-centered models, care coordination, and integrated services; improve operations; incorporate coordinated care; leverage health information technology; and boost patient health outcomes.

PCDC works with key policy makers, trade associations, primary care practices, and industry leaders to advance policy initiatives that strengthen, sustain, and expand access to quality primary care. In a rapidly evolving health policy environment, PCDC brings both policy expertise and a quarter century's experience investing in and strengthening primary care practices in New York State.

Contact Information

Primary Care
Development Corporation
45 Broadway
Suite 530
New York, NY 10006

MARY M. FORD, MS
mford@pcdc.org
212-437-3900

pcdc.org

Suggested Citation

Primary Care Development Corporation. (2019). Rural Access to Primary Care in New York State. New York, NY.

THANK YOU **NEW YORK STATE LEGISLATURE**

SECTION 8.0

Thank You to the New York State Legislature

The Rural Access to Primary Care in New York State 2019 Report is made possible by public funds provided by the New York State Department of Health through support from the New York State Legislature.

New York State Legislature, Albany, New York

The Primary Care Development Corporation extends a special thanks for the leadership of the New York State Assembly Member Richard N. Gottfried and the following members for championing this project in FY19:

Michael Blake
Harry Bronson
Kevin Cahill
Vivian Cook
Steven Cymbrowitz
Maritza Davila
Inez Dickens
Anthony D'Urso
Sandra Galef
David Gantt
Deborah Glick
Pamela Harris
Addie Jenne
Latoya Joyner
Charles Lavine
Joseph Lentol
Barbara Lifton
John McDonald
Walter Mosley
Felix Ortiz
Steven Otis
Jose Rivera
Robert Rodriguez
Rebecca Seawright
Luis Sepulveda
Aravella Simotas
James Skoufis
Philip Steck
Al Stirpe
Alfred Taylor
Fred Thiele
Matthew Titone
David Weprin
Jaime Williams
Tremaine Wright
Clifford Crouch
Joseph Errigo
Gary Finch
David McDonough
Michael Montesano
Philip Palmesano
Andrew Raia