THESIS ABSTRACT

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Title LACK OF ACCESS TO CARE HURTS RURAL POPULATIONS' HEALTH: FEDERALLY QUALIFIED HEALTH CENTERS OFFER A SOLUTION

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The objective of this thesis is to investigate the effectiveness of implementing more Federally Qualified Health Centers (FQHCs) into rural areas to improve existing health disparities. Three benefits of FQHCs were analyzed: their impact on improving access to healthcare and reducing health disparities, their economic impact on patients, local healthcare systems, and the national healthcare system, as well as their ability to work with and improve already existing healthcare infrastructure in rural areas. FQHCs provide primary medical care, dental care, health screenings, immunizations, prenatal and obstetrics specialty care, and mental health services—all services that are lacking in rural areas, which leads to poorer health outcomes. The data analyzed in this paper shows the benefits of FQHCs in reducing rural health disparities and improving the cost effectiveness of healthcare. The findings showed FQHCs bring a high level of quality healthcare at an affordable price to rural settings and can play a significant role in reducing rural health disparities.

Key words: Federally Qualified Health Centers, Rural Health, Rural Health Disparities

LACK OF ACCESS TO CARE HURTS RURAL POPULATIONS' HEALTH: FEDERALLY QUALIFIED HEALTH CENTERS OFFER A SOLUTION

By

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Introduction

Federally Qualified Health Centers (FQHCs) are at the forefront of providing more primary care access to over 22 million Americans living in Primary Care Health Professional Shortage Areas (HPSA).[1] Over 47% of underinsured Americans live in inner-city areas and 53% live in rural communities.[2] There is a great need to increase access to FQHCs for the 53% of Americans living in rural communities who comprise 15% of the U.S. population.[3] FQHCs currently provide services to 10% of rural Americans, 14% of minorities, and 20% of the nation's uninsured.[4] A lack of medical providers, and likely a lack of FQHCs, leads to significant health disparities found among rural residents.[5] On average, rural residents have poorer health outcomes than their urban and suburban counterparts.[6] Compared to their urban counterparts, rural populations are at a greater risk of dying from the five leading causes of death in America including: heart disease, cancer, unintentional injury, stroke, and lung disease.[7] Implementation of more FQHCs in rural areas would help lessen the widening gap of health disparities among rural residents.

FQHCs, also known as Community Health Centers, are community-directed, not for profit, medical homes,[1] centered on providing healthcare to low-income and medically underserved communities. There are currently 1,300 FQHCs providing a multitude of services such as primary medical care, dental care, health screenings, immunizations, prenatal and obstetrics specialty care, and mental health services.[8] Transportation poses a major barrier to accessing healthcare for rural residents due to the

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[1] A medical home is a healthcare system model, where a patient's primary care physician coordinates their healthcare delivery in a comprehensive, efficient, and affordable manner.

[2] FQHC look-alikes operate, have the same quality standards, and provide services similar to FQHCs. Like FQHCs they are eligible for increased Medicare and Medicaid reimbursements and discounted

lack of public transportation in rural areas. FQHCs also provide transportation when needed for adequate patient care, alongside many other services, at over 9,000 sites across the USA.[9] FQHCs serve over 24 million people nationwide—with 71% of the population served having family incomes at, or below, the Federal Poverty Level (FLP).[10] Likewise, 28% of patients at FQHCs are uninsured and 47% depend on Medicaid.[11] FQHCs also provide access to care for a large portion of racial and ethnic minority groups.[12]

Populations Served by the National Association of Community Health Centers, March 2017[13]

	Health Center Percentage	US Percentage
% at or below 100% poverty	71%	14%
% at or below 200% poverty	92%	32%
% Uninsured	24%	9%
% Medicaid	49%	20%
% Medicare	9%	14%
% Racial/Ethnic Minority	62%	39%

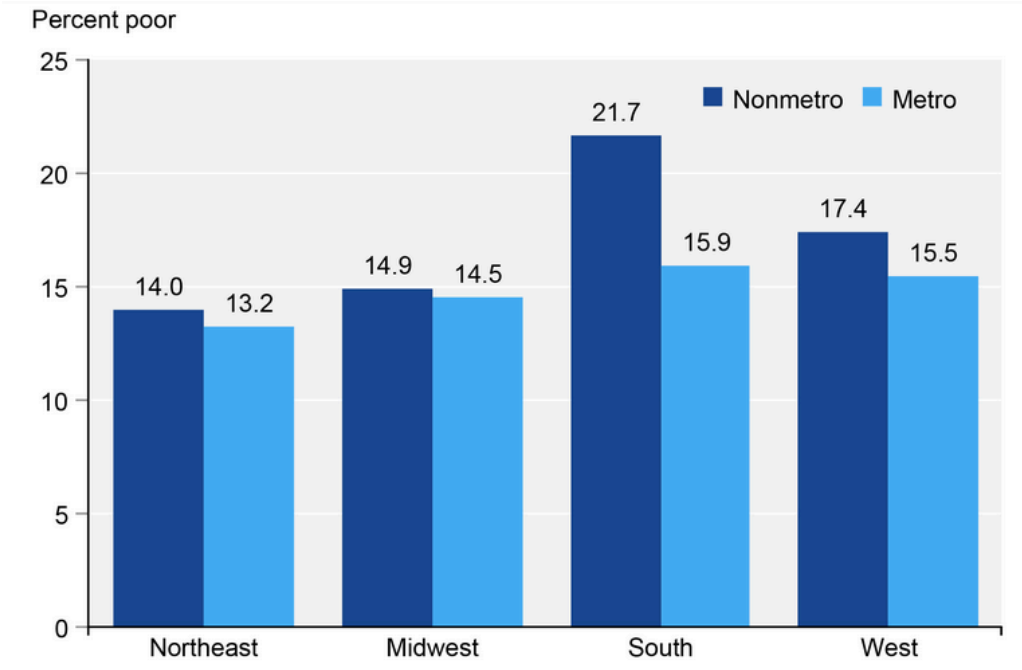
For a health center to become a FQHC, the health facility must meet the following requirements:

1. Serve all people regardless of their ability to pay

2. Be a public or not for profit organization
3. Have a governing board composed of 51% or more of their patients
4. Serve a medically underserved population or area
5. Provide comprehensive primary care services
6. Have an ongoing quality assurance program.[14]

These specified criteria lend a hand to the success of FQHC's by making them more responsive to community needs. Criteria's (1) and (2) allow FQHCs to improve the health of rural Americans by providing affordable care. With rural (non-metro) citizens more likely to live in poverty and be uninsured than urban populations, it is important to help alleviate the cost of healthcare as a barrier to access.[15]

Poverty rates by region and metro/nonmetro status, 2011-2015[16]



Source: USDA, Economic Research Service using data from U.S. Census Bureau, American Community Survey, county-level 5-year estimates 2011-15.

FQHCs can provide free and low-cost services due to their eligibility under the Section 330 PHS Act Health Center Grant Program, their ability to purchase prescription and

non-prescription medications at a reduced cost through the 340B Drug Pricing program, and their ability to access vaccines, as part of the Vaccines for Children Program, through the CDC.[17] FQHCs are also rewarded for providing primary care to underserved, homeless, and migrant populations by being reimbursed for Medicaid and Medicare at a higher rate by the Federal government than other providers.[18] FQHCs have long been recipients of bipartisan support. FQHC's were established in 1965 during President Lyndon Johnson's War on Poverty. Under President George W. Bush, the number of patients served by FQHCs doubled, as part of his Health Center Expansion Initiative, a centerpiece of the administration's healthcare agenda.[19] The Affordable Care Act (ACA), under the leadership of President Obama, increased the role and funding for FQHCs, so they could become a major provider of primary care services – specifically for newly insured Americans.[20] The requirement that a majority of the governing board be composed of 51% or more of their patients**,** allows FQHCs to be responsive to individual community needs. This is beneficial, especially in rural areas, where barriers to transportation are a commonly cited problem.[21] Community members recognize this and then can allocate the funds to provide the needed transportation services.[22] FQHCs value providing their patients with culturally competent care, which has been associated with increased health outcomes.[23]

Rural Health Overview: The Need for More FQHCs

Rural populations experience significant and unique barriers to accessing medical care, as well as environmental challenges, which in turn cause them to bare a higher burden of disease. These barriers often include increased travel time to hospitals and clinics, inadequate housing, shortage of health professionals, lack of health insurance,

and poverty.[24] Rural areas are often homes to hazardous mining and manufacturing industries, which can introduce hazardous chemicals into rural residents' environments, compromising their health.[25] Many rural residents are employed in the agricultural industry, which is one of the top ten most dangerous occupations in America.[26] To combat the morbidity and mortality of these risk factors, rural residents need better access to primary and critical care centers.

Life expectancy as a whole in America has been steadily on the rise for the past forty years.[27] However, rural residents have experienced slower growth, in life expectancy, than their urban counterparts and the gap continues to grow.[28] In a study conducted by the National Advisory Committee on Rural and Human Services, *Mortality and Life Expectancy in Rural America: Connecting the Health and Human Service Safety Nets to Improve Health Outcomes over the Life Course*, Dr. Gopal K. Singh found the disparities between rural and urban populations have been increasing over the past twenty years:

> There has been consistent overall increases in U.S. life expectancy during the past 40 years, from 70.8 years in 1970 to 78.7 years in 2010. In contrast, the study reveals the rural-urban gap widening from 0.4 years in 1969 to 1971 to 2.0 years in 2005 to 2009. Accidents, cardiovascular disease, COPD and lung cancer accounted for 70 percent of the overall rural–urban gap in life expectancy and 54 percent of the life expectancy gap between the urban rich and rural poor in 2005 to 2009.[29]

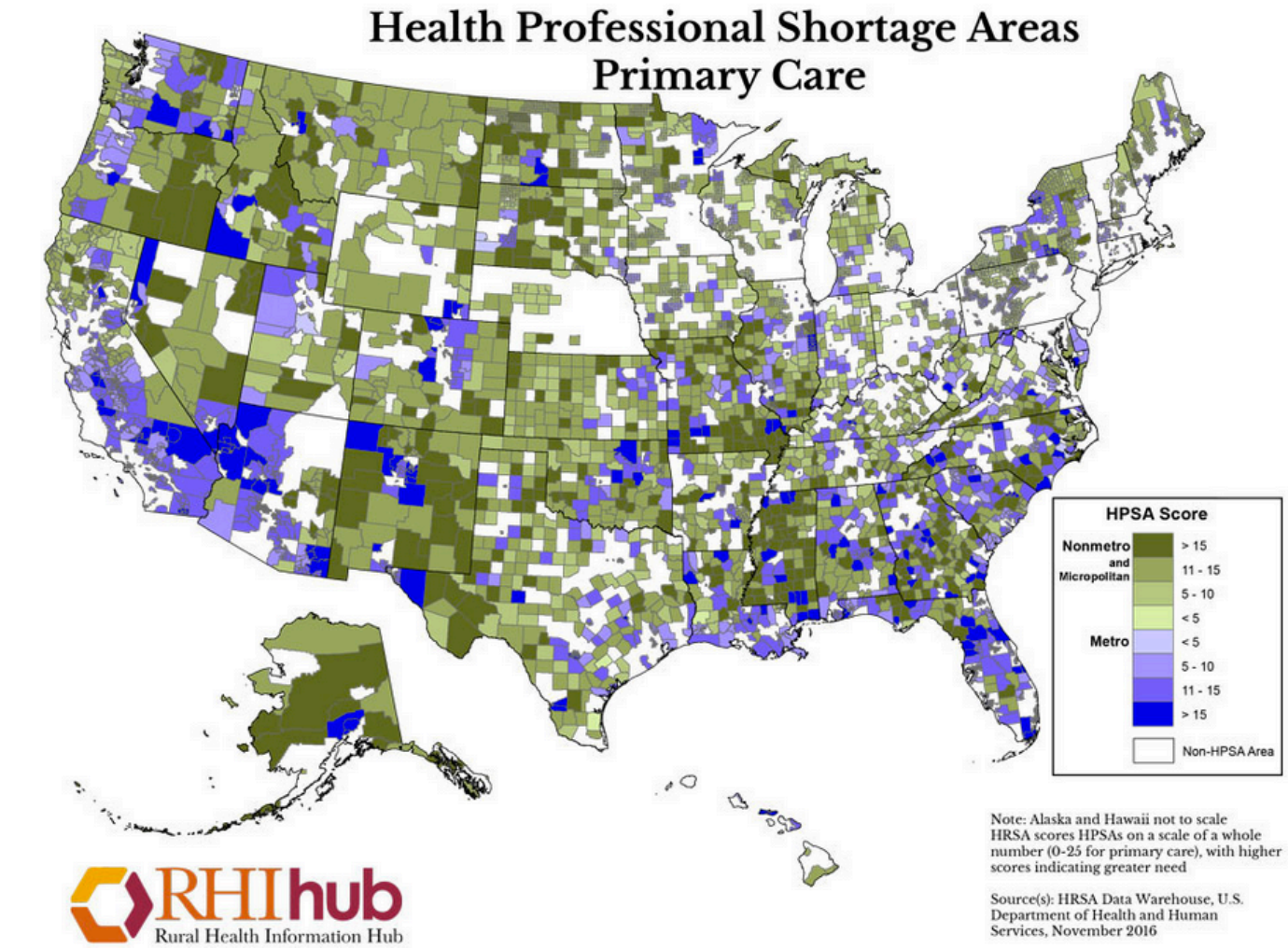
Cardiovascular disease, Chronic Obstructive Pulmonary Disease (COPD) and lung cancer from smoking are diseases that could be prevented or controlled if patients were given access to better health information, medical care, preventative services, and earlier detection – all of which an FQHC could provide.[30] "According to the report, rural

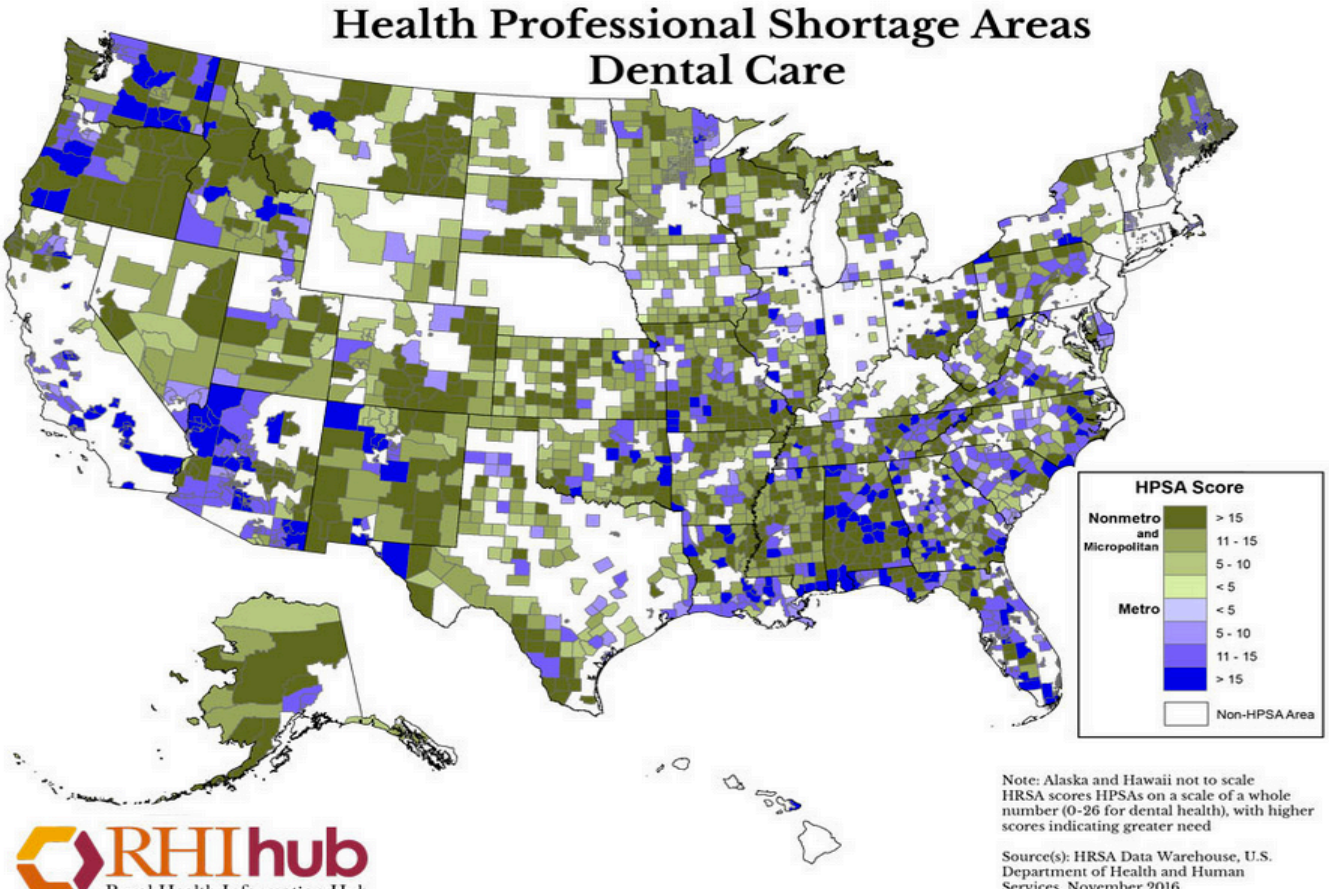
populations have higher rates of smoking, lung cancer, and obesity, yet reduced access to health care services. Additionally, rural residents have a lower median family income, higher poverty rate and fewer have college degrees."[31]

Rural areas are more likely to be designated a Health Professional Shortage Area (HPSA). According to the Rural Health Information Hub, HPSAs are determined by,

> Demographic indicators included minority population, population 65 and older, Veterans, adults without a high school diploma, and other factors. Economic indicators included poverty, households without vehicles, households receiving SNAP (food stamps) benefits, and income received from government transfer programs. Based on this set of 12 indicators, only 9% of metropolitan counties had three or more risk factors, while among non-metropolitan counties, 17.3% of micropolitan and 31.2% of non-core (rural) counties had three or more risk factors.[32]

The following maps show areas, both metropolitan and nonmetropolitan that are designated HPSAs for primary medical care and dental care.[33] FQHCs provide each of these services, often all offered under the same roof, which is beneficial for members of rural communities who already must travel significant distances to access care.


Health Professional Shortage Areas
Primary Care
HPSA Score
Nonmetro and Micropolitan
> 15
11 - 15
5 - 10
< 5
Metro
< 5
5 - 10
11 - 15
> 15
Non-HPSA Area
Note: Alaska and Hawaii not to scale
HRSA scores HPSAs on a scale of a whole number (0-25 for primary care), with higher scores indicating greater need
Source(s): HRSA Data Warehouse, U.S. Department of Health and Human Services, November 2016
RHIhub
Rural Health Information Hub


Health Professional Shortage Areas
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HPSA Score
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Metro
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Non-HPSA Area
Note: Alaska and Hawaii not to scale
HRSA scores HPSAs on a scale of a whole number (0-26 for dental health), with higher scores indicating greater need
Source(s): HRSA Data Warehouse, U.S. Department of Health and Human
RHIhub

There is a shortage of FQHCs in the U.S., and the trend continues to rise. According to HRSA, as of 2017, it is estimated 8,644 primary care practitioners would be needed to remove HPSA status for rural to partially rural America.[34] [35] It would take an additional 8,341 dentists, and 3,369 mental health practitioners to remove their HPSA status.[36] Furthermore, the argument can be made that FQHCs are the best healthcare model to alleviate these shortages due to their ability to house all services in one location and receive startup grants from the federal government to initiate these programs.

Bureau of Health Workforce
Health Resources and Services Administration (HRSA)
U.S. Department of Health and Human Services[37]

Table 1. Health Professional Shortage Areas: Number, Population, and Additional Practitioners Needed for Geographic Areas, Population Groups, and Facilities as of April 22, 2017

	Number of Designations[1]	Population of Designated HPSAs[2]	Percent of Need Met[3]	Practitioners Needed to Remove Designations
Primary Medical HPSA Totals	**6,741**	**68,631,866**	**55.68 %**[4]	**10,043**[7]
Geographic Area	1,430	32,890,314	65.76 %	3,444
Population Group	1,539	34,504,734	49.26 %	5,793
Facility	3,772	1,236,818	32.14 %	806
Dental HPSA Totals	**5,558**	**52,842,397**	**38.19 %**[5]	**8,341**[8]
Geographic Area	704	15,058,942	57.58 %	1,466
Population Group	1,619	36,162,099	32.03 %	6,088
Facility	3,235	1,621,356	26.74 %	787
Mental Health HPSA Totals	**4,690**	**109,344,321**	**45.14 %**[6]	**3,369**[9]
Geographic Area	1,036	87,331,344	55.07 %	1,701
Population Group	260	19,861,087	40.19 %	555
Facility	3,394	2,151,890	21.43 %	1,113

Data as of: 04/22/2017

According to the CDC, nine states (Nevada, Idaho, Texas, Oregon, Wyoming, Kentucky, Arizona, Alaska, and Florida) had a higher percentage of adults without a medical home compared with the national average (17.3%).[38] In eleven states (Montana, South Dakota, Alaska, Nevada, New Mexico, South Carolina, Idaho, Nebraska, Texas, Florida, and California) over 34% of adults had not seen or talked to a general physician in the past year.[39] Even with the passage of the ACA, as of 2015, 28.5 million Americans did not have coverage.[40] However, to fill in the insurance gaps the ACA also provided funding for increased investment in FQHCs. FQHCs fill the insurance gaps and give uninsured Americans a place to get quality care for little to no cost—allowing more people to access general physicians.

Economic Impact of FQHCs

Apart from the overall improvements in community health, FQHCs can decrease overall health expenditures, increase economic stimulation for rural communities, and provide more affordable healthcare to rural patients. According to the National Association of Community Health Centers (NACHC), "health centers' average cost runs a dollar less per patient per day compared to all physician settings."[41] In a study, *Using primary care to bend the cost curve: The potential impact of health center expansion in Senate reforms*, by Ku L. et al., it was found that, with the implementation of the ACA and investments in the expansion of community health centers, substantial long-term savings could be realized both for the overall health care system and for the federal government[42]. Their analysis estimated $369 billion in total medical savings, which would include $105 billion in federal Medicaid savings.[43]

Several states and counties, who have readily adopted the FQHC model, have seen impressive results. In one California study, it was found that patients whose medical home was a FQHC had 64% lower rates of multi-day admission, a fourth of total

inpatient bed days, 18% lower risk of visiting the Emergency Department, and nearly 5% lower 30-day readmission rates.[44] In Colorado, Medicaid patients that utilize FQHC's for their medical home are 1/3 less likely to use hospital-related services when compared to other Colorado Medicaid patients that do not utilize FQHCs.[45] Emergency visits by uninsured patients, for nonemergency situations, puts excessive burdens on hospitals and society because the financial burden falls on insured patients, the hospital itself, and the local community.

Rural areas have higher rates of poverty and likewise higher rates of patients without health insurance. When these uninsured patients present to the Emergency Department (ED), because uninsured patients have nowhere else to go and no primary care physician, the financial burden has a direct impact on the financial viability of small rural hospitals who can't afford to take a loss.[46] A study published in the Journal of Rural Health, found in Georgia uninsured patients who received care at FQHCs were 25% less likely to visit the ED.[47] In a North Carolina study, it was found the average spending on patients in a FQHC setting was 62% lower than patients who received care from a non-FQHC.[48]

As mentioned, not only do FQHCs reduce the cost of the healthcare system, FQHCs also stimulate economic growth within the community they serve. For every $1 of federal funding invested in a FQHC $11 are generated in total economic activity.[49] [50] The total National Economic Impact of Health Center revenue is $26.5 billion; this money is reinvested into underserved communities. FQHCs also created nearly 157,000

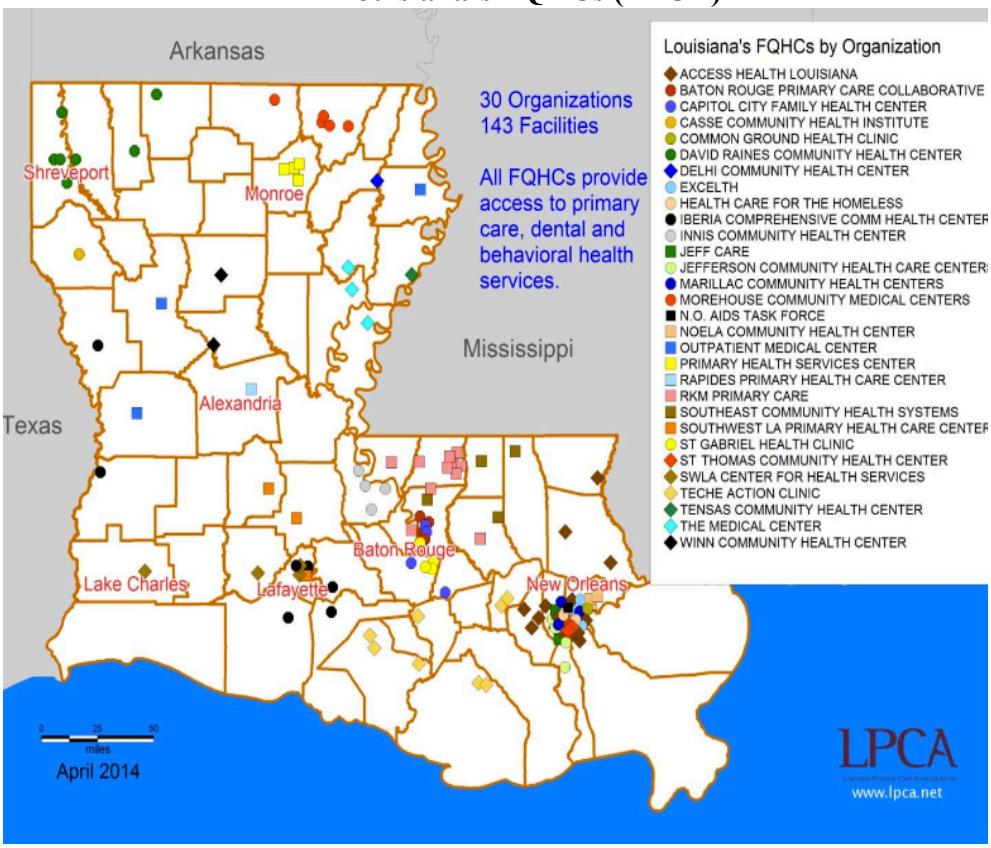
full-time jobs and an additional 112,000 other local jobs – in communities that needed economic stimulation.[51]

FQHC's also save patients money. Lewin Group found when an uninsured patient visits the ED 47% of the cost falls upon them.[52] This can lead to financial struggles or bankruptcy for patients who are already financially insecure. FQHCs also save insured patients from having to foot the bill, for uninsured patients utilizing the ED, by providing primary care services, which have been shown to reduce ED utilization.

Successful Model Programs

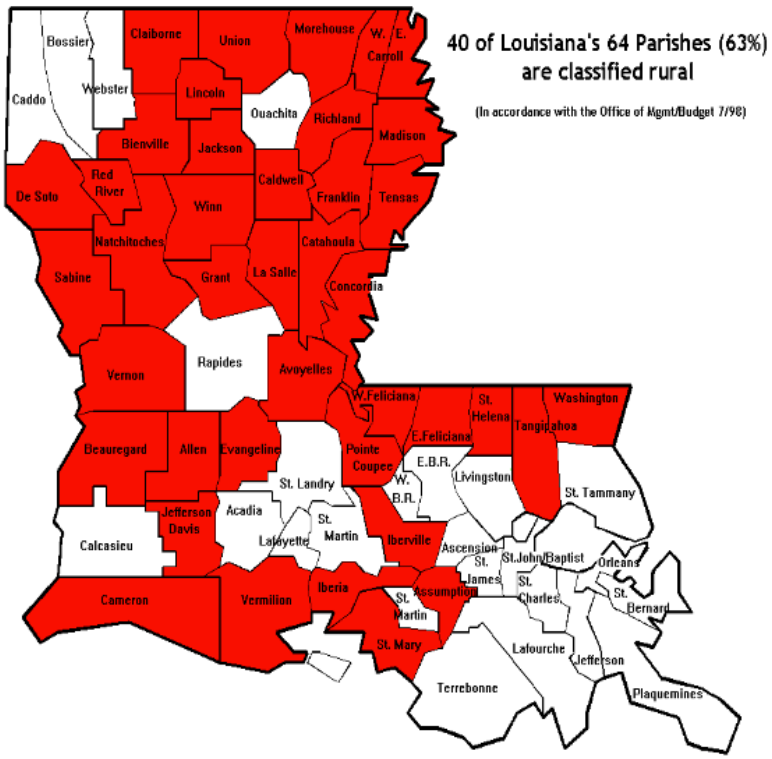
In 2007, the Louisiana Legislature appropriated $41.5 million to the Facility Expansion Initiative (FEI)—an initiative to expand existing Louisiana FQHCs and implement new FQHCs in more underserved communities.[53] Louisiana has seen the success and improvements FQHCs can bring to rural and underserved communities. Louisiana's FQHCs currently serve over 250,000 patients a year with a multitude of services.[54] With over 30 FQHCs, their FQHC's were able to serve individuals by delivering 765,000

Louisiana's FQHCs (LPCA)



encounters and provide over 1,560 full-time jobs.[55] The success of Louisiana's already established FQHCs, and its current health status ranking as 48th out of 50 States, is what prompted the legislature to approve the allocation of funds for the FEI.[56] With nearly 30% of its population living in rural areas and 40 out of 60 of its parishes being designated as rural, Louisianans suffer from high rates of chronic illnesses. Chronic illnesses such as, obesity, smoking, diabetes, preventable hospitalizations, low birth weights, lack of health insurance, cancer, and poor cardiovascular health are very common in Louisiana—and are all common illnesses found among rural underserved populations.[57] [58] The Louisiana Legislature and health centers recognized these problems and in turn proposed more FQHCs, which provide comprehensive, quality, affordable care, as a potential solution.

Louisiana Rural Parishes Map



Not only did Louisiana's FQHCs serve 251,438 patients, they also provided preventative health services. Of those served by Louisiana's FQHCs, 76% of the patients were below the FLP and 93.2% were below the 200% FLP. Of the revenue drawn from Louisiana's FQHCs, 38.4% was from Medicaid patients while 40.9% of revenue was

supplied by the federal government, to compensate for patients without insurance. These revenue statistics show how well-utilized FQHCs are by low-income and uninsured populations.[59] These programs were considered a critical investment in the economic growth of medically underserved communities, as well as, a way to improve overall state health.

The Role of FQHCs in Public Health

While FQHCs have physicians readily available to treat sick patients, they are also actively working in the communities they serve to prevent and lessen the burden of disease. The focus FQHCs have on public health makes them beneficial to rural areas. Rural areas often lack proper public health infrastructure, which can lead to reduced health literacy, lack of community health improvement projects, and poorer vaccination and nutritional programs. It is estimated 37% of rural residents lack access to a primary care physicians compared to 21% of urban residents.[60] Likewise, rural populations rate their health as being poor to fair 4% more often than urban dwellers.[61]

Rural populations tend to be poorer and more likely to live below the poverty line than urban populations. The average per capita income for rural residents is $9,242 less than the national average—this gap is only increased when gender and race are factored in.[62] Not only are adults at risk of poverty in rural areas nearly 25% of rural children live in poverty.[63] This poses significant challenges when trying to provide children with proper education, nutrition, and other resources. However, FQHCs help alleviate these health disparities by providing free and discounted health services. FQHCs also usually have an office dedicated to helping patients sign up for federal assistance through

programs like Supplemental Nutrition Assistance Program (SNAP), CHIP, and Medicaid. The Center for Rural Affairs estimates, 16.6% or 1.1 million rural household receive SNAP benefits.[64] However, without a way to apply for these benefits, the 53% of rural Americans without high-speed Internet would have difficulty registering for such programs.[65] Rural populations are also more likely to be involved in fatal car accidents, suffer from chronic disease, have higher rates of teen pregnancy, and experience a lack of mental healthcare providers.[66] FQHCs address all of these issues by working to educate the public—whether that means presenting about the importance of seat belts at local community events, offering free family planning supplies, free nutritional programs, or raising awareness and reducing the stigma associated with mental illness.[67]

Potential Unintended Results and Challenges

Those who do not support the implementation of FQHCs in rural areas claim they increase competition for already struggling rural hospitals and private practices.[68] This increased competition is due to the ability of FQHCs to receive federal grant money to start and update their services, attract and retain physicians, and provide a multitude of services to both low-income uninsured and privately insured patients.[69] Benefits of being an FQHC also include malpractice cost savings and potential patient drug coverage through the 340B drug program.[70] In a rural community, it is estimated that one Critical Access Hospital provides 127 full-time jobs, $6.0 million in wages, salaries, benefits, and 1.8 million in retail sales.[71] Rural hospitals can very easily be one of the largest employers in a rural economy. The average direct and secondary impacts of a rural hospital closure in 2015 were the loss of 99 jobs and $5.3 million in wages, salaries, and benefits.[72] The total impact an independent a Rural Health Clinic with an employed

physician has on a rural community was an increase in 12.6 jobs and $1,009,299 in wages, salaries, and benefits.[73] Another worry of health center administrators, who are exploring the option of becoming a FQHC or partnering with an FQHC, is the requirement of having a community-controlled board of directors.[74] This takes some of the administrative control out of executives hands and gives it back to the patients.

However, it is by no means the intention or desire of FQHCs to replace existing rural health centers. The outcry of unfair competition by independent physicians, clinics, and rural hospitals has propelled HRSA to initiate an effort to limit the duplication of services in rural areas.[75] The goal of FQHCs are to supplement and ensure populations that have limited access to other types of medical facilities, due to financial reasons or other barriers, are receiving appropriate care.

Benefits of Collaboration between non-FQHCs and FQHCs

While opponents argue FQHCs may harm the other health systems in rural communities, studies have shown collaborations between the local Health System (non-FQHC) and the FQHC result in mutual benefits. Gary Lewins describes the benefits of collaboration in his paper, *Physician integration: the community health center collaboration option*. According to Lewins, one of the major benefits of a health system forming a contractual agreement with their local FQHC is the ability to develop a primary health and education referral plan. The goal of such would be to reduce the use of the health centers' ED by non-emergency uninsured patients. Rural hospitals struggle with finding the funds to cover charity care and bad debts. This struggle to serve primary care needs, via the ED, is a large burden for rural hospitals, which commonly serve low-income and uninsured populations and is one of the attributing factors to the rise in rural

hospital closures.[76] Another potential benefit to health centers collaborating with FQHCs is the possibility of reducing the need to expand primary care employees or capacity as patients could be referred to the FQHC, which specializes in primary care delivery.[77] The FQHC would benefit from collaborating with the health system by being able to utilize aspects of the already established administrative support services, quality assurance programs, medical record keeping systems, increased patient referrals from the ED, and assistance with governing board, physician, and other administrative leadership programs.[78]

Successful Collaboration Models

To encourage successful collaboration of FQHCs and health systems the U.S. Department of Health and Human Services Health Resources and Services Administration Office of Rural Health Policy released a *Manual on Effective Collaborations Between Critical Access Hospitals and Federally Qualified Health Centers.* Within this manual, the three collaborative programs surveyed realized a total of $1,083,000 in annual operating cost savings and a total $2,225,000 in direct grant or financial support from outside programs.[79]

A study in three rural Georgia communities showed that when an FQHC was present in the community, ED visits were reduced by 33% per 10,000 of the uninsured population. Physician retention was higher due to decreased feelings of burnout because of reduced ED visits for non-emergency needs. This study also showed reduced professional liability cost in the ED, over $2.23 million in direct grants, and financial support to the hospital totaling over $2.23 million.[80]

In Milwaukee, Wisconsin the Milwaukee Health Care Partnership was started with the goals of reducing ED visits, connecting community members with medical homes, and increasing the rate of successful follow-up appointments.[81] The results of this collaboration allowed for the FQHC in the partnership to see an 14% increase in Medicaid and uninsured patients served and allowed the FQHC and the ten EDs that are a part of the Milwaukee Health Care Partnership to share patient information.[82]

FQHCs are known to improve a community's health by providing healthcare in areas previously without access to medical care.[83] These studies show the ability of FQHCs to enhance community health, in the presence of already existing health systems, without harming established programs.

Quality of Care in FQHCs

Providing quality affordable care is a core part of FQHCs mission. FQHCs believe a patient's ability to pay or the community they live in should not dictate their health. Unlike in many private and for-profit facilities, disparities in health status are nonexistent among FQHC patients, even when socio-demographic factors are considered.[84] FQHCs patient satisfaction rates were over 98% in one survey.[85] It is believed FQHCs prevent such health disparities within their medically served community due to their increased involvement in the community and focus on providing culturally competent care.[86]

DeMarco, 2015

The stigma of providing lesser quality of services, due to the fact FQHCs serve the poor, is

being rapidly replaced as FQHCs perform better or equal to private practices on ambulatory quality measures.[87] In 2012 Goldman et al. conducted the first national study comparing ambulatory quality measures between FQHCs and private practices, titled *Federally Qualified Health Centers and Private Practice Performance on Ambulatory Care Measures*. The study found,

> Physicians working at FQHC and look-alikes demonstrated greater adherence to guidelines than primary care physicians at private practices on 6 of 18 quality measures, except for diet counseling in at-risk adolescents, and similar adherence on the remaining measures despite providing care to patients with limited or no insurance and a higher burden of comorbidities.[88]

Out of the 18 quality measures used in the study,

> FQHC and FQHC look-alikes[2] scored statistically significantly higher on 6 measures ($p < 0.05$), statistically significantly lower on 1 measure ($p < 0.05$), and no differently on 11 measures. FQHC and look-alikes demonstrated higher performance in 2 performance categories (pharmacological management of common chronic diseases and appropriate use of screening tests). Private practice primary care physicians performed better on one measure (diet counseling in at-risk adolescents, $p < 0.05$), but this was no longer significant after adjustment.[89]

The higher performance of FQHCs compared to private practices in the area of pharmacological management of chronic diseases and appropriate use of screening test prove they would be a valuable asset to rural communities. Rural communities suffer from disproportionate rates of chronic illness and often lack the public health infrastructure to educate and encourage preventative screenings—FQHCs can improve management of chronic conditions and fill the public health gaps felt in rural communities.

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[2] FQHC look-alikes operate, have the same quality standards, and provide services similar to FQHCs. Like FQHCs they are eligible for increased Medicare and Medicaid reimbursements and discounted drug prices. However, they are not eligible for grants under Section 330 of the Public Health Service Act.

Conclusion: Rural America Needs More FQHCs

The barriers to accessing healthcare rural Americans feel are similar to the barriers underserved populations in urban and suburban face. However, the geographic isolation imposes an extra barrier that proposes unique challenges to rural patients. Increasing the proximity and ability to receive a multitude of services in one medical home via the implementation of FQHCs is one option that has been shown to be effective at reducing rural health disparities. FQHCs offer a comprehensive solution to solving many of the disparities rural areas face. FQHCs provide quality care at or above the standard of care given by private practitioners. FQHCs are responsive to community needs and are able to provide healthcare free of charge or on a sliding-fee scale. With 90% of rural health centers patients having low incomes and 2/3 being uninsured the ability of FQHCs to accept these patients increases their ability to serve more rural citizens who fall into these categories.[90] Another advantage of FQHC implementation is the ability to recruit more doctors to rural areas through the use of the National Health Service Corps, which offer scholarships and loan forgiveness to medical professionals willing to serve in FQHCs.[91] Increasing the number of rural physicians is vital to improving rural health, FQHCs are doing their part in offering incentives for physicians to practice in rural areas. On top of the health benefits FQHCs bring to rural communities they also provide economic stimulation to often economically struggling communities. In short, FQHCs are a prime solution to reducing the health disparities in rural America.

Notes

[1] Hunt, J. B., Curran, G., Kramer, T., Mouden, S., Ward-Jones, S., Owen, R., & Fortney,

[2] Ibid.,1

[3] Center for Disease Control and Prevention: Rural Health. (2017, March 15). Retrieved February 22, 2017, from https://www.cdc.gov/ruralhealth/ Content source: Center for Surveillance, Epidemiology, and Laboratory Services (CSELS)

[4] Ibid.,1.

[5] Hunt, J. B., Curran, G., Kramer, T., Mouden, S., Ward-Jones, S., Owen, R., & Fortney, J. (2012). Partnership for Implementation of Evidence-Based Mental Health Practices in Rural Federally Qualified Health Centers: Theory and Methods. *Progress in Community Health Partnerships : Research, Education, and Action*, *6*(3), 389–398. http://doi.org/10.1353/cpr.2012.0039

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